

Pediatric Measures

FINAL REPORT

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**NATIONAL
QUALITY FORUM**

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Pediatric Measures

FINAL REPORT

Executive Summary

A healthy childhood sets the stage for better health and quality of life in adulthood. About 75 million children under 18 years of age live in the United States, representing 23.3% of the population.¹ In 2011-2012, 19.8% of these children had a special healthcare need, defined as having a chronic medical, behavioral, or developmental condition lasting 12 months or longer and experiencing a service-related or functional consequence (including the need for or use of prescription medications and/or specialized therapies).² In 2012, approximately 1 in 5 adolescents had a mental disorder, which brings increased risk for struggles with school, use of drugs and alcohol, and development of chronic illnesses in adulthood.

Understanding the health-related needs of children and adolescents is essential for developing measures to improve the quality of care for the pediatric population. Currently, more than 100 NQF-endorsed measures include the pediatric population; some of these measures are pediatric-specific, and some are all-patient. These measures pertain to a range of clinical and cross-cutting areas, including cardiovascular surgery, pulmonary care, cancer, perinatal care, health and well-being, and safety. Currently, many of the measures in the NQF portfolio are used in public and/or private accountability and quality improvement programs. Still, gaps remain in the areas of care coordination (e.g., home and community-based care, social services coordination, and cross-sector measures that foster accountability in the educational system); screening for abuse and neglect; injuries and trauma; and mental health (e.g., access to outpatient and ambulatory mental health services, emergency department use for behavioral health, etc.).

For the first time in several years, NQF has undertaken a project focused specifically on pediatric measures. Most of the project's measures were funded by the Agency for Healthcare Research and Quality (AHRQ) and the Centers for Medicare & Medicaid Services (CMS) and developed by the Centers of Excellence in Pediatric Quality Measurement, which aimed to develop new measures or refine existing ones in high-priority areas of pediatric health.

For this project, the Steering Committee evaluated 23 newly submitted measures and one previously reviewed measure against NQF's standard evaluation criteria. The Committee recommended 15 measures for endorsement and did not recommend 9 measures. In addition, 3 measures were withdrawn from consideration prior to the Committee's review and evaluation. The 15 measures endorsed were:

- 2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care
- 2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
- 2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics
- 2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics
- 2803: Tobacco Use and Help with Quitting Among Adolescents

- 2806: Adolescent Psychosis: Screening for Drugs of Abuse in the Emergency Department
- 2820: Pediatric Computed Tomography Radiation Dose
- 2842: Family Experiences with Coordination of Care (FECC)-1: Has Care Coordinator
- 2843: Family Experiences with Coordination of Care (FECC)-3: Care Coordinator Helped to Obtain Community Services
- 2844: Family Experiences with Coordination of Care (FECC)-5: Care Coordinator Asked About Concerns and Health
- 2845: Family Experiences with Coordination of Care (FECC)-7: Care Coordinator Assisted with Specialist Service Referrals
- 2846: Family Experiences with Coordination of Care (FECC)-8: Care Coordinator Was Knowledgeable, Supportive and Advocated for Child's Needs
- 2847: Family Experiences with Coordination of Care (FECC)-9: Appropriate Written Visit Summary Content
- 2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver Has Access to Medical Interpreter When Needed
- 2850: Family Experiences with Coordination of Care (FECC)-16: Child Has Shared Care Plan

The Committee did not recommend the following measures:

- 2799: Use of Multiple Concurrent Antipsychotics in Children and Adolescents
- 2802: Overuse of Imaging for the Evaluation of Children with Post-Traumatic Headache
- 2805: Pediatric Psychosis: Timely Inpatient Psychiatric Consultation
- 2807: Pediatric Danger to Self: Discharge Communication with Outpatient Provider
- 2815: CAPQuAM PQMP Mental Health Follow Up Measure Timeliness 1: Delayed Coordination of Care Following Mental Health Discharge
- 2817: Accurate ADHD Diagnosis
- 2818: ADHD Chronic Care Follow-up
- 2848: Family Experiences with Coordination of Care (FECC)-14: Healthcare Provider Communicated with School Staff About Child's Condition
- 2851: Family Experiences with Coordination of Care (FECC)-17: Child Has Emergency Care Plan

Brief summaries of the measures that were evaluated are included in the body of the report; detailed summaries of the Committee's discussion and ratings on the criteria for each measure are in [Appendix A](#).

Introduction

A healthy childhood sets the stage for better health and quality of life in adulthood. There are about 75 million children under 18 years of age in the United States, representing 23.3% of the population.³ Understanding the health-related needs of children is central to selecting appropriate measures to improve quality across the continuum of child healthcare.

The health of children includes unique considerations, such as the variety of developmental stages through which children progress; differences in physiology and prevalence of health conditions in the pediatric population as compared to adults; the dependence of children on adults for consistent and continuous care; and changing demographic patterns, such as increased rates of poverty among children. In addition, nearly 20% of children have complex health needs; for example, they may have a chronic medical, behavioral, or developmental condition that affects their daily lives. Although most children are healthy and assessing the quality of their care requires a focus on healthy development and disease prevention, measuring quality of care for children with complex health needs has equal importance and requires appropriate focus (e.g., chronic, behavioral/mental health, or developmental conditions).

The Children's Health Insurance Reauthorization Act of 2009 (CHIPRA) accelerated interest in pediatric quality measurement, especially for the nearly 40 million children enrolled in Medicaid or the Children's Health Insurance Program (CHIP). CHIPRA established the Pediatric Quality Measures Program. This program, with support from AHRQ and CMS, funded 7 Centers of Excellence to develop or refine child health measures in high-priority areas.

Trends and Performance

National Healthcare Quality Report

The 2014 National Healthcare Quality and Disparities Report⁴ identified several trends and disparities in the quality of pediatric care:

- Performance on most access-to-care measures improved for children (median improvement was 5% per year); however, children with only Medicaid or CHIP coverage were less likely to get care as soon as they wanted, compared to children with any private insurance.
- A number of pediatric quality measures showed rapid improvement, including 1 measure pertaining to adolescents ages 13-15 and 16-17 who received one or more doses of tetanus-diphtheria-acellular pertussis vaccine and meningococcal conjugate vaccines.
- A number of measures showed a decline in quality, including 1 measure focused on children ages 19-35 months who received 3 or more doses of hepatitis B vaccine and 1 or more doses of measles-mumps-rubella vaccine.
- The percentage of children whose parents reported poor communication with healthcare providers significantly decreased overall, as well as among all racial/ethnic and income groups.

NQF Portfolio of Performance Measures for Pediatric Conditions

Currently, more than 100 NQF-endorsed measures address the pediatric population—some of these measures are pediatric-specific, and some are all-patient measures ([Appendix B](#)). Most of these measures have been endorsed in other condition-specific or cross-cutting projects. NQF-endorsed measures specific to the pediatric population include:

- Assessment and screening measures (Health and Well-Being/Behavioral Health projects)
- Ear infection measures (Eye Ear Nose Throat [EENT] project)
- Cardiovascular care measures (Cardiovascular/Surgery project)
- Sepsis measures (Patient Safety project)
- Complications and outcomes measures (Health and Well-Being/Surgery projects)
- Low birth weight measures (Perinatal and Reproductive Health project)
- Functional status measures (Person- and Family-Centered Care project)

The pediatric portfolio contains 123 measures (pediatric-specific and all-patient): 75 process measures, 40 outcome measures, 3 patient-/person-reported outcome (PRO) measures, 1 intermediate clinical outcome, and 4 structural measures (Table 1).

Table 1. NQF Pediatric Portfolio of Measures

	Process	Outcome	PRO	Intermediate Outcome	Structure	Composite	Total
Behavioral/Mental Health	10	1	-	-	-	-	11
Cancer	5	-	-	-	1	-	6
Cardiovascular	-	1	-	-	-	-	1
Care Coordination	12	-	1	-	-	-	13
Endocrine	1	-	-	-	-	-	1
Health and Well-being	21	14	-	-	1	-	36
HEENT	8	-	-	-	-	-	8
Infectious Disease	5	-	-	-	-	-	5
Palliative and End of Life Care	1	-	-	-	-	-	1
Perinatal and Reproductive Health	5	5	-	-	-	-	10
Person- and Family-Centered Care	-	2	2	-	-	-	4
Pulmonary Care	2	3	-	-	-	-	5
Readmissions	-	3	-	-	-	-	3
Renal	2	4	-	-	-	-	6
Safety	3	2	-	1	-	-	6
Surgery	-	5	-	-	2	-	7
Total	73	40	3	1	4	0	123

National Quality Strategy

NQF-endorsed measures for pediatric care support the [National Quality Strategy \(NQS\)](#). The NQS serves as the overarching framework for guiding and aligning public and private efforts across all levels (local, state, and national) to improve the quality of healthcare in the United States. The NQS establishes the "triple aim" of better care, affordable care, and healthy people/communities, focusing on 6 priorities to achieve those aims: *Safety, Person and Family Centered Care, Communication and Care Coordination, Effective Prevention and Treatment of Illness, Best Practices for Healthy Living, and Affordable Care*.

Identifying quality measures for pediatric care aligns with all 6 NQS priorities:

- Making care safer by reducing harm caused in the delivery of care. The global use of evidence-based patient safety practices to reduce adverse events and complications is a cornerstone of high-quality care.
- Ensuring that all persons and families are engaged as partners in care. Family engagement is the foundation that supports change. Actively and deliberately engaging parents, guardians, or families in their children's care can lead to better health outcomes.
- Promoting effective communication and coordination of care. Pediatric care encompasses many services and practitioners who must coordinate care and effectively communicate with each other to ensure a successful outcome.
- Promoting the most effective prevention and treatment practices for the leading causes of mortality. In 2011, 24,001 U.S infants died before their first birthday, representing a rate of 6.07 deaths per 1,000 live births.⁵ Conditions related to prematurity accounted for more than a third of these infant deaths.⁶
- Working with communities to promote wide use of best practices to enable healthy living. Social, environmental, and behavioral factors can have significant negative impact on health outcomes and economic stability.⁷ These factors, along with other upstream determinants, contribute up to 60% of deaths in the United States;⁸ yet only 3% of national health expenditures are spent on prevention (e.g., immunizations, disease screenings, and behavioral counseling interventions), while 97% is spent on healthcare services.⁹
- Making quality care more affordable for individuals, families, employers, and governments by developing and spreading new healthcare delivery models. Per capita healthcare spending in the United States is unmatched by any country in the world.¹⁰ This high rate of spending, however, has not resulted in better health for Americans. Higher spending has not decreased mortality, increased patient satisfaction, nor led to improvements in access or higher quality of care.^{11,12} By improving efficiency, there is potential to reduce the rate of cost growth and improve the quality of care provided simultaneously.

Use of Measures in the Portfolio

NQF endorsement of measures is valued because the evaluation process is rigorous and transparent, and because evaluations are conducted by multistakeholder committees comprised of experts from the

clinical professions, healthcare providers, employers, health plans, public agencies, community coalitions, and patients/caregivers—many of whom use measures on a daily basis to ensure better care. Moreover, NQF-endorsed measures undergo routine "maintenance" (i.e., re-evaluation) to ensure that they are still the best-available measures and reflect the current science. Federal law requires that preference be given to NQF-endorsed measures for use in federal public reporting and performance-based payment programs. NQF measures also are used by a variety of stakeholders in the private sector, including hospitals, health plans, and communities.

Many of the measures in the pediatric portfolio are in use in at least one federal program. Also, several of the assessment and screening measures have been included in the Medicaid Child Core Set by the NQF-convened Measure Applications Partnership (MAP). [Appendix C](#) provides details of federal programs that currently use NQF-endorsed pediatric measures.

Improving NQF's Pediatric Portfolio

Many priorities for quality measurement and improvement do not yet have metrics available to address them, and the gaps for pediatric care are even greater than those for adult care. MAP discussed and documented these pediatric-specific gaps in current measure sets to communicate its vision for the future of pediatric measurement.

- Care coordination
 - Home- and community-based care
 - Social services coordination
 - Cross-sector measures that would foster joint accountability with the education and criminal justice systems
- Screening for abuse and neglect
- Injuries and trauma
- Mental health
 - Access to outpatient and ambulatory mental health services
 - Emergency department use for behavioral health
 - Behavioral health functional outcomes that stem from trauma-informed care
- Overuse/medically unnecessary care
 - Appropriate use of CT scans
- Durable medical equipment (DME)
- Cost measures
 - Targeting people with chronic needs
 - Families' out-of-pocket spending
- Sickle-cell disease
- Patient-reported outcome measures
- Dental care access for children with disabilities (or stratification of current measures)

Pediatric Measure Evaluation

On December 1-2, 2015, the Pediatric Measures Steering Committee evaluated 23 new measures and 1 previously submitted measure against [NQF's standard evaluation criteria](#).

Table 2. Pediatric Measure Evaluation Summary

	New	Resubmitted*	Total
Measures under consideration	23	1	24
Measures endorsed	14	1	15
Measures where consensus is not yet reached	0	-	0
Measures not recommended for endorsement	9	-	9
Measures withdrawn from consideration**	3	-	3
Reasons for not recommending	Importance – 4 Scientific Acceptability – 4 Overall – 1		

* This measure was reviewed in the 2014 Patient Safety Measure Endorsement Project and was not recommended for endorsement. The developer revised and resubmitted the measure for review in the 2015 Pediatric Measure Endorsement Project.

**Three measures were withdrawn from consideration prior to Committee review due to insufficient testing.

Comments Received Prior to Committee Evaluation

NQF solicited comments prior to the Committee’s evaluation of the measures via an online tool located on the project webpage. The pre-evaluation comment period was open from November 6-20, 2015, for the 24 measures under review. NQF did not receive any pre-evaluation comments during this comment period.

Overarching Issues

During the Steering Committee’s discussion of the measures, 3 overarching issues emerged that were factored into the Committee’s ratings and recommendations for multiple measures and are not repeated in detail for each individual measure.

Underdevelopment of Measurement Science in Pediatric Care

As a whole, the field of pediatric measurement is limited as compared to adult measurement. Various aspects of this issue—including evidence, testing, and feasibility of measures—were raised throughout the Committee’s deliberations.

It is generally acknowledged many areas within pediatric quality measurement have limited evidence, in part due to a lack of research on children’s health and in part due to the current lack of quality measurement. In some cases, the evidence for particular measures within this project was based on 1 or 2 randomized controlled trials (RCTs) with a small population; in others the evidence was based on adult studies or expert consensus. In many areas of pediatric medicine, there is an absence of systematic evaluation of the quality, quantity, and consistency of empirical evidence, but there is expert consensus that measurement is important. In light of this, four of the measures in this project did not pass NQF’s Evidence criterion, but Committee review continued because the Committee invoked the exception for Insufficient Evidence with Exception. This rating allows a measure without a large base of empirical evidence to move forward if the Steering Committee agrees it is acceptable or beneficial to hold providers accountable for their performance because the benefits of the measure outweigh potential harms.

Several measures in this project also did not pass the Reliability or Validity subcriteria, and therefore were not recommended by the Committee. In some cases, specific concerns were raised with the measure specifications (such as the age range of the population included in the measure) that affected the validity (i.e., evidence links) of the measure or sole reliance on face validity.

Although feasibility is not a must-pass criterion, the Committee identified this as a major issue on several measures. Several of the measures rely on chart review or on data elements that are not always included in fixed fields of electronic health records. Some of the measures in this project are based on data collected in whole or in part via a survey. Committee members noted that while surveys can be the most effective way to collect certain types of information, they also are expensive and time consuming. Only 1 of the surveys used for the measures considered is available in both telephone and mailed forms. The Committee encouraged developers to move to electronic or telephone survey options, rather than mail-based surveys, as these can be easier to administer and may be more appropriate, especially for adolescents.

Overall, the Committee noted the need for more research in the field, as well as the potential use of this set of pediatric measures in building a base for more pediatric quality measurement.

Patient-Reported Outcome Measures (PROMs)

The Committee had extensive discussions on the evidence requirements for PROMs. While outcome measures, including PROMs, require a rationale for a relationship between the outcome and processes, they do not require a full assessment of the quality, quantity, and consistency of evidence for the measure focus. The Committee raised concerns that measures were being held to different standards of evidence. The Committee also discussed which measures should qualify as PROMs, since all measures collected by patient reporting are not necessarily PROMs (e.g., a measure asking a patient to report on a process of care). There was also discussion regarding measures that rely on parent self-report. It was noted that patient experience-of-care measures may be difficult to link to processes, though it is important to understand which processes can be modified to improve quality of care.

Unintended Consequences of Measurement

During its discussions, the Committee noted potential unintended consequences of measurement with regard to some measures under review. Potential unintended consequences included performing unnecessary or excessive tests; incorrectly labeling individuals because of inaccurate tests (e.g., urine drug screening) or coding diagnoses that later turn out to be inaccurate (e.g., psychosis); prescribing unnecessary or inappropriate medications; and penalizing a provider who is providing appropriate care for a specific patient, although that care would not be considered appropriate in most other situations (e.g., cases when the use of multiple antipsychotic medications may be appropriate). The downstream consequences could include stigma for patients who are misdiagnosed with certain conditions, or providers being inappropriately penalized. In addition, Committee members noted the need to be cautious and limit the use of the Insufficient Evidence with Exception criterion to minimize the potential for diverting limited resources for measurement away from existing high-impact, high-return measurement.

Summary of Measure Evaluations

The following brief summaries of the Committee's measure evaluations highlight the major issues that were considered. Details of the Committee's discussion and ratings of the criteria for each measure are included in [Appendix A](#).

Attention Deficit Hyperactivity Disorder (ADHD)

Two new submissions addressing Attention Deficit Hyperactivity Disorder (ADHD) were reviewed. Neither measure was recommended for endorsement.

2817 Accurate ADHD Diagnosis (AHRQ-CMS CHIPRA Pediatric Measurement Center of Excellence (PMCoE)): Not Recommended

Description: Percentage of patients aged 4 through 18 years whose diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) was based on a clinical exam with a physician or other healthcare professional, as appropriate which includes: confirmation of functional impairment in two or more settings AND assessment of core symptoms of ADHD including inattention, hyperactivity, and impulsivity, either through use of a validated diagnostic tool based on DMS-IV-TR criteria for ADHD or through direct assessment of the patient; **Measure Type:** Process; **Level of Analysis:** Clinician: Group/Practice, Facility; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic, Behavioral Health/Psychiatric : Inpatient; **Data Source:** Electronic Clinical Data: Electronic Health Record, Paper Medical Records

NQF #2817 is a new submission developed in response to the Centers for Disease Control and Prevention (CDC) findings that 5 million children between the ages of 4 and 17 years have been diagnosed with ADHD, and the rates of ADHD diagnosis increased 5.5% per year from 2003 to 2007. Validated tools based on Diagnostic and Statistical Manual of Mental Disorders (DSM) criteria have demonstrated effectiveness for diagnosing ADHD and distinguishing ADHD from other conditions. When less rigorous methods are applied to the diagnosis of ADHD, the condition may be missed (false negative), leading to potential social and academic struggles. Conversely, a false positive diagnosis may lead to stigmatization or inappropriate treatment.

This measure was developed to assess rates of providers who accurately diagnosis ADHD by using validated diagnostic tools based on the DSM-IV criteria for ADHD. The Committee agreed that it was an important measure, given the significant implications for the children who are either diagnosed correctly, incorrectly, or not at all even when ADHD is present. The Committee expressed significant concern with the numerator and denominator, including disagreement with the DSM criteria (i.e., all three symptoms [inattention, hyperactivity, and impulsivity] needed to be present to accurately diagnose ADHD), what constituted meeting the numerator (i.e., either using a validated tool for the symptoms or using direct clinical assessment where the DSM criteria are used to evaluate symptoms), appropriateness of the denominator age group (i.e., children between 4 and 18 years old), and timing of diagnosis (i.e., diagnosis must be within the year prior to the visit). Although the Committee noted the importance of #2817, it did not reach consensus on the Reliability criterion. The measure did not pass the Validity criterion, so the measure was not recommended.

2818 ADHD Chronic Care Follow-up (AHRQ-CMS CHIPRA Pediatric Measurement Center of Excellence (PMCoE)): Not Recommended

Description: Percentage of patients aged 4 through 18 years with a primary or secondary diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) in the year prior to the measurement year who have at least one follow-up visit in the measurement year with ADHD as the primary diagnosis; **Measure Type:** Process; **Level of Analysis:** Health Plan, Population: National; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic; **Data Source:** Administrative claims

NQF #2818 is a new submission derived from the 2011 American Academy of Pediatrics' *Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents*, which recommends ADHD be considered a chronic condition and that patients with a diagnosis of ADHD be treated as children and youth with special healthcare needs. The practice guideline also stresses the importance of follow-up visits to maintain treatment adherence.

The developer and the Committee agreed that ADHD treatment should be managed fairly frequently in the first year: there should be several visits and phone calls to continuously measure and adjust the medication dosage or to assess behavior therapy. The developer stated that following the first year after diagnosis, a clinician should see the patient at least once yearly to manage ADHD in accordance with the medical home model for treating chronic conditions. Although the Committee noted the importance of considering ADHD as a chronic condition that needs follow-up, Committee members were concerned that one visit per year may not be adequate and was not grounded in the evidence provided. The Committee also sought clarification from the developer about the meaning of calendar year (i.e., measurement year, prior year, or 12-month period). The Committee questioned the health plan level of analysis and the downstream implications if a patient moves outside the coverage network or does not have continuous enrollment for a specified period. In these circumstances the patients would no longer be included in the denominator. Additionally, Committee members raised concern about appropriate coding for well-child care and certain diagnoses. Specifically, they noted payers reimburse significantly more for preventive care than for acute care, and providers are encouraged not to code for certain diagnoses (e.g., asthma and ADHD) during visits that involved well-child care. Ultimately #2818 did not pass the must-pass criterion of Reliability because the developer did not show that appropriate empirical reliability testing was conducted for this measure as specified. The measure did not move forward and was not recommended.

Behavioral/Mental Health

Eight new submissions addressing behavioral and mental health were reviewed. The Committee recommended 3 of these measures for endorsement and did not recommend 5 measures.

2799 Use of Multiple Concurrent Antipsychotics in Children and Adolescents (National Committee on Quality Assurance (NCQA)): Not Recommended

Description: The percentage of children and adolescents 1-17 years of age who were on 2 or more concurrent antipsychotic medications; **Measure Type:** Process; **Level of Analysis:** Health Plan, Integrated Delivery System, Population: State; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic, Behavioral Health/Psychiatric: Outpatient; **Data Source:** Administrative claims

This new process measure assesses the degree to which antipsychotic medications are safely and judiciously prescribed for children and adolescents. The developer cited high rates of overuse of antipsychotic medications among publicly insured and foster care children, as well as the serious side effects of these medications on children and adolescents, including rapid weight gain and increased risk for developing diabetes.

Committee members agreed on the importance of measuring overuse of antipsychotic medications, but they noted the lack of empirical evidence to support this measure, particularly the specification of 2 antipsychotic medications versus more than 2 antipsychotic medications. In some cases, 2 antipsychotic medications may be appropriate. The Committee also noted that no evidence-based threshold or goal for percent of patients on 2 or more antipsychotics exists, only that the percentage should be low. Due to insufficient empirical evidence, this measure did not pass Evidence, but moved forward on Insufficient Evidence with Exception, given the Committee's concern about the importance of the measure focus.

The Committee did not reach consensus on the Reliability criterion. While reliability was good at the state level, the measure was not as reliable for Medicaid plans, except those that are large; it was not reliable at the commercial plan level. Because the measure assesses a relatively rare event, a large sample size/population is needed to produce statistically significant results; the Committee found this to be a limitation of the measure. Additionally, Committee members also expressed concerns about the consistency of the measure specifications with the evidence. Specifically, the goal of the measure is to assess inappropriate prescribing of antipsychotic medication to children and adolescents; however, the specifications do not measure *inappropriate* prescribing of antipsychotic medications but use quantity as a proxy. Since the measure did not assess inappropriate prescribing, the Committee agreed that #2799 did not meet the Validity criterion. Overall, the Committee felt that the measure did not adequately address problems with prescribing or situations for which it would be appropriate to prescribe more than 1 antipsychotic at a time. Since #2799 did not pass the must-pass criterion of Validity, it did not move forward and was not recommended.

During the comment period, [NCQA requested reconsideration of this measure](#). It provided a report from the Department of Health and Human Services' Office of the Inspector General (IG) (included in the reconsideration memo) that examines the concordance of claims-based quality concerns with chart review findings, which the developer noted one Committee member had felt would be useful to demonstrate polypharmacy was related to poor quality and would help to further demonstrate validity.^a In addition, the developer provided a bulletin from CMS indicating that the measure is included in the 2016 CHIP Core Measure Set and re-summarized the HEDIS results that had been submitted as an addendum to the measure submission.

^a NQF staff reviewed the report, which finds that 67% of claims (n=687) had quality problems. Of those, 37% were "too many drugs"—i.e., ~25% of claims had polypharmacy issues. The IG report defined "too many" as 3 or more psychotropic drugs, one of which was a second-generation antipsychotic drug. Measure 2799 specifies 2 or more drugs.

The Committee reviewed the materials provided by the developer and discussed whether the request, in particular the IG report, offered sufficient new information related to Validity. The Committee generally agreed that most of the information had been provided previously, and there was not enough new information to meet the Validity criteria. Following this discussion, the Committee voted on whether to reconsider this measure. Per NQF policy, greater than 60% of the Committee must vote to reconsider in order for a reconsideration request to move forward. The vote did not meet this threshold.

2800 Metabolic Monitoring for Children and Adolescents on Antipsychotics (NCQA): Endorsed

Description: The percentage of children and adolescents 1-17 years of age who had 2 or more antipsychotic prescriptions and had metabolic testing; **Measure Type:** Process; **Level of Analysis:** Health Plan, Integrated Delivery System, Population: State; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic, Behavioral Health/Psychiatric: Outpatient, Laboratory; **Data Source:** Administrative claims

This newly submitted measure adds to the suite of antipsychotic prescribing measures (#2799, #2800, and #2801) developed by NCQA to assess use of antipsychotic medications in children and adolescents. Measure #2800, however, assesses the prescribing of 2 or more antipsychotics accompanied with metabolic monitoring. The Committee sought clarification on timing, which the developer defines as 2 prescriptions of the same drugs or 2 different drugs during the measurement year. The Committee agreed with the coupling of an antipsychotic prescription with metabolic monitoring and noted the importance of the measure in potentially identifying and addressing the serious side effects (e.g., diabetes, rapid weight gain) of prescribing these medications. The Committee agreed that the measure met NQF criteria and recommended #2800 for endorsement.

2801 Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics (NCQA): Endorsed

Description: Percentage of children and adolescents 1-17 years of age with a new prescription for an antipsychotic, but no indication for antipsychotics, who had documentation of psychosocial care as first-line treatment; **Measure Type:** Process; **Level of Analysis:** Health Plan, Integrated Delivery System, Population: State; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic, Behavioral Health/Psychiatric: Inpatient, Behavioral Health/Psychiatric: Outpatient; **Data Source:** Administrative claims

This new process measure addresses inappropriate use of antipsychotics in children and adolescents. Specifically, #2801 focuses on children and adolescents 1-17 years of age with a new prescription for an antipsychotic medication without a Food and Drug Administration (FDA) indication for antipsychotics (schizophrenia, bipolar disorder, psychotic disorder, autism, tic disorders), but who had psychosocial care either before or immediately after the prescription. The developer stated that in many cases antipsychotics are prescribed for ADHD or disruptive behaviors for which antipsychotics are not indicated, and in these cases, psychosocial therapy should be recommended as the first process of care.

The Committee agreed on the importance of measuring the use of first-line psychosocial therapy for children and adolescents on antipsychotics, but noted that the evidence is largely based on expert consensus. Committee members were particularly concerned about instances when initiating pharmacotherapy without waiting for psychosocial interventions might be appropriate. Due to the lack

of empirical evidence, this measure did not pass Evidence, but moved forward on Insufficient Evidence with Exception, given the importance of the measure focus.

The Committee expressed reservations about the validity of the specifications. The Committee felt that the prescription data could be readily captured, but expressed concern about the ability to capture psychosocial care since many children may receive psychosocial care outside of the measured entity of the health plan (e.g., in schools and community health centers). It was noted many health plans will not cover some types of psychosocial care, so the prescription would be captured, but not the first-line psychosocial care, because it is not covered. Committee members noted that this was true for both commercial and Medicaid plans, with the further complication of state variation in coverage among Medicaid plans. The Committee did not reach consensus on the Validity criterion for #2801, but it passed the other NQF criteria, and it was recommended for endorsement.

2803: Tobacco Use and Help with Quitting Among Adolescents (NCQA): Endorsed

Description: Percentage of adolescents 12 to 20 years of age during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user;

Measure Type: Process; **Level of Analysis:** Clinician: Group/Practice; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic; **Data Source:** Electronic Clinical Data

NQF #2803 aims to standardize documentation of tobacco use and tobacco cessation among adolescents. It complements NCQA's NQF-endorsed tobacco cessation measure #0027, which is specified for patients 18 years and older. Although the developer noted numerous studies that document the effectiveness of physician counseling in promoting tobacco cessation, the Committee expressed concerns about the broad definition of counseling, lack of assessment of the quality of counseling given, and how it will be reported at the clinician level. The Committee acknowledged, however, that a performance gap exists. The Committee also encouraged the developer to incorporate this measure into the electronic health record, especially since some components of this measure already align with the Meaningful Use definition of tobacco use status. The Committee agreed that the measure met NQF criteria and recommended #2803 for endorsement.

2805 Pediatric Psychosis: Timely Inpatient Psychiatric Consultation (Seattle Children's Research Institute): Not Recommended

Description: Percentage of children/adolescents age ≥ 5 to ≤ 19 years-old admitted to the hospital with psychotic symptoms who had a psychiatric consult (in person or by telepsychiatry) within 24 hours of admission; **Measure Type:** Process; **Level of Analysis:** Facility; **Setting of Care:** Behavioral Health/Psychiatric: Inpatient, Hospital/Acute Care Facility; **Data Source:** Administrative claims, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

NQF #2805 is 1 of 3 newly submitted process measures (#2805, #2806, and #2807) developed to assess pediatric mental health in the emergency department (ED) or inpatient setting. The developer noted research related to this population is difficult: patients and their families are extremely vulnerable during acute ED and inpatient episodes, and pediatric patients presenting with psychosis are relatively rare. The developer also reported that few pediatric mental health measures exist, yet 9% of pediatric hospitalizations nationwide of children 3 years and older are for mental health reasons. Given the

barriers to developing empirical evidence, the developer requested that the Committee not wait for more robust evidence in order to endorse this pediatric mental health measure for accountability.

The Committee noted that the evidence provided by the developer was largely based on expert consensus and not empirical evidence; however, the Committee agreed that #2805 qualified for consideration under the criterion of Insufficient Evidence with Exception. At the same time, the Committee discussed the unintended consequence of holding providers and health plans accountable in the absence of rigorous empirical evidence when psychiatric consultations may not be easily accessible in certain geographic areas or circumstances. The Committee also voiced several concerns about #2805, including identifying psychotic symptoms versus diagnosis of psychosis, particularly patients (e.g., younger children) who were admitted with psychotic symptoms, but not discharged with a diagnosis of psychosis; defining a psychiatric consultation, as well as who is responsible for the consultation (i.e., any licensed mental health professional or only a psychiatrist or a psychologist); lack of sufficient evidence to support the 24-hour limit; and lack of evidence of improvement in outcomes associated with high performance on the measure (other than length of stay). The Committee also expressed concern about whether the measure could be operationalized in less specialized hospital settings (e.g., general hospitals that are not pediatric-specific) or those without electronic health records.

Ultimately, #2805 did not pass the must-pass criterion of Evidence. The Committee voted on whether the measure was eligible for Insufficient Evidence with Exception, but failed to reach consensus.

2806 Adolescent Psychosis: Screening for Drugs of Abuse in the Emergency Department (Seattle Children's Research Institute): Endorsed

Description: Percentage of children/adolescents age =12 to =19 years-old seen in the emergency department with psychotic symptoms who are screened for alcohol or drugs of abuse; **Measure Type:** Process; **Level of Analysis:** Facility; **Setting of Care:** Emergency Medical Services/Ambulance, Hospital/Acute Care Facility; **Data Source:** Administrative claims, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

As with #2805, this measure, #2806, focuses on assessing pediatric mental health in the ED or inpatient setting. Specifically, this measure involves children and adolescents age 12-19 years (original version was 5-19 years) with a discharge diagnosis from the ED of psychosis who are screened for alcohol or drugs of abuse while in the ED.

The Committee noted the lack of strong empirical evidence that screening improves outcomes; however, the Committee agreed that this measure qualified for consideration under the criterion of Insufficient Evidence with Exception. The Committee expressed major concerns regarding the appropriateness of this measure for children ages 5 to 11. It also noted that #2806 is measuring two different things—i.e., diagnosed with psychosis and comorbid drugs, or substance use among children with psychosis—that vary by age group. The developer explained that the substance abuse component should have been 12 to 19 years old and the psychosis component should be 5 to 19 years. Additionally, the Committee questioned the reliability of urine drug screening tests and requested that the developer consider using nonlaboratory screening for substance abuse, particularly alcohol, which is the most drug most used by adolescents, in general, and in adolescents who present with psychosis.

The Committee sought information on the range of performance variation in younger children compared to older children, and the developer explained that the younger children were only 5% of the sample, which may be evidence this measure might not be valid at this time for younger children. The Committee also requested that the developer restate the denominator to improve clarity and reflect what #2806 actually measures, as well as the accurate population. The denominator is currently “patients 5 to 19 seen in the ED with psychotic symptoms.” The Committee suggested a more accurate construct might be “patients 5 to 19 discharged from the ED to home or another setting of care.”

The Committee also noted that the measure’s reliability appears limited to the older population; it is unclear whether #2806 is reliable in the younger age group. Lastly, the Committee discussed missed opportunities for testing, including data from ED visits where there were psychotic symptoms, but no diagnosis of psychosis at discharge. The developer explained that the testing approach precluded identifying this population.

NQF #2806 failed on the Validity criterion, in part due to serious concerns with the age range of patients specified by the measure. However, Committee members elected to continue their evaluation because the developer indicated that it could change the age range and provide new testing data, which might address the validity issues to the Committee’s satisfaction. For the final vote on overall suitability for endorsement, the Committee failed to reach consensus.^b

During the comment period, the measure developer revised the measure to limit the age range to 12-19 years and submitted updated specifications and testing, as the Committee had requested. The Committee reviewed this material, as well as the comment received. On a re-vote, the Committee agreed that the revised measure met the Validity criteria. The Committee then re-voted to recommend the measure for endorsement.

2807 Pediatric Danger to Self: Discharge Communication with Outpatient Provider (Seattle Children's Research Institute): Not Recommended

Description: Percentage of children/adolescents age ≥ 5 to ≤ 19 years-old admitted to the hospital with dangerous self-harm or suicidality, should have documentation in the hospital record of discussion between the hospital provider and the patient’s outpatient provider regarding the plan for follow-up (discussion can be by phone or email); **Measure Type:** Process; **Level of Analysis:** Facility; **Setting of Care:** Behavioral Health/Psychiatric: Inpatient, Hospital/Acute Care Facility; **Data Source:** Administrative claims, Electronic Clinical Data Electronic Health Record, Paper Medical Records

This newly submitted measure focuses on patients 5 to 19 years of age who are admitted to a hospital with dangerous self-harm or suicidality and have documentation in the hospital record of a discussion between the inpatient and outpatient providers regarding the plan for follow-up 24 hours prior to discharge or up to 48 hours after discharge.

^b Because most Committee members felt that the age range was problematic and the developer indicated it could readily provide testing results only for the older age group, the Committee continued voting on the criteria even though it failed on Validity.

Similar to #2805 and #2806, the Committee noted the lack of strong empirical evidence—the majority of evidence is based on expert consensus—but agreed that #2807 qualified for consideration under the criterion of Insufficient Evidence with Exception. The Committee expressed concerns about being able to identify the primary provider; information not documented appropriately to calculate the rate; and communications within and outside of institutions, particularly issues with confidentiality when communicating about psychiatric matters. The Committee noted the significant performance gap reported by the developer about the low rate of communication, which could have been attributed to a validity issue—i.e., the discussion or communications between the hospital provider and the patient’s outpatient provider was not documented *or* did not happen. The Committee did not reach consensus on the Validity criterion.

The Committee also had concerns about Feasibility, including testing that required trained nurse extractors and documenting all calls and emails. For the Usability and Use criterion, the Committee again expressed concern about the challenges of documentation and accessibility to information, particularly that some types of communications, such as email, may not be HIPAA compliant due to security issues. Ultimately, the Committee failed to reach consensus on Overall Suitability for Endorsement of #2807.

Per NQF procedure, the Committee discussed this measure after the comment period in an attempt to reach consensus. During the post-comment call, Committee members reviewed their discussion from the in-person meeting, as well as the comment and developer response. It felt that the issues concerning Feasibility and Validity had not been addressed. In a second vote, the Committee reaffirmed its decision not to recommend the measure for endorsement.

2815 Mental Health Follow Up Measure Timeliness 1: Delayed coordination of care following mental health discharge (Collaboration for Pediatric Quality Measures (CAPQuaM)): Not Recommended

Description: This measure describes the presence or absence of delay in follow up visits with mental health and primary care clinicians following hospital discharge of a child with a primary mental health diagnosis or from a mental health facility; **Measure Type:** Process; **Level of Analysis:** Facility, Health Plan, Integrated Delivery System, Population: Community, Population: County or City, Population: National, Population : Regional, Population: State; **Setting of Care:** Ambulatory Care : Clinician Office/Clinic, Behavioral Health/Psychiatric: Inpatient, Behavioral Health/Psychiatric : Outpatient, Hospital/Acute Care Facility, Other, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility: Long Term Acute Care Hospital; **Data Source:** Administrative claims

NQF #2815 assesses the presence or absence of delay in follow-up visits with mental health and primary care clinicians following hospital discharge of a child with a primary mental health diagnosis or discharge from a mental health facility. The Committee noted that there was no empirical evidence showing that this measure improves outcomes and expressed concerns about the 30-day timeframe in the numerator for visits not being informed by evidence. Additionally, the Committee noted concerns with the exclusion of children who are readmitted to any hospital on the day of discharge (since this is within 30 days of discharge), and of children who do not have 180 days of continuous enrollment after the discharge (versus a shorter period).

The Committee also voiced numerous concerns about the requirement for follow-up with both mental health and primary care providers. First, Committee members expressed concerns that hospitals do not have control over access to mental health providers, and have very little control over access to primary care providers. Second, a number of systems are beginning to integrate behavioral health and primary care in different ways. For example, in one approach, patients are seen by the primary care provider, who will consult with a child psychiatrist or a mental health counselor while the patient is in the process of accessing mental/behavioral healthcare. This measure would not take account for these innovative systems, especially since the measure requires follow-up with both mental health and primary care as opposed to one or the other. Another issue raised was the time required for families to visit healthcare providers, which can be a significant burden.

Measure #2815 did not pass the Evidence criterion, and the Committee elected not to consider Insufficient Evidence with Exception since the developer made it clear that the measure would remain as specified (by its expert panel) as opposed to revising the measure to specify follow-up by *either* a mental health *or* primary care provider.

Care Transition

2789 Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care (Center of Excellence for Pediatric Quality Measurement): Endorsed

Description: The Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care measures the quality of preparation for transition from pediatric-focused to adult-focused health care as reported in a survey completed by youth ages 16-17 years old with a chronic health condition. The ADAPT survey generates measures for each of the 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning; **Measure Type:** PRO; **Level of Analysis:** Clinician: Group/Practice, Facility, Health Plan; **Setting of Care:** Clinician: Group/Practice, Facility, Health Plan; **Data Source:** Patient Reported Data/Survey

This patient-reported outcome (PRO) measure has three domains (Counseling on Transition Self-Management, Counseling on Prescription Medication, and Transfer Planning) and is reported as a single measure. The developer noted that a lack of effective transition from pediatric- to adult-focused healthcare can contribute to fragmented or delayed care and increased risk for adverse health outcomes. Improving transition preparation for at-risk youth may decrease costs associated with inappropriate or delayed healthcare.

The Committee noted the limited empirical evidence for #2789, but found this measure conceptually compelling. The Committee agreed that the transition from pediatric to adult care needs improvement, and these conversations should occur by age 16. Because this is a PRO, the measure must be shown to be valuable and useful to the target population, and the Committee agreed that the developer's work with focus groups of adolescents and parents/guardians demonstrated that this criterion was met.

The Committee expressed some concerns related to testing (specifically the inability to perform confirmatory factor analysis for the transfer planning domain) and the exclusion of individuals who are not capable of either completing the survey or participating in this type of planning, noting these

patients may be the ones most in need of transition services. Nevertheless, the Committee decided that #2789 met the Scientific Acceptability criterion. Because the measure is specified and was tested with a mail-only survey, the Committee discussed feasibility issues and strongly encouraged the developer to expand administration of the survey to include electronic and telephone versions; electronic communication is particularly appropriate and preferred by the target adolescent population. The Committee agreed that #2789 met the NQF criteria and recommended it for endorsement.

Family Experience with Care Coordination (FECC) Measures

The FECC measure set is derived from a survey assessing family experiences with care coordination, of which a subset of 10 measures was submitted to NQF for endorsement consideration. The developer noted evidence showing that children with medical complexity (CMC) who have comprehensive, well-coordinated care in a medical home have better patient and family experiences of care and improved medical outcomes. Care coordination interventions among CMC also have been associated with decreased unmet specialty care need and improved use of healthcare services, decreasing hospitalizations and cost. While the FECC measures originally were submitted under one submission, #2770, the Committee elected to consider them as 10 separate measures for 2 reasons: The developer stated that it considered them individual measures (albeit from a single survey instrument), and the Committee recognized that some of the measures appeared less likely to meet all NQF must-pass criteria. By separating the measures, the Committee could recommend those that passed all criteria. NQF #2770 will not move forward, and each component has been given a new number and has a separate discussion below.

2842 Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator (Seattle Children's Research Institute): Endorsed

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease. FECC-1: Has care coordinator; **Measure Type:** Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

NQF #2842, a new process measure, assesses whether children with medical complexity (CMC) have a care coordinator. The Committee raised concerns about the evidence base for #2842, noting that, although the balance of the evidence from several small studies and one RCT supported having a care coordinator, the empirical evidence is limited. While the Committee agreed that a gap exists, it again noted the paucity of data related to gaps in care coordination for CMC. After discussing concerns about the testing sample size and population with the developer, the Committee agreed that the measure met the NQF criteria for Reliability and for Validity. With respect to the criterion of Feasibility, Committee members noted that caregiver surveys are expensive and time consuming. As a plan-level measure, however, the measure should be feasible. The Committee agreed the measure met the NQF criteria and recommended #2842 for endorsement.

2843 Family Experiences with Coordination of Care (FECC)-3: Care coordinator helped to obtain community services (Seattle Children's Research Institute): Endorsed

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease; **Measure Type:** Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

This new process measure, #2483, assesses whether caregivers of CMC who have a care coordinator and who require community services reported that their care coordinator helped their child obtain these community services in the last year. The evidence for this measure was the same as the evidence for #2842, so the Committee raised no further concerns. The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and therefore a lack of consensus on the size of the gap.

The Committee expressed concern about the measure's reliability, which the developer attributed to the small sample size. However, the developer also provided data element-level validity, which the Committee judged met the Validity criterion and, per NQF guidance, can be used demonstrate reliability. As with all caregiver surveys, the Committee noted they are expensive and time consuming. As a plan-level measure, however, Committee members judged the measure feasible. Ultimately, the Committee agreed the measure met the NQF criteria and recommended #2842 for endorsement.

2844 Family Experiences with Coordination of Care (FECC)-5: Care coordinator asked about concerns and health changes (Seattle Children's Research Institute): Endorsed

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease; **Measure Type:** Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

NQF #2844 measures whether CMC who have a care coordinator have been contacted in the last 3 months and asked about caregiver concerns and health changes in the child. The measure draws on the same body of evidence as #2842 and #2843.

The Committee questioned the 3-month time period for contact, expressing concern this might be too long between contacts. The developer explained that their advisory panel had originally proposed 1 month, but the parent representatives on their advisory panel recommended 3 months. The parent representatives on the Committee concurred with the 3-month timeframe.

As with #2842 and #2843, the Committee agreed that a gap exists in care coordination for CMC and that this is an important topic to measure, but there are limited data and therefore a lack of consensus on the size of the gap for #2844. The Committee again noted that caregiver surveys are expensive and time consuming. As a plan-level measure, however, Committee members judged the measure feasible. Ultimately, the Committee agreed the measure met the NQF criteria and recommended #2844 for endorsement.

2845 Family Experiences with Coordination of Care (FECC)-7: Care coordinator assisted with specialist service referrals (Seattle Children's Research Institute): Endorsed

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease;

Measure Type: Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

NQF #2845, a new process measure, assesses whether caregivers of CMC who have a care coordinator reported that the care coordinator ensures that appointments with specialty service providers occur. NQF #2845 shares the same evidence base as measures #2842, #2843, and #2844, so no additional issues were identified by the Committee. The Committee expressed concerns with the timing, however, because scheduling an appointment with a specialist within 3 months can be difficult. The developer explained that the measure focuses on assistance in making the appointment, not whether the appointment occurred within 3 months. This measure did not achieve consensus on the Evidence criterion.

The Committee agreed that a gap exists in care coordination for CMC and that this is an important topic to measure, but there are limited data and therefore a lack of consensus on the size of the gap. The Committee agreed that this measure met the Reliability and Validity criteria. The Committee noted that caregiver surveys are expensive and time consuming, however, as a plan-level measure, Committee members judged the measure feasible. The Committee approved #2845 for the NQF criterion of Overall Suitability for Endorsement.

2846 Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs (Seattle Children's Research Institute): Endorsed

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease;

Measure Type: Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

This new process measure, #2846, assesses whether caregivers of CMC who have a care coordinator report that their care coordinator was knowledgeable about their child's health, supported the

caregiver, and advocated for the needs of the child. This measure shares the same body of evidence as #2842, #2843, #2844, and #2845, so no further concerns were raised. The Committee agreed that there is a strong conceptual basis for this measure and that a care coordinator should be knowledgeable, supportive, and should advocate for a child's needs. While limited data exist regarding a gap in care coordination for CMC, the Committee agreed that there is a gap for #2846.

The Committee noted that caregiver surveys are expensive and time consuming. As a plan-level measure, however, Committee members judged this measure feasible. Ultimately, the Committee agreed the measure met the NQF criteria and recommended #2846 for endorsement.

2847 Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content (Seattle Children's Research Institute): Endorsed

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease;

Measure Type: Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

NQF #2847 assesses whether caregivers of CMC report receiving a written visit summary during the last 12 months from the office of the child's main provider and whether the summary contained the following elements: current problem list; current medication list; drug allergies; specialists involved in the child's care; planned follow-up; and what to do for problems related to outpatient visit. This measure also draws on the same body of evidence as measures #2842, #2843, #2844, #2845, and #2846.

Much of the Committee's discussion on the evidence for this measure focused on whether the 6 summary components specified are appropriate and how they relate to the requirements for Meaningful Use visit summaries. The Committee did not achieve consensus on the NQF criterion of Evidence. The Committee agreed that there is a gap for #2847, while also acknowledging the limited availability of data on the actual size of the gap. The Committee noted that caregiver surveys are expensive and time consuming. As a plan-level measure, however, Committee members judged the measure to be feasible. Although it did not reach consensus on the Evidence criterion, the Committee approved #2845 for the NQF criterion of Overall Suitability for Endorsement.

2848 Family Experiences with Coordination of Care (FECC) -14: Healthcare provider communicated with school staff about child's condition (Seattle Children's Research Institute): Not Recommended

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease;

Measure Type: Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

NQF #2848 measures whether caregivers of CMC who report their child's condition causes difficulty learning, understanding, or paying attention in class also report that one of their child's healthcare providers (i.e., primary care physician, specialist physician, care coordinator, nurse practitioner, nurse, social worker) communicated with school staff at least once a year about the educational effects of the child's condition. The Committee expressed significant concerns about the evidence for this measure. While the developer conducted a systematic review, the developer was unable to find direct empirical evidence; evidence provided was for other populations, not CMC (e.g., a small study of children with traumatic brain injury). The Committee felt such related studies were not necessarily applicable. The Committee also was divided on whether the requirement to communicate at least annually with school staff would be a burden on families and may not be appropriate in all cases. One parent said this was something she would have privacy concerns and would want providers to consult with her prior to speaking with the school, and that this is not something that should automatically be required via performance measurement. Others stated that the information is important for schools to have. Ultimately, #2848 did not pass the must-pass criterion of Evidence and was not recommended.

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed (Seattle Children's Research Institute): Endorsed

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease;

Measure Type: Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

NQF #2849, a new process measure, assesses whether the caregivers of CMC who self-identify as having a preference for conducting medical visits in a language other than English have access to a professional medical interpreter (live or telephonic) at all visits for which an interpreter is needed. The Committee noted providing translation services is a federal requirement, but concurred this does not always occur and a gap exists. Committee members also acknowledged the strong evidence for professional translation as a critical healthcare service. The Committee noted reliability testing for #2849 was not strong, which the developer attributed to the small sample size; the Committee agreed this measure has strong face validity. The Committee again noted caregiver surveys are expensive and time consuming, but it should be feasible as a plan-level measure. Ultimately, the Committee agreed measure #2849 met the NQF criteria, and it was recommended for endorsement.

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan (Seattle Children's Research Institute): Endorsed

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease;

Measure Type: Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

NQF #2850 assesses whether caregivers of CMC report that their child's primary care provider created a shared care plan for the child. The Committee noted this measure has a strong evidence base, with multiple RCTs, cohort studies, case series studies, and 2 consensus statements all supporting shared care plans. There were some concerns shared care plans may not be updated frequently enough, but the developer explained it had assessed this and, while overall performance on having a shared care plan was poor, performance on updating existing care plans within the last year was good.

The Committee agreed that a gap in care coordination for CMC exists and that this is an important topic to measure, but there are limited data and therefore a lack of consensus on the size of the gap. The Committee again noted that caregiver surveys are expensive and time consuming. As a plan-level measure, however, Committee members judged the measure to be feasible. Ultimately, the Committee agreed that the measure met the NQF criteria and recommended #2850 for endorsement.

2851 Family Experiences with Coordination of Care (FECC) -17: Child has emergency care plan (Seattle Children's Research Institute): Not Recommended

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year. CMC are children identified by the Pediatric Medical Complexity Algorithm (PMCA) as having complex, chronic disease;

Measure Type: Process; **Level of Analysis:** Health Plan, Population: State; **Setting of Care:** Other; **Data Source:** Administrative claims, Patient Reported Data/Survey

NQF #2851 assesses whether caregivers of CMC report that their child's main provider created an emergency care plan for the child. The Committee noted having an emergency care plan is important, but may not be technically possible at this time given the limitations of data portability that often exist across providers and care settings. The Committee also noted the lack of empirical evidence to support the measure; the evidence provided was based on expert consensus statements from the American Academy of Pediatrics. Because #2851 did not pass the must-pass criterion of Evidence, it was not recommended.

Imaging

2820 Pediatric Computed Tomography Radiation Dose (University of California, San Francisco): Endorsed

Description: The measure requires hospitals and output facilities that conduct Computed Tomography (CT) examinations in children to: 1. Review their CT radiation dose metrics, 2. calculate the distribution of the results, and 3. compare their results to benchmarks. This would then imply a fourth step to investigate instances where results exceed a trigger value for underlying cause, such as issues with protocol, tech, equipment, patient, etc.; **Measure Type:** Intermediate Clinical Outcome; **Level of Analysis:** Facility, Integrated Delivery System; **Setting of Care:** Ambulatory Care: Ambulatory Surgery Center (ASC), Ambulatory Care : Clinician Office/Clinic, Ambulatory Care: Outpatient Rehabilitation, Ambulatory Care: Urgent Care, Hospital/Acute Care Facility, Imaging Facility; **Data Source:** Electronic

Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Imaging/Diagnostic Study, Electronic Clinical Data: Registry

This intermediate outcome measure, #2820, requires facilities to review their CT radiation dose metrics, calculate the distribution of the results, and compare their results to benchmarks. A previous version of this measure was submitted to NQF's Patient Safety Project in 2014, but was not recommended. The developer provided additional information to address the issues raised during that project and submitted the measure for review in this project. The developer reported that, at current rates, 1 in 3 children will have at least one CT scan before his/her 18th birthday, and most hospitals currently do not tailor CT scans to the size of their patients, meaning children frequently receive the same radiation dose as an adult.

The Committee agreed that #2820 should drive organizations to examine radiation doses for pediatric scans and would give facilities a framework for setting their dose levels. In addition, the Committee noted that dose level, in and of itself, is an important outcome to patients. The Committee had questions about the specifications and the process of collecting the data for this measure, all of which were adequately addressed by the developer. The developer explained that consecutive exams should be used, and that the measure does not include certain procedures (such as radiological oncology). The developer also noted that while there is variability in dose depending on clinical indications, this variability is dwarfed by the variability resulting from institutional preference. For example, for some clinical questions, one facility will use a single-phase setting while another will use a multiple-phase setting, which results in twice as much radiation exposure. Further, the developer noted that this measure only requires that a facility meet the average benchmark, not that every patient be at or below the benchmark. Based on the developer's responses, the Committee agreed that NQF's criteria of Reliability and Validity were met. Of note, although the developer indicated that the health plan is an appropriate level of analysis, the Committee stated that the measure was not feasible because of a lack of access to the necessary data. It also was noted that the developer did not provide testing at the plan level. The developer agreed to remove this level of analysis. With this modification, the Committee agreed that #2820 met the NQF criteria and recommended it for endorsement.

2802 Overuse of Imaging for the Evaluation of Children with Post-Traumatic Headache (Q-METRIC – The University of Michigan): Not Recommended

Description: Percentage of children, ages 2 through 17 years old, with post-traumatic headache who were evaluated in the emergency department (ED) within 24 hours after an injury, and imaging of the head (computed tomography [CT] or magnetic resonance imaging [MRI]) was obtained in the absence of documented neurologic signs or symptoms that suggest intracranial hemorrhage or basilar skull fracture; **Measure Type:** Process; **Level of Analysis:** Health Plan; **Setting of Care:** Hospital/Acute Care Facility; **Data Source:** Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

This new process measure, #2802, focuses on overuse of imaging. Overall, the Committee was concerned that the developer had specified the patient population too narrowly. The Committee also raised other concerns, including: the level of analysis (health plan rather than hospital level); the exclusion of children without a documented neurological exam; the exclusion of children with suspected

neglect; and the problems identifying cases of suspected child abuse within the data. Additionally, although Committee members agreed that there is a wide variation in the rate at which CT scans are performed, they were not convinced that the same variation existed among the much smaller population of children with headache, especially since headache is often not coded in the ED. Committee members were particularly concerned about the ability to identify a gap at the plan level, and they did not achieve consensus on the existence of a gap for #2802.

Committee members also voiced concerns with the testing approach and results. The reliance on chart review was highlighted, with the Committee expressing concern as to whether the measure would be reliable if implemented nationwide; Committee members felt reliability could potentially be enhanced if a list of diagnoses and trigger words were added for abstractors. The Committee did not achieve consensus on the criterion of Reliability and did not pass Validity, a must-pass criterion. Overall, the Committee emphasized that overuse of imaging is an important area for measurement, but it felt this measure was too limited and recommended development of specifications for a more broad-based measure. Lastly, the Committee recommended the broader measure be specified at the facility or provider level to ensure that the appropriate party is held accountable for performance. Because it failed on the criterion of Validity, #2802 was not recommended for NQF endorsement.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia (Q-METRIC – University of Michigan): Endorsed

Description: The percentage of children ages 2 through 15 years old with sickle cell anemia (Hemoglobin SS) who received at least one transcranial Doppler (TCD) screening within a year; **Measure Type:** Process; **Level of Analysis:** Health Plan; **Setting of Care:** Other; **Data Source:** Administrative claims

This new process measure, #2797, fills a gap in care for children with sickle cell disease. Data submitted by the developer suggest that, without intervention, 11% of children with sickle cell anemia will have a stroke by the age of 18. The Committee concurred that the measure aligned with National Heart, Lung, and Blood Institute guidelines for annual transcranial doppler (TCD) screening of children with sickle cell anemia; TCD ultrasonography is the only method available to identify those who are at high risk for developing a stroke. The Committee agreed that there is variability in the expertise of providers who perform TCD, but this is not an issue that should stop the measure. Committee members agreed that this is a health plan-level measure, but noted it may not be appropriate for all health plans due to a “small numbers” issue: 70% of children with sickle cell disease are on Medicaid, and the performance gap was identified at a state level. The Committee agreed that #2797 met the NQF criteria and recommended it for endorsement.

Comments Received After Committee Evaluation

After the Committee’s evaluation of the 24 measures, NQF solicited comments on the draft report via an online tool from January 14, 2016, through February 12, 2016. During this period, NQF received 45 comments from 3 organizations. Comments included support for Committee recommendations, as well as comments related to the Family Experience with Care Coordination (FECC) measures, lack of access to care, and measure-specific issues.

Support for Committee Recommendations

Overall, the comments supported the Committee's recommendations (either for or against endorsement) on the measures. Several of the comments noted concerns with the measures or provided suggestions for improvement and are detailed under the measure-specific comments.

Family Experiences with Coordination of Care Measures

A commenter submitted similar comments on several of the measures relating to the Family Experiences with Coordination of Care (FECC) measure (#2842, #2843, #2844, #2845, #2846, #2847, #2848, #2849, #2850, and #2851). The comments noted, in part, that the measure definitions include ICD-9, and should be expanded to include ICD-10 and SNOMED codes. (The measure relies on the Pediatric Medical Complexity Algorithm [PMCA], which uses ICD-9 codes to classify a child's illness with regard to chronicity and complexity.) The commenter also expressed general concern about the use of ICD codes as the method to determine the denominator population.

While the commenter did note the importance of care coordination and family engagement, it also raised general concerns with the logistics of care coordination, including that these measures can only be used in systems where a care coordinator position is available and reimbursed, which requires external support. Additionally, the commenter requested information on how the measure supports the medical home where the primary care physician is not part of the network, but has his or her own care coordinator.

A second commenter submitted a single comment supporting all of the FECC measures, highlighting the critical importance of measures assessing the quality of coordination of care services from the patient/caregiver's perspective.

The developer's response to the portion of the comments that apply to multiple FECC measures is below and is not repeated for the individual measures. Measure-specific responses are included in [Appendix A](#) with the individual measure.

Developer Responses

NOTE: This developer has elected to respond separately to each point of the comments received. The statements quoted below are from the original comment. The developer's responses follow each quotation.

"The measure definition includes ICD-9, which has to be expanded to be relevant to ICD-10 and SNOMEDs."

As described in sections S.9 and 2b.2 of the submission, conversion of PMCA from ICD-9 to ICD-10 codes is underway and should be available later this year. The conversion that has occurred so far is included in the detailed measure specifications attachment. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately, and would not be appropriate to use until at least 1 full year of ICD-10 codes are available (October 2016).

“This can only happen in systems where a Care Coordinator position is available and reimbursed. This is sustainable only if the practice has support from the health plan or other sources.”

While we appreciate the commenter’s concern that this might be the case, the survey questions asking about care coordination allow for the “care coordinator” to be anyone, either within or outside of the main provider’s office, who “helped [the caregiver] with managing [the] child’s care.” Specific options on the survey allow the caregiver to identify that person as the main provider, another doctor or nurse, a social worker, or a care coordinator, among other options. The survey is attached to the submission. That language (“the person who helped you with managing your child’s care”) was the result of cognitive interviews with caregivers of children with medical complexity in English and Spanish, during which “care coordinator” was not universally understood. The FECC survey measures evaluate the quality of care coordination being provided, regardless of who is providing that care coordination service.

“How does this support the medical home where the PCP is not part of the network, but has their own care coordinator?”

As mentioned above, the FECC measures evaluate the quality of care coordination being provided, regardless of who is providing the care coordination services. The measure is structured so that the care coordinator can be part of the medical home or be from outside of the medical home. Thus, if the medical home PCP is providing a care coordinator, those are the services the caregiver will report on—whether or not the medical home is in or out of network.

“We are concerned about using ICD codes as the main way to determine the populations—this is not an accurate reflection of complexity, and compromises the selection of the population”

We appreciate the commenter’s concern that ICD codes might miss some of the nuances of medical complexity, and could mis-classify children. However, there are several reasons that it is not only a reasonable approach, but may be the only feasible approach. To begin with, the FECC measures were designed for use at the state or payment model level, not at the practice level. The eligible population therefore needs to be identifiable on the basis of billing or administrative data, as neither chart review nor practice report would be feasible. In addition, if practice report or registry data were to be used to identify children with medical complexity in need of care coordination, practices could either intentionally or unintentionally report only those who had been flagged by the practice and were already receiving additional care coordination services, thereby improving their performance scores. Such an approach would miss the patients and families who had already fallen through the cracks and were failing to receive needed services. Finally, the PMCA has been validated in both hospital and Medicaid claims data and demonstrated high degrees of sensitivity and specificity for correctly identifying children with medical complexity, compared to a gold-standard population determined via medical record review (see submission section 2b2.2: Validity, and Simon TD et al. “Pediatric Medical Complexity Algorithm: A new method to stratify children by medical complexity.” *Pediatrics*. 133(6), June 2014.)

Committee Response

Thank you for your comment. After reviewing the comments received, and the developer's response, the Committee does not wish to reconsider its recommendations on any of the FECC measures.

Lack of Access to Care

Some of the measures rely on access to specialty care, such as psychosocial care (in particular psychiatrists), radiologists, care coordinators, pediatric hospitals, or referrals for abnormal HgbA1C or lipid levels. Commenters noted that access to these providers/facilities is not universal and that inability to access these types of care may hinder performance on these measures.

Measure-Specific Comments

Comments specific to particular measures, along with Committee and developer responses, are in [Appendix A](#).

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⁷ Nash DB, Reifsnyder J, Fabius RJ, et al. *Population Health: Creating a Culture of Wellness*. Sudbury, MA: Jones & Bartlett Learning; 2010.

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⁹ Bipartisan Policy Center. *Lots to Lose: How America's Health and Obesity Crisis Threatens our Economic Future*. Washington, DC: Bipartisan Policy Center; 2012. Available at <http://bipartisanpolicy.org/library/lots-lose-how-americas-health-and-obesity-crisis-threatens-our-economic-future/>. Last accessed January 2016.

¹⁰ The Henry J. Kaiser Family Foundation (KFF). Snapshots: health care spending in the United States & selected OECD countries website. <http://kff.org/health-costs/issue-brief/snapshots-health-care-spending-in-the-united-states-selected-oecd-countries/>. Last accessed May 2016.

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¹² Hoyert DL, Matthews TJ, Menacker F, et al. Annual summary of vital statistics: 2004. *Pediatrics*. 2006;117(1):168-183.

Appendix A: Details of Measure Evaluation

Measures Endorsed

Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable; Y=Yes; N=No

2797 Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

[Submission](#) | [Specifications](#)

Description: The percentage of children ages 2 through 15 years old with sickle cell anemia (Hemoglobin SS) who received at least one transcranial Doppler (TCD) screening within a year.

Numerator Statement: The numerator is the number of children ages 2 through 15 years old with sickle cell anemia who received at least one TCD screening within the measurement year.

Denominator Statement: The denominator is the number of children ages 2 through 15 years with sickle cell anemia within the measurement year.

Exclusions: There are no denominator exclusions.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: Q-METRIC – University of Michigan

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: **H-18; M-8; L-1; I-0**; 1b. Performance Gap: **H-23; M-4; L-0; I-0**

Rationale:

- The developer stated evidence for this process measure is based on clinical practice guidelines for management of sickle cell disease from the National Heart, Lung, and Blood Institute (NHLBI). Dated 2014, this is a strong recommendation with moderate quality evidence. The recommendation is: “In children with SCA, screen annually with TCD according to methods employed in the STOP studies, beginning at age 2 and continuing until at least age 16.”
- The Committee concurred that the measure aligns with the NHLBI guidelines for annual transcranial doppler (TCD) screening of children with sickle cell anemia; TCD ultrasonography is the only method available to identify those who are at high risk for a stroke.
- The Committee agreed the clinical evidence provided by the measure developer demonstrated that lack of annual screening is strongly associated with poor outcome.
- The Committee expressed concern about the availability and quality of TCD screening across different health centers around the country, including access to a health workforce with the

proper expertise in performing the screening. The Committee agreed, however, such concerns should not preclude this measure from moving forward.

- The measure developer confirmed the measure recommends one TCD screening annually, from ages 2 to 16 years old.
- Committee members highlighted performance gaps between different types of health plans (e.g., Medicaid versus commercial). The measure was primarily tested in the Medicaid population, and the Committee suggested testing in the commercial insurance population to ensure the measure would yield the same results. A Committee member noted most patients with sickle cell disease qualify for Medicaid after a relatively short time period, and the measure developer confirmed at least 70% of children with sickle cell anemia are enrolled in Medicaid.
- Based on data presented from different states, Committee members concurred a gap in care exists, and there is an opportunity for improvement. They also noted disparities based on socioeconomic status are unlikely, since the majority of the children with sickle cell disease are covered by Medicaid.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-17; M-9; L-0; I-0** 2b. Validity: **H-20; M-6; L-0; I-0**

Rationale:

- The Committee expressed concern about the process of identifying children with sickle cell disease and noted the measure should include stringent diagnosis specifications for identifying the condition. The Committee ultimately agreed the developer demonstrated that patients with sickle cell disease could be reliably identified.
- The measure developer conducted signal-to-noise testing at the performance measure level.
- Empirical validity testing was performed at both the critical data element and the performance measure score levels. Face validity also was established by a panel of national experts and parent advocates, as well as measurement and state Medicaid experts. The Committee did not identify any threats to validity.
- The Committee agreed this measure met the Reliability and Validity criteria.

3. Feasibility: H-24; M-2; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- This measure is a health plan level measure collected through administrative claims data. The Committee agreed this should be easy to collect and had no feasibility concerns.

4. Usability and Use: H-22; M-4; L-0; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The measure is currently in use for surveillance purposes by the New York State Health Department.
- The Committee agreed the measure met the Usability and Use criterion.

5. Related and Competing Measures

- There are no related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-26; N-0

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received three comments from three separate organizations. The first commenter noted the importance of yearly screening as a first step, but raised several questions about the measure overall (e.g., interventions and patient refusals) as well as the numerator and denominator details. The second comment noted this measure is at the health plan level and stated the measure could be improved by supporting mechanisms at the primary care level for tracking, such as coding at the electronic health record (EHR) level. The third comment supported the Committee's recommendation for endorsement.

Developer response:

- **General Comment:**
We agree that receipt of intervention in the form of transfusions or hydroxyurea is the causal step in preventing stroke among children with sickle cell anemia. However, that intervention should not be initiated without the use of TCD screening to identify candidates for intervention. Therefore, the use of TCD screening is recommended by the National Heart, Lung, and Blood Institute (NHLBI) for all children with sickle cell anemia from 2-16 years of age.
Consequently, measures reflecting appropriate use of TCD screening are an important indicator of quality of care among children with sickle cell disease. However, the proposed measure is specified and tested to identify children with sickle cell anemia and their receipt of TCD screening solely based upon administrative claims data. Complete information on transfusions and hydroxyurea interventions will require additional data from clinical information sources. Future enhancement of this measure as an e-measure may provide an opportunity to measure quality of care related to these interventions.
Finally, although parents may refuse screening on religious grounds or for other personal reasons, we do not expect this refusal to vary by health plan.
- **Numerator Details:**
Our numerator is reflective of NHLBI guidelines, which state that each child with sickle cell anemia should receive an annual TCD screen from ages 2-16.
All CPT codes reflective of a TCD screen will be captured, irrespective of place of service or provider. Therefore, any screens performed by an MD, RN, or other health professional will be included in this measure.
- **Denominator Details:**
Three separate encounters related to sickle cell anemia identify children with a high level of sensitivity (91.4%) and specificity (80.0%) when compared to the gold standard of newborn screening records (please see NQF Testing documentation). Each sickle cell anemia-related

encounter is not limited by location or provider—therefore, does not need to occur at the same center where the screening is performed. Additionally, receipt of TCD screening may occur at any location and is not limited to the hematology medical home; therefore, this location is not specified within this measure.

- Response to other comment:

We agree LOINC and SNOMED coding systems would be important for capturing orders and results pertaining to transcranial Doppler (TCD) screening at the primary care level. However, this measure was specified and tested to identify children with sickle cell anemia and their receipt of TCD screening solely based upon administrative claims data. The specification of LOINC and SNOMED codes would be appropriate for future enhancement of this measure, such as for e-measures based on clinical information systems.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2789 Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

[Submission](#) | [Specifications](#)

Description: The Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care measures the quality of preparation for transition from pediatric-focused to adult-focused health care as reported in a survey completed by youth ages 16-17 years old with a chronic health condition. The ADAPT survey generates measures for each of the 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning.

Numerator Statement: The ADAPT survey consists of 26 questions assessing the quality of health care transition preparation for youth with chronic health conditions, based on youth report of whether specific recommended processes of care were received. The ADAPT survey generates measures for each of 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning. ADAPT measure scores are calculated using the sum of the proportions of positive responses to between 3 and 5 individual items. Complete instructions for measure score calculations are provided in the Detailed Measure Specifications (Appendix A).

1) Counseling on Transition Self-Management:

The numerator is the sum of the proportions of positive responses to the five questions about counseling on transition self-management, among respondents with valid responses to all questions.

2) Counseling on prescription medication:

The numerator is the sum of the proportions of positive responses to the three questions about counseling on prescription medication, among respondents who indicate that they take prescription medication every day and with valid responses to all questions.

3) Transfer planning:

The numerator is the sum of the proportions of positive responses to the four questions about transfer planning, among respondents who report being treated by a pediatric provider and with valid responses to all questions.

Denominator Statement: The target population of the survey is 16- or 17-year-old adolescents with a chronic health condition who are either (a) receiving health care services in a clinical program or (b) enrolled in a health plan or similar defined population.

The denominator for each measure is the number of respondents with valid responses for all of the questions in the measure.

Exclusions: SURVEY SAMPLE

Exclude patients in the following categories from the ADAPT survey sample frame:

1. “No-publicity” patients (i.e., those who requested that they not be contacted)
2. Court/law enforcement patients
3. Patients with a foreign home address
4. Patients who cannot be surveyed because of local, state, or federal regulations

SURVEY RESPONSE

Exclude survey respondents based on the following clinical and non-clinical criteria:

1. Undeliverable survey, i.e., the survey is returned by US Mail as undeliverable. “Undeliverable” should not be assumed merely because of non-response.
2. The survey is returned with clear indication that the patient does not meet eligibility criteria (e.g., ineligible age or lack of a chronic health condition).
3. Patient unable to complete survey independently: This must be indicated by the appropriate checkbox in the cover letter or equivalent clear indication by the parent/guardian that the patient is unable to complete the survey independently (e.g., due to cognitive limitation).
4. Exclude all respondents who answered “None” to ADAPT question 3 (“In the last 12 months, how many times did you visit this provider?”).

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Facility, Clinician : Group/Practice, Health Plan

Setting of Care: Ambulatory Care : Clinician Office/Clinic

Type of Measure: PRO

Data Source: Patient Reported Data/Survey

Measure Steward: Center of Excellence for Pediatric Quality Measurement

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: **Y-22; N-2**; 1b. Performance Gap: **H-2; M-16; L-5; I-1**

Rationale:

- This is a patient-reported outcome measure with 3 domains included in a single measure: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning.
- The Committee agreed transitions from pediatric to adult care are an area of care that needs improvement, and that these conversations should be happening by age 16. A Committee member also noted this is a major transition for these patients, and it should be introduced by the primary healthcare provider.
- The Committee discussed the age range specified by the measure, since these transitions may be happening later due to changes in health insurance regulations. It ultimately agreed the range was appropriate.
- Limited evidence exists that physician counseling will achieve transition readiness. In addition, the Committee noted some groups, such as children with developmental disabilities, may have a high need for transition services, but may not be able to participate in this type of transition planning (or participate in this survey).
- Because this is a patient-reported outcome measure, the developer was required to demonstrate the target population values the measure and finds it useful. The developer provided data on focus groups that demonstrated the target populations (adolescents 16-18 and young adults 19-26, with chronic health conditions) do value the measure. The Committee noted this measure is novel because it asks adolescents for their assessment, not their parents/caregivers.
- Despite finding the measure conceptually compelling, and noting there is evidence that care transitions are not being done well, the Committee had some concerns that the processes focused on in the domains linked to actual improved outcomes. However, it ultimately passed the Evidence criteria.
- Concerns also were expressed about whether there was a performance gap. The developer stated the data from field testing demonstrated a population-level gap, with scores on all 3 domains low, especially for the transition planning domain.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability (all three domains): **H-0; M-18; L-5; I-1**

2b. Counseling on Transition Self-Management domain and Counseling on Prescription Medication domain Validity: **H-1; M-20; L-2; I-1**

Transfer Planning domain Validity: **H-0; M-15; L-6; I-3**

Rationale:

- This measure was tested at the critical data element level and the performance measure score level, but data only were provided at the performance measure score level.
- The measure was tested in 1 hospital and 2 health plans serving Medicaid enrollees; the sites were geographically dispersed.
- The response rate by setting varied from 21% and 28% for the health plans and 47% for the clinical programs. The initial deployment for the health plans was 1,500 surveys and 623 for the

clinical programs. The Committee noted concerns about the low response rate, particularly at the health plan level.

- Internal consistency reliability tested with ordinal alpha was provided for each of the 3 domains at each of the 3 test sites. Results ranged from 0.74-0.99, with 1 exception at 1 site (0.57). These results generally indicate good to excellent reliability. The transfer planning measure had the highest score—0.99 at each site. Counseling on transition ranged from 0.70 to 0.79. The alphas for counseling on prescriptions were 0.57, 0.74, and 0.78.
- Empirical validity testing at the performance measure score level was performed.
- Because this is a PRO, focus groups and cognitive interviews were conducted to test content validity and to confirm each question was understandable.
- Confirmatory factor analysis for the 2 counseling measures was performed; it could not be performed for the transfer planning measure due to small sample size. Because of this, the Committee elected to split its votes on validity; the transfer planning domain was voted on separately from the 2 counseling domains.
- The Committee questioned the exclusion of individuals who are not capable of completing the survey independently (due to cognitive limitations, etc.); a Committee member noted these individuals might be the patients most in need of this type of service. The developer agreed adolescents with developmental and intellectual delays need transition planning, but stated patients who cannot complete the survey had to be excluded since it is a patient-reported survey. (If a parent or caregiver completed the survey, the developer excluded it from analysis.) The developer further indicated this measure was intended for the general population, and other measures should be developed for targeted populations.
- The developer reported risk adjustment/case mix for self-reported health status and age.
- The developer assessed variation by education and gender; no variation was found so these were not included in the final risk adjustment model. The developer stated it did not have enough variability for race/ethnicity to include it in a testing model. The developer reported it found variation based on medical complexity and the patient's county of residence. Committee members noted potential other variables that could be used for risk adjustment, such as language; the developer explained it had chosen variables that were readily available from the survey instrument and further noted they were limited by the data they had available.

3. Feasibility: H-1; M-19; L-4; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The ADAPT survey is administered by mail. The developer's rationale for not using electronic sources (e.g., web-based or e-mail administration) is that mail and telephone administration are the best ways to obtain representative samples of patients based on the contact information (mailing address and telephone number) most often available for sampling and data collection. However, the Committee identified concerns with the approach and rationale, noting for adolescents in particular, an electronic survey would be more appropriate. The developer stated it is looking into electronic survey administration.
- The Committee noted the survey is short, so it should be easy to use, but the developer did not address the feasibility of identifying the eligible denominator pool.

4. Usability and Use: H-3; M-16; L-2; I-2

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The measure is not currently in use, and the developer did not present a specific plan for use, but noted many groups have inquired about using the tool since it became available in the last six months.

5. Related and Competing Measures

- This measure is related to 0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child. It is not completely harmonized. The developer indicates CG-CAHPS is intended to be completed by parents and ADAPT is intended to be completed by adolescents. The developer stated, “the ADAPT survey complements the CG CAHPS survey well and has the potential to be administered concurrently.”

Steering Committee Recommendation for Endorsement: Y-16; N-7

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received two comments of support. Both comments noted it is an important topic area, but one also added there is room for improvement, such as ensuring there are tools that are compatible with current EHRs; the development of a follow-up outcome measure; and future use of system-wide EHRs. In addition, the comment requested more information on how the measure could be used for children with intellectual disabilities or severe learning disabilities.

Developer response:

- We thank the AAP for their comments and are glad that they view ADAPT as an excellent tool for addressing transition. ADAPT is focused on pre-transition preparation and we agree that post-transition measurement is important.
We agree that system-wide EHRs would allow for improvements in the transition process, and we concur that standard tools to assess transition preparation for adolescents should be incorporated into existing EHR systems.
We agree that transition preparation is important for adolescents with intellectual and developmental disabilities. The domains of the ADAPT measure clearly apply to this population as well. However, the ADAPT survey is designed for adolescents without such conditions, and measure testing was not performed in cognitively impaired populations. For these adolescents, a measure tailored to their cognitive abilities would need to be developed; potentially a proxy-reported measure would be appropriate for this patient population.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement
-

9. Appeals

- No appeals were received.
-

2800 Metabolic Monitoring for Children and Adolescents on Antipsychotics

[Submission](#) | [Specifications](#)

Description: The percentage of children and adolescents 1–17 years of age who had two or more antipsychotic prescriptions and had metabolic testing.

Numerator Statement: Children and adolescents who received glucose and cholesterol tests during the measurement year.

Denominator Statement: Children and adolescents who had ongoing use of antipsychotic medication (at least two prescriptions).

Exclusions: No exclusions

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan, Integrated Delivery System, Population : State

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Laboratory, Behavioral Health/Psychiatric : Outpatient

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: National Committee on Quality Assurance

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-4; M-18; L-0; I-1**; 1b. Performance Gap: **H-10; M-13; L-0; I-0**

Rationale:

- The developer provided the following relationship between the process being measured and outcome: Child or adolescent has ongoing use of antipsychotic medication >>> Metabolic monitoring by a health care provider >>> Identification of metabolic issues/side effects >>> Health care provider addresses metabolic issue by, for example, adjusting antipsychotic medication regimen >>> Patient receives intervention for metabolic issues present >>> Metabolic issues reduced or eliminated >>> Improvement in metabolic functioning for patient (desired outcome).
- Overall, the Committee agreed this is an important measure to monitor the serious side effects of prescribing antipsychotic medications to children and adolescents (e.g., diabetes, rapid weight gain).

- The measure is based on 11 evidence-based clinical practice guidelines and standards from 5 organizations, particularly the guidelines from the American Academy of Child and Adolescent Psychiatry (AACAP).
- The Committee agreed evidence exists to support metabolic monitoring, specifically glucose monitoring and lipid monitoring for children on antipsychotics. Clear recommendations are provided by the professional societies regarding concern for metabolic derangements.
- The Committee sought clarification on timing, which the developer defines as 2 prescriptions of the same drugs or 2 different drugs during the measurement year.
- During field testing, the developer found the percentage of children receiving metabolic screening within 30 days of a new antipsychotic medication prescription was 6.0%, with a range of 0.4% to 14.0%. For children and adolescents who had ongoing antipsychotic use, the percentage who received metabolic monitoring was on average 18.5%, with a range of 4.8% to 36.2%. In an examination of claims data from 17 Medicaid health plans in 1 state, the developer found the average percentage of children receiving baseline metabolic screening within 30 days of a new antipsychotic medication prescription among the general population of children in health plans was 10.3%, with a range of 0.2% to 17.8%. For ongoing metabolic monitoring during the measurement year, the data suggest similar gaps in care. The percentage of children with ongoing antipsychotic use receiving metabolic monitoring during the measurement year was 30.9%, with a range of 2.3% to 40.0%. The Committee noted the low rate of performance and the broad range, indicating there is a performance gap.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-5; M-18; L-0; I-0** 2b. Validity: **H-5; M-18; L-1; I-0**

Rationale:

- The Committee determined the measure specifications were precise, noting the specifications were consistent with the evidence presented.
- Reliability testing was performed at the performance measure score level using a beta-binomial signal-to-noise analysis. The average reliability for states and plans was > 0.7 (ranging from 0.99 to 0.83), suggesting the measure is reliable, particularly at the Medicaid health plans and state levels.
- Validity testing included construct validity (i.e., correlations among measures and rankings of health plans and states on measures on the three antipsychotic medication measures) and consensus validity by 5 expert panels. Among national commercial plans, there was a very slight positive correlation between the First-line Psychosocial Care and Metabolic Monitoring measures ($r=0.12$, $p=.70$) and high positive correlation between the Metabolic Screening and Metabolic Monitoring measures ($r=0.82$, $p<0.0001$). Among Medicaid plans in one state, there was a slight positive correlation between the Follow-up Visit and Metabolic Monitoring measures ($r=0.14$, $p=.58$) and high positive correlation between the Metabolic Screening and Metabolic Monitoring measures ($r=0.72$, $p<0.001$).
- The Committee voiced no concerns about the reliability and validity testing.

3. Feasibility: H-15; M-9; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The Committee noted the measure is feasible for collection by health plans and states using administrative claims data.

4. Usability and Use: H-10; M-14; L-0; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The Committee had no questions or concerns on the usability and use of this measure.

5. Related and Competing Measures

- This measure directly relates to two other measures, #1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD) and #2337: Antipsychotic Use in Children Under 5 Years Old. This measure has a different target population and focus.

Steering Committee Recommendation for Endorsement: Y-24; N-0

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received comments from two organizations. One comment noted a number of potential areas for improvement, including supportive mechanisms for tracking at the primary care or patient EHR level; suggested exclusions and implementation protocols; and the development of an accompanying measure to ensure appropriate follow-up and record keeping. The comment also flagged concerns about the availability of referral for abnormal results; lack of clarity around the criteria for changing or stopping medications; and “the medicolegal consequences for failure to meet this quality measure may be forthcoming.” The other comment supported the Committee’s recommendation for endorsement.

Developer response:

- The value set to identify the glucose and cholesterol lab tests for this measure does include both CPT and LOINC codes. Because this measure is specified at the health plan level, it accounts for care that is provided across different providers and care settings. This is particularly important for assessing care for children and adolescents prescribed antipsychotics who may be seeing a primary care provider as well as a mental health specialist. The measure will encourage appropriate metabolic monitoring for youth on antipsychotics regardless of which providers they see. This measure is based on guidelines from the American Academy of Child and Adolescent Psychiatry (AACAP), Canadian Alliance for Monitoring Effectiveness and Safety of Antipsychotics in Children (CAMESA), and others. These organizations recommend metabolic testing for youth prescribed antipsychotics, with consensus that baseline and ongoing metabolic monitoring are standards of care for this population. The AACAP and CAMESA guidelines include recommendations for the timing of these tests. AACAP recommends that

glucose and cholesterol tests should be monitored at baseline, 3 months and 12 months. CAMESA recommends monitoring at baseline, three months, 6 months and 12 months. We found from testing that only about 30 percent of children and adolescents on antipsychotics received lab monitoring once during the year, suggesting a significant quality gap. Thus, we specified the measure as receiving lab monitoring within the measurement year in order to address the quality gap while balancing the burden of assessing exact timing of visits.

This measure applies to states and health plans. Our advisory panels did not recommend a “refusal” exclusion, which is not appropriate at a state- and health-plan measure level. We would expect that the number of children meeting these criteria would be fairly small and relatively evenly distributed at the state- and health-plan level. Further, this measure uses administrative claims for data collection. Therefore it would be challenging and potentially burdensome to have an exclusion for children and adolescents who refuse a blood draw or are otherwise “uncooperative”.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2801 Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

[Submission](#) | [Specifications](#)

Description: Percentage of children and adolescents 1-17 years of age with a new prescription for an antipsychotic, but no indication for antipsychotics, who had documentation of psychosocial care as first-line treatment.

Numerator Statement: Children and adolescents from the denominator who had psychosocial care as first-line treatment prior to (or immediately following) a new prescription of an antipsychotic.

Denominator Statement: Children and adolescents who had a new prescription of an antipsychotic medication for which they do not have a U.S Food and Drug Administration primary indication.

Exclusions: Exclude children and adolescents with a diagnosis of a condition for which antipsychotic medications have a U.S. Food and Drug Administration indication and are thus clinically appropriate: schizophrenia, bipolar disorder, psychotic disorder, autism, tic disorders.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan, Integrated Delivery System, Population : State

Setting of Care: Ambulatory Care: Clinician Office/Clinic, Behavioral Health/Psychiatric: Inpatient, Behavioral Health/Psychiatric : Outpatient

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: National Committee on Quality Assurance

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: **H-0; M-7; L-4; I-13**; Insufficient Evidence with Exception: **Y-21; N-3**; 1b. Performance Gap: **H-5; M-16; L-2; I-0**

Rationale:

- This measure encourages the use of psychosocial care prior to or immediately following administration of antipsychotics if the child does not have a U.S. Food and Drug Administration (FDA) indication for antipsychotics (schizophrenia, bipolar disorder, psychotic disorder, autism, tic disorders). If psychosocial care is successful, antipsychotic use may be halted or avoided altogether. The developer provided the following path: Child does NOT have a primary indication for antipsychotic use >>> Health care provider utilizes psychosocial care intervention >>> Child avoids unnecessary antipsychotic use >>> Child avoids adverse side effects associated with antipsychotic medications >>> Child experiences improvement in mental and physical outcomes (desired outcome).
- The measure is based on 11 evidence-based clinical practice guidelines and standards from five organizations, particularly the guidelines from the American Academy of Child and Adolescent Psychiatry (AACAP).
- The Committee agreed on the importance of measuring the use of first-line psychosocial therapy for children and adolescents on antipsychotics, but it noted the evidence is largely consensus-based. It was particularly concerned about the times where it is appropriate to initiate pharmacotherapy without waiting for psychosocial interventions. Due to the lack of empirical evidence, this measure did not pass Evidence, but moved forward on Insufficient Evidence with Exception given the importance of the measure focus.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-4; M-18; L-2; I-0** 2b. Validity: **H-0; M-13; L-7; I-4**

Rationale:

- Reliability testing was performed at the performance measures score level using a beta-binomial signal-to-noise analysis. The average reliability at the state level was 0.99, the Medicaid plan level was 0.97, and the commercial plan level was 0.77, suggesting a very high level of reliability for the measure, particularly for states and Medicaid plans.
- The Committee expressed reservations about the validity of the specifications. It felt the prescription data could be readily captured, but expressed concern about the ability to accurately capture the psychosocial care, since many children may receive psychosocial care

outside of the measured entity of the health plan (e.g., schools and community health centers). As an example, it was noted many health plans do not cover some types of psychosocial care. The prescription data might be captured, but the first-line psychosocial care might not be if it was provided, but not covered. Committee members noted this was true for both commercial and Medicaid plans, with the further complication of state variation in coverage among Medicaid plans.

- The Committee also questioned whether recommending therapy first, before medications, would improve quality of care, especially since access to therapy services might not be available for several months—i.e. whether the risk of not treating could worsen the quality of care. The Committee stated the role of early intervention services—either medication in conjunction with therapy or and therapy in conjunction with medication—is not addressed by this measure.
- Validity testing was at the performance measure score level using both empirical testing and face validity at the plan level. For the empirical testing, the developer assessed construct validity with two types of analyses: correlations among measures using Spearman Correlation Coefficients (using a commercial health plan data sample) and rankings of health plans and states on measures (using MAX state data sample and Medicaid health plan data sample).
- The Committee noted that for validity testing it would have appreciated more claims-based information that actually reflected details about the histories for these children. The developer noted it did consider including more charts, however experienced significant barriers in access to all of the records needed that could have answered the Committee’s question.
- The Committee did not reach consensus on the Validity criterion for #2801, but the measure passed the other NQF criteria and it passed Overall Suitability for Endorsement.

3. Feasibility: H-6; M-12; L-5; I-1

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The Committee noted the limitations of the data source. Since the measure relies on administrative claims data, it may be difficult for health plans to collect supplemental data due to the complication of state variation in benefits coverage among Medicaid plans.

4. Usability and Use: H-4; M-13; L-6; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The Committee had no questions or concerns on the usability and use of this measure.

5. Related and Competing Measures

- This measure directly relates to the NQF-endorsed 2337: Antipsychotic Use in Children Under 5 Years Old. However, this new measure has a broader age population and different focus (i.e., focus on new diagnosis and use of psychosocial care).

Steering Committee Recommendation for Endorsement: Y-17; N-7

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received comments from two organizations. One comment noted it is important issue, but agreeing with the significant concerns raised by the Committee. It also noted the lack of uniform availability of psychosocial care, and requested the addition of children with autism. A second comment supported the Committee's recommendation for endorsement.

Developer response:

- We agree with the importance of this measure and the need for access to first-line psychosocial care for children and adolescents who are started on antipsychotics without a primary indication. This state- and health plan-level measure requires that the plan have a mental health benefit. This is to ensure that health plan members would have access to mental health and psychosocial services through their health plan benefit. In recognition that availability of mental health providers is an issue in some markets, the measure allows for psychosocial care delivered up to 30 days after an antipsychotic is started.

We also agree with the commenter that children with autism should in general be provided psychosocial care. Since autism is a condition for which there is a Food and Drug Administration (FDA) indication for first-line antipsychotic use, we exclude these individuals from the measure. This is not to say that providing psychosocial care would not be important or appropriate for those with autism, but rather the exclusion of individuals with an FDA indication for antipsychotics focuses the measure on those for whom clinical guidelines recommend first-line psychosocial care before starting on antipsychotics.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2803 Tobacco Use and Help with Quitting Among Adolescents

[Submission](#) | [Specifications](#)

Description: Percentage of adolescents 12 to 20 years of age during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user.

Numerator Statement: Adolescents who are not smokers OR Adolescents who are smokers but are receiving cessation counseling.

Denominator Statement: Adolescents who turn 12 through 20 years of age during the measurement year.

Exclusions: N/A

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician : Group/Practice

Setting of Care: Ambulatory Care : Clinician Office/Clinic

Type of Measure: Process

Data Source: Electronic Clinical Data

Measure Steward: National Committee for Quality Assurance

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: **H-11; M-12; L-0; I-1** 1b. Performance Gap: **H-12; M-11; L-0; I-1**

Rationale:

- The measure aims to standardize the way tobacco use is documented.
- The evidence supporting measure #2803 is based on 2 clinical practice guidelines from the U.S. Preventive Services Health Task Force (USPSTF) and the American Academy of Pediatrics (AAP); both derive their evidence from a systematic review of the evidence.
- Data submitted by the developer noted evidence has shown a physician's advice on tobacco cessation can be effective.
- The Committee acknowledged cessation counseling is a proven and effective practice, but expressed concerns over the quality of counseling assessment.
- The Committee asked the measure developer to clarify the measure details, and received confirmation that "physician advice" encompasses counseling, referral to services, treatment services, and medication, and is aligned with other counseling measures included in HEDIS, as well as an adult version of this measure.
- The Committee discussed concerns about the possibility of data manipulation based on information entered automatically on each patient's after-visit summary. The developer clarified this is in the interest of counting a broad array of interventions that could apply.
- Data provided by the measure developer showed an opportunity for improvement, especially between commercial and Medicaid health plans populations (82% vs. 60%).

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-0; M-20; L-4; I-0** 2b. Validity: **H-2; M-19; L-2; I-1**

Rationale:

- The Committee asked for clarification on the numerator specifications, and the measure developer confirmed the measure is specified for all tobacco use and is not limited to cigarette smoking. The use of e-cigarettes is not specifically included in the specifications because they

were not as popular a few years ago when the measure was developed. The Committee encouraged the developer to examine including e-cigarettes in future iterations.

- The developer conducted empirical testing at 3 pediatric centers. Reliability testing was done at the level of data elements using a sub-sample of 75 adolescents from the initial sample of 597.
- Committee members suggested the developer clearly specify the types of counseling being given to ensure clinicians are not merely checking-off documentation. The measure developer confirmed it has aligned this measure with other counseling measures in HEDIS to include referral, treatment, and medication services in addition to counseling.
- The Committee agreed the measure met the Reliability and Validity criteria.

3. Feasibility: H-1; M-19; L-4; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Data for this measure needs to be manually abstracted from a healthcare provider's record.
- Some components of this measure are aligned with the Meaningful Use definition of tobacco use status.
- The measure has been specified as an eMeasure, but is not being submitted as an eMeasure at this time.
- The Committee had an in-depth discussion on the measure's susceptibility to inaccuracies based on chart reviews and diagnosis codes on electronic charts. The Committee suggested documentation should involve detailed questionnaires and specific summary instructions to ascertain clinicians are actually reviewing information with the adolescents and their families. The Committee concurred this concern should not preclude this measure from moving forward.
- This measure is aligned with an existing tobacco use measure for adults, with the exception of nicotine patch prescriptions, which are not appropriate for adolescents. Having the same measure construct allows this measure to be easily implemented because large organizations already have experience with the adult population and can mirror the same steps for this pediatric/adolescent measure.

4. Usability and Use: H-5; M-16; L-3; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The measure is currently in use in PRQS for 2015 and the EHR Incentive Program (Meaningful Use).
- The Committee raised concerns about Usability and Use.

5. Related and Competing Measures

- This measure, #2803, is related to 1 NQF-endorsed measure, NQF 0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention.

- NQF 0028 has a different target population (18 years and older), while this measure covers ages 12 years to 20 years.

Steering Committee Recommendation for Endorsement: Y-21; N-3**6. Public and Member Comment: January 14, 2016 - February 12, 2016**

Comments received:

- This measure received comments from two organizations. One comment noted it is an important gap area for adolescent health, but that the measure is duplicative of currently endorsed measures. The commenter noted the existing measure should be expanded instead. It also raised concerns with the exclusion of e-cigarettes and nicotine patches, and requested clarity on the algorithm. A second organization supported the Committee's recommendation for endorsement.

Developer response:

- The measure specifies adolescents, a different patient population than the adult measure that is currently in use. The measure aligns to the adult tobacco use measure specifications and also aligns with Meaningful Use tobacco definitions. We agree that this measure addresses an important area for adolescent health. We are exploring whether e-cigarettes should be included in the measure, as the evidence around this form of tobacco use is emerging. In step 2 of the calculation algorithm we would like to clarify that 2a and 2b together identify the numerator and that the numerator is not solely "tobacco users." While we recognize the AAP's clinical practice policy states NRT can be used in adolescents, our current approach is to follow Food and Drug Administration guidance. Our team can assess the AAP policy further in the future.

Committee response:

- The Committee discussed this comment on the post-comment call and agreed that, despite the limitations of the measure, it covers an important topic area and should be recommended for endorsement. The Committee recommends improvements, such as including e-cigarettes, in future versions.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2806 Adolescent Psychosis: Screening for Drugs of Abuse in the Emergency Department

[Submission](#) | [Specifications](#)

Description: Percentage of children/adolescents age =12 to =19 years-old seen in the emergency department with psychotic symptoms who are screened for alcohol or drugs of abuse

Numerator Statement: Eligible patients with documentation of drug and alcohol screening using urine drug or serum alcohol tests.

Denominator Statement: Patients aged =12 to =19 years-old seen in the emergency department with psychotic symptoms.

Exclusions: No patients were excluded from the target population.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility

Setting of Care: Emergency Medical Services/Ambulance, Hospital/Acute Care Facility

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-0; M-2; L-3; I-19; Insufficient Evidence with Exception: Y-16; N-8**; 1b. Performance Gap: **H-2; M-18; L-3; I-1**

Rationale:

- The developer cited a 2013 guideline from the American Academy of Child and Adolescent Psychiatry (AACAP): "Clinical Practice Guideline Recommendation 3. Youth with suspected schizophrenia should be carefully evaluated for other pertinent clinical conditions and/or associated problems, including suicidality, comorbid disorders, substance abuse, developmental disabilities, psychosocial stressors, and medical problems." The developer provided no additional reviews or literature, and indicated no studies were identified since AACAP published the guideline in 2013.
- The Committee noted the lack of strong empirical evidence that screening has an impact on improved outcome, however, agreed this measure qualified for consideration under Insufficient Evidence with Exception.
- Performance gap information was derived from testing the measure using data aggregated during a 2-year period from 3 children's hospitals and 2 community hospitals. The performance scores ranged from 17.8% to 83.3%.
- The Committee agreed a gap existed, as represented by the wide range of performance by the emergency departments (EDs) at different types of hospitals.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-1; M-13; L-9; I-1** 2b. Validity: **H-0; M-17; L-4; I-0**

Rationale:

- Reliability testing was conducted at the critical data element level and performance measure score level. Critical data elements were tested using inter-rater reliability of medical record abstraction. The total population sample size was N=257, however for this specific measure, the sampling N=4 patients was too few to calculate a Kappa. Performance measure score reliability was assessed using the intra-class correlation coefficient (ICC). The developer reported the hospital-level ICC=0.42 (95%CI 0.16-0.73); N=5 hospitals.
- Empirical validity testing was not conducted; only face validity of the performance measure score at the level of the computed measure score. The developer performed systematic face validity assessment (RAND-UCLA Modified Delphi) of whether panelists “would consider providers who adhere more consistently to the quality measure to be providing higher quality care.” The panelists concluded there was face validity, although other factors were bundled with the assessment.
- The Committee expressed significant concerns regarding the appropriateness of this measure for the younger age group. It also noted #2806 is measuring two different things—diagnosed with psychosis and comorbid drugs or substance use among children with psychosis—that vary by age group. The developer explained the substance abuse component should have been 12 to 19 years old and the psychosis component should be 5 to 19 years.
- Additionally, the Committee questioned the reliability of urine drug screen tests and requested that the developer consider using non-laboratory screening for substance abuse, particularly for alcohol, which is the most prevalent drug used by adolescents in general and in adolescents who present with psychosis. The Committee sought information on the range of performance variation in younger children compared to older children; the developer explained the younger children were only 5% of sample, which lead the Committee to express concern about the scientific acceptability of the measure for the younger population
- The Committee also asked the developer to restate the denominator to improve clarity and reflect what #2806 actually measures, as well as the accurate population. For example, the denominator is currently “patients 5 to 19 seen in the ED with psychotic symptoms,” the Committee suggested a more accurate construct might be “patients 5 to 19 discharged from the ED to home or another setting of care.”
- The Committee specifically noted the measure’s reliability appears to be limited to the older population; it was unclear whether #2806 is reliable in the younger age group.
- Lastly, the Committee discussed missed opportunities for testing, including data from ED visits where there were psychotic symptoms, but no diagnosis of psychosis at discharge. The developer noted identifying this population of children/adolescents was limited during testing due to the data source used for the measure (i.e., chart data).
- NQF #2806 failed on the Validity criterion, in part due to serious concerns with the age ranges of patients specified by the measure. However, Committee members elected to continue their evaluation because the developer indicated it could change the age range and provide new testing data, which would potentially address the age-related validity issues to the Committee’s satisfaction; the developer is currently working on these matters.

3. Feasibility: H-11; M-12; L-1; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The Committee had no questions or concerns about the feasibility of this measure.

4. Usability and Use: H-3; M-15; L-5; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The Committee noted this measure is incomplete for the appropriate emergent evaluation of psychosis, since it excludes looking for classes of drugs that are not drugs of abuse. The developer stated its intent was not to work up causes of psychotic symptoms in the ED, but to look for comorbid substance use among children and adolescents with psychosis. The Committee further noted it is important to look for co-occurring substance abuse (or psychosis related to drugs of abuse), but that is only part of the equation. Using a measure that does not include all of the possibilities gives the impression this is all that is necessary to provide quality care.
- The Committee highlighted the consequences of having a test that has some unreliable results, including labeling people incorrectly, introducing false negatives, affecting treatment and family dynamics, and missing people who may definitely have an issue or problem.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-18; N-3

- Because most Committee members felt the age range was the barrier to this measure, and the developer indicated it could readily provide testing results only for the older age group, the Committee continued voting on the criteria even though it failed on Validity. The vote during the in-person meeting on Overall Suitability for Endorsement was taken on the original specifications.
- The updated recommendation for endorsement was taken on the revised specification.

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Committee's Recommended Revision:

- The Committee requested that the developer revise this measure to limit the population to ages 12-19 (instead of 5-19) and resubmit the new specifications after the comment period.

Developer Response to Committee's Recommended Revision:

- The developer has revised the measure to include a population of 12-19 years (instead of 5-19). In addition, it has updated the title to Adolescent Psychosis: Screening for Drugs of Abuse. The developer has submitted updated specifications and testing materials in a red-lined version of the submission form.

Comments received:

- This measure received one comment that supported the Committee’s decision not to recommend the measure, identifying several issues the Committee had mentioned in its discussion, including the age range, the testing of the measure, and the definitions in the measure.

Developer response:

- 1) We agree with the comments from the reviewer and from the committee regarding age range, and therefore submitted the measure to the committee for reconsideration on Feb 26th for a narrower age range (12-19).
- 2) Our response to the psychotic symptom question from the reviewer is similar to our response to the same question in 2805 and is as follows.
Because patients are identified for measurement retrospectively, the patients with psychotic symptoms are identified based on a coded diagnosis of psychosis at discharge from the inpatient setting. Therefore, psychotic symptoms are defined in the population by their discharge diagnosis. The ICD-9 and ICD-10 codes for the discharge diagnosis set are delineated in the full application.
The measure specifications, including the ICD-9 codes, were field tested in 209 patients, in an implementation at 3 tertiary care children’s hospitals and 2 community hospitals, from Washington State, Ohio, and Minnesota.
The new proposed denominator definition (changed only in age range):
“Cases are identified from hospital administrative data.
Patients aged 12-19 years-old
ICD-9: Patients have at least one of the following ICD-9 codes for psychosis, as a primary or secondary diagnosis: 291.3, 291.5, 292.11, 292.12, 293.81, 293.82, 295.30, 295.31, 295.32, 295.33, 295.34, 295.40, 295.41, 295.42, 294.43, 295.44, 295.70, 295.71, 295.72, 295.73, 295.74, 295.90, 295.91, 295.92, 295.93, 295.94, 296.24, 296.44, 297.1, 297.2, 297.3, 298.X
ICD-10: [ICD-10 codes are available in the Excel file referenced in item S.2b.]
These codes were chosen by Members of the COE4CCN Mental Health Working Group co-chaired by Psychiatric Health Services Researchers Drs. Michael Murphy and Bonnie Zima.”
- 3) We addressed the inconsistencies in testing by creating explicit instructions in the abstraction manual when we operationalized the measure. Instructions to chart abstractors are included below for reference. The goal of measurement is in part to create a level of clarity and actionability that can help address inconsistencies in care, which is one part of the rationale for proposing the measure.
“Patients passing the quality measure are identified during medical record abstraction using the guidelines below.
Urine Drug Screening /Serum Alcohol Screening – [Module: Psychosis, ED care] This item applies to children and adolescents with psychosis who were admitted to the marker ED. Indicate if the patient had a urine drug screen and/or serum alcohol screen while in the ED. The alcohol test will be a separate test from the drug tests. The drug test must be comprehensive in that it tests for multiple types of illicit drugs. Do NOT give credit for tests that include results of just a single drug. Drug screens commonly include tests for benzodiazepines, barbiturates, methamphetamine, cocaine, methadone, opiates, tetrahydrocannabinol, etc.”

Committee response:

- The Committee reviewed the revised measure specifications and testing, and the comment received. The Committee agreed the revised specifications meet the Validity criterion. The Committee voted to recommend the measure for endorsement.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2820 Pediatric Computed Tomography (CT) Radiation Dose

[Submission](#) | [Specifications](#)

Description: The measure requires hospitals and output facilities that conduct Computed Tomography (CT) examinations in children to: 1. Review their CT radiation dose metrics, 2. calculate the distribution of the results, and 3. compare their results to benchmarks. This would then imply a fourth step to investigate instances where results exceed a trigger value for underlying cause, such as issues with protocol, tech, equipment, patient, etc.

It is important to review doses of radiation used for CT, as the doses are far higher than conventional radiographs (x-rays), the doses are in the same range known to be carcinogenic (Pearce, Lancet, 2012; Ozasa, Radiation Research, 2012), and the higher the doses, the greater the risk of subsequent cancer (Miglioretti, JAMA Pediatrics, 2013) Thus the goal of the measure is to provide a framework where facilities can easily assess their doses, compare them to benchmarks, and take corrective action to lower their doses if they exceed threshold values, as per specifications in benchmarks.

The measure calls for assessment of doses for the most frequently conducted CT examination types, and compare these doses to published benchmarks. The measure calls for the assessment of radiation doses within four anatomic areas (CT's of the head, chest, abdomen/pelvis and combined chest/abdomen/pelvis.) The measure provides a simple framework for how facilities can assess their dose, compare their doses to published benchmarks (Smith-Bindman, Radiology, 2015) and identify opportunities to improve if their doses are higher than the benchmarks. For example, If a hospital finds their doses are higher than published benchmarks, they can review the processes and procedures they use for performance of CT in children and take corrective action, and follow published guidelines for how to lower doses (such as "child sizing" the doses, reducing multiple phase scans, and reducing scan lengths).

Published benchmarks for radiation dose in children exist (Smith-Bindman, Radiology, 2015) and additional benchmarks are under development and will be published within the year by us. (Kumar, 2015) Other groups have also published benchmarks (Goeske) or in the process of doing so.

Our work and that of others have shown that institutional review of dose metrics as outlined in this measure results in a significant lowering of average and outlier doses. (Demb, 2015; Greenwood, RadioGraphics, 2015; Miglioretti, JAMA Pediatrics, 2013; Keegan, JACR, 2104; Wilson, ARRS, 2015).

This measure is being proposed for diagnostic CT in children, but can also be used for CT in adults, and CT used in conjunction with radiation therapy for cancer. Whenever context the doses are used, the doses should be compared with appropriate benchmarks.

A similar measure (#0739) was previously endorsed by the NQF in 2011. The NQF did not provide ongoing endorsement when the measure was up for renewal in 2015, primarily because there was no evidence that assessing doses as called for in the measure would result in an improvement in outcomes (i.e. patient dose). Since that time, there has been additional research that has shown that assessing doses using the format outlined in the measure does indeed result in lower doses, and thus we are re-submitting a similar although updated measure.

Of note, the surrogate measure we are using for outcomes is radiation dose. The true outcome of interest is the number of cancers that result from imaging. Because of the lag time between exposure to radiation and cancer development (years to decades) it is not feasible to use cancer cases as the outcome of a quality improvement effort. Thus while there is ample evidence that radiation causes cancer (sited below), and evidenced that cancer risk is proportional to dose, there are no direct data that suggest that lowering doses lowers cancer risk. However, we have used mathematical modeling to try to understand the relationship between lowering doses and cancers and estimated that if the top quartile of doses were reduced in children (i.e. the very high doses are brought down the average doses), the number of cancer cases would be reduced by approximately 43%, the equivalent to preventing 4,350 cancer cases / year in the US among children (Miglioretti, JAMA Pediatrics 2013).

Cited in this section:

Demb J, manuscript under preparation. CT Radiation Dose Standardization Across the University of California Medical Centers Using Audits to Optimize Dose. 2015.

Following an in-person meeting regarding CT radiation dose, radiologists, technologists and medical physicists from University of California medical centers strategized how to best optimize dosing practices at their sites, which were then analyzed for effectiveness and success after implementation.

Greenwood T, Lopez-Costa R, Rhoades P, et al. CT Dose Optimization in Pediatric Radiology: A Multiyear Effort to Preserve the Benefits of Imaging While Reducing the Risks. RadioGraphics. Jan 2015;35(5):1539-1554

“This systematic approach involving education, streamlining access to magnetic resonance imaging and ultrasonography, auditing with comparison with benchmarks, applying modern CT technology, and revising CT protocols has led to a more than twofold reduction in CT radiation exposure between 2005 and 2012...” – Conclusion statement from Abstract

Keegan J, Miglioretti DL, Gould R, Donnelly LF, Wilson ND, Smith-Bindman R. Radiation Dose Metrics in CT: Assessing Dose Using the National Quality Forum CT Patient Safety Measure. Journal of the American College of Radiology: JACR; 11(3):309-315.

<http://download.journals.elsevierhealth.com/pdfs/journals/1546-1440/PIIS1546144013006625.pdf>. Mar 2014

Looking at dose metrics as per compliance with the previously endorsed #0739 NQF measure results in reasonably timed acquisition of CT doses, and seeing such doses resulted in 30-50% dose reduction.

Kumar K, manuscript under preparation. Radiation Dose Benchmarks in Children.

This paper will describe dose metrics among 29,000 children within age strata <1, 1-4 years, 5-9 years, 10-14 years, and 15-19 years. 2015.

Miglioretti D, Johnson E, Vanneman N, Smith-Bindman R, al e. Use of Computed Tomography and Associated Radiation Exposure and Leukemia Risk in Children and Young Adults across Seven Integrated Healthcare Systems from 1994 – 2010. JAMA Pediatrics Published online June 10, 2013
joli:101001/jamapediatrics2013311, 2013.

Radiation-induced cancers in children could be dramatically reduced if the highest quartile of CT radiation doses were lowered.

Miglioretti, YX Zhang, E Johnson, N Vanneman, R Smith-Bindman. Personalized Technologist Dose Audit Feedback for Reducing Patient Radiation Exposure from Computed Tomography. Journal of the American College of Radiology: JACR 2014.

“Personalized audit feedback and education can change technologists' attitudes about, and awareness of, radiation and can lower patient radiation exposure from CT imaging.” – Conclusion statement from Abstract

Ozasa K, Shimizu Y, Suyama A, et al. Studies of the mortality of atomic bomb survivors, Report 14, 1950-2003: an overview of cancer and noncancer diseases. Radiation Research; 177(3):229-243. Mar 2012

Fourteenth follow-up report on the lifetime health effects from radiation on atomic bomb survivor showing that: 58% of the 86,611 LSS cohort members with DS02 dose estimates have died, 17% more cancer deaths especially among those under age 10 at exposure (58% more deaths).

Pearce MS, Salotti JA, Little MP, et al. Radiation exposure from CT scans in childhood and subsequent risk of leukaemia and brain tumours: a retrospective cohort study. Lancet;380(9840):499-505. Aug 4 2012

“Use of CT scans in children to deliver cumulative doses of about 50 mGy might almost triple the risk of leukaemia and doses of about 60 mGy might triple the risk of brain cancer... although clinical benefits should outweigh the small absolute risks, radiation doses from CT scans ought to be kept as low as possible” – Conclusion statement from Abstract

Smith-Bindman R, Moghadassi M, Wilson N, et al. Radiation Doses in Consecutive CT Examinations from Five University of California Centers. Radiology 2015;277: 134–141

“These summary dose data provide a starting point for institutional evaluation of CT radiation doses.” – Conclusion statement from Abstract

Wilson N. CT Radiation Dose Standardization Across the Five University of California Medical Centers. ARRS: Annual Toronto Meeting presentation. April 19-24, 2015

Understanding the reasons for variation in commonly performed CT procedures, and figuring out how to standardize them.

Numerator Statement: Radiation Dose metrics among consecutive patients, who have undergone CT of the head, chest, abdomen/pelvis, or chest/abdomen/pelvis. The metrics are 1) mean dose as measured using DLP, CTDIvol, and SSDE: within age strata. And 2) the proportion of exams with doses greater than the 75th percentile of the benchmark you are comparing with for the same anatomic area strata (Kumar, 2015; Smith-Bindman, Radiology, 2015; Goske, Radiology, 2013)

The CTDIvol and DLP are directly reported by the scanner using an “industry wide” standardized dose report (DICOM Radiation Dose Structured Report). The data should be assembled for the entire CT examination. If there are several series, the CTDIvol values should be averaged, and the DLP values should be added.

SSDE can be calculated using any dose monitoring software product, or using published multiplier coefficients which are highly valid.

These different metrics are highly correlated, but nonetheless reveal important differences regarding radiology practice and performance and are thus complimentary. However, if a practice only assesses data from a single metric, there is substantial opportunity for data-driven improvement.

CTDIvol reflects the average dose per small scan length. Modern CT scanners directly generate this.

DLP reflects the CTDIvol x scan length, and is directly generated by modern CT scanners.

SSDE is a modified measure of CTDIvol that takes into account the size of the patient scanned and is useful for scaling dose to patient size. Several current radiation tracking software tools directly report SSDE.

Cited in this section

Goske MJ, Strauss KJ, Coombs LP, et al. Diagnostic reference ranges for pediatric abdominal CT. *Radiology*. Jul 2013;268(1):208-218.

“Calculation of reference doses as a function of BW (body weight) for an individual practice provides a tool to help develop site-specific CT protocols that help manage pediatric patient radiation doses.” – Conclusion statement from Abstract

Kumar K, manuscript under preparation. Radiation Dose Benchmarks in Children.

This paper will describe dose metrics among 29,000 children within age strata <1, 1-4 years, 5-9 years, 10-14 years, and 15-19 years. 2015.

Smith-Bindman R, Moghadassi M, Wilson N, et al. Radiation Doses in Consecutive CT Examinations from Five University of California Centers. *Radiology* 2015;277: 134–141

“These summary dose data provide a starting point for institutional evaluation of CT radiation doses.” – Conclusion statement from Abstract

Smith-Bindman R, Miglioretti DL. CTDIvol, DLP, and Effective Dose are excellent measures for use in CT quality improvement. *Radiology*. Dec 2011;261(3):999; author reply 999-1000.

An explanation as to why these radiation dose metrics are useful in calculating a patient’s absorbed doses.

Huda W, Ogden KM, Khorasani MR. Converting dose-length product to effective dose at CT. *Radiology*. Sep 2008;248(3):995-1003.

“This article describes a method of providing CT users with a practical and reliable estimate of adult patient EDs by using the DLP displayed on the CT console at the end of any given examination.” – Conclusion statement from Abstract

Denominator Statement: Consecutive sample of CTs conducted in the head, chest, abdomen/pelvis and chest/abdomen/pelvis. No examinations should be excluded

Exclusions: CT examinations conducted in anatomic areas not included above (such as CTs of the extremities or lumbar spine) or that combine several areas (head and chest) should not be included. In children, these four included categories will reflect approximately 80% of CT scans.

Examinations performed as part of diagnostic procedures – such as biopsy procedures – should not be included. CT examinations performed as part of surgical planning or radiation therapy should not be included.

Examinations that are considered "limited abdomen" or "limited pelvis" studies should be included in the abdomen and pelvis category. Any examinations that include any parts of the abdomen and or pelvis should count in the abdomen/pelvis category.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility, Integrated Delivery System

Setting of Care: Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinician Office/Clinic, Hospital/Acute Care Facility, Imaging Facility, Ambulatory Care : Outpatient Rehabilitation, Ambulatory Care : Urgent Care

Type of Measure: Intermediate Clinical Outcome

Data Source: Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Imaging/Diagnostic Study, Electronic Clinical Data : Registry

Measure Steward: University of California, San Francisco

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-7; M-16; L-1; I-2**; 1b. Performance Gap: **H-11; M-14; L-0; I-1**

Rationale:

- The Committee agreed this is an intermediate outcome: while it is not possible to show a direct outcome on a particular patient, on a population level the general evidence linking radiation dose to cancer is strong.
- The Committee also noted patients care about radiation dose as an outcome on its own.
- The developer stated most hospitals do not currently tailor their scans to the age of their patients, so children receive the same doses as adults at non-pediatric hospitals—yet a lower dose in a child still produces the same quality of scan. The Committee questioned whether non-pediatric radiologists could properly read lower dose scans, which are “noisier,” but radiologists on the Committee explained a lower dose for children would produce an image of the same quality that occurs for an adult at the higher dose. In other words, using the higher dose in children yields much clearer images for children than radiologists are used to seeing for adults.
- The submission materials noted an earlier version of this measure was not endorsed due to concerns that simply assessing doses was not enough to change them. The developer presented new data, however, demonstrating merely tracking doses alters behavior and lowers an institution’s dose profile for children. According to the developer, dose metrics collected from 2010-2012 showed a 30-50% decrease in variability of doses after an earlier version of this measure was implemented. Five University of California hospitals reported 0-18% reduction after being given strategies to optimize CT doses. Doses have declined 10-30% across all published studies, with the greater reduction shown among sites with higher doses. Additionally, the Committee noted the gap between doses in county hospitals as compared to academic hospitals.
- The Committee agreed the new data demonstrate the measure should lead organizations to address the issue of high doses for children if their doses are higher than national benchmarks, and it should give facilities a framework for setting their dose levels. Committee members also noted the measure can be useful internally for a facility to examine its own dose profile over time.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-5; M-17; L-1; I-3** 2b. Validity: **H-6; M-16; L-0; I-4**

Rationale:

- The Committee raised a number of questions about the specifications and the process of collecting the data, all of which were adequately addressed. The developer explained

consecutive exams should be used, and the measure does not include certain procedures (such as radiological oncology). Further, the developer noted this measure only requires that facilities meet the average benchmarks, not that every patient be at or below the benchmark. It also was explained that while there is variability in dose depending on clinical indications, this variability dwarfs the variability from institutional preference. For example, in some situations 1 facility will use a single-phase setting while another will use a multiple-phase setting, which results in twice as much radiation exposure.

- The developer performed empirical testing at the data element level and the performance measure score at 7 integrated health systems and 5 hospitals, from 2012-2014. Overall, more than 115,000 scans were included.
- Reliability testing was done at the level of data elements using several metrics reflecting CT dose indices, including DLP, CTDIvol, and SSDE.
- DLP and CTDI are calculated automatically by all current CT scanners, without variability. Reliability of CT radiation dose metric abstraction (DLP and CTDIvol) was tested through both manual and automated data abstraction, both yielding identical results, perfect Kappa statistics.
- SSDE is a calculated variable that is automatically calculated by dose monitoring programs. Errors from manual calculation were not tested.
- The developer noted nearly 99% of facilities should be able to report on this measure automatically, since any scanner built in the last 10 years reports on the data needed.
- The Kappas for the reliability testing were high (greater than 95%), but on a limited number of sites.
- Empirical testing was performed at the performance measure score. The developer indicated a study was conducted comparing each of the dose metrics with measures of absorbed dose among a sample of 10,000 CT examinations showed a “high correlation,” >90%.
- After the developer clarified the questions about the specifications and data collection, the Committee agreed the measure met the Reliability and Validity criteria.

3. Feasibility: H-9; M-12; L-3; I-2

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Two of the specified metrics (CTDIvol and DLP) are generated as part of clinical CT examinations. Two additional metrics can be calculated from these 2 primary metrics, and these calculations are done within existing software products or can be done manually, or by using various additional approaches. Nearly all facilities (~99%) that perform CT examinations can collect all the measure elements (3 dose metrics: DLP, CTDI and SSDE). Facilities that do not automatically report can use a free software program to compile the data. The Committee agreed this measure is feasible.
- The Committee noted the measure submission states it can be analyzed at the health plan level, but testing data were not provided. Concern also was expressed that plans do not have access to this data and would have to go through providers or get direct access to EMRs. The developer stated testing has been completed at the HMO level, and that certain types of plans, such as those run by integrated health systems, can report this measure. The developer acknowledged other plans, such as commercial or Medicaid plans, may not be able to report the measure. After discussion, the developer agreed to remove the health plan level of analysis.

4. Usability and Use: H-10; M-14; L-1; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The Committee inquired about potential unintended consequences of some patients receiving repeat scans due to the dose being too low. The developer explained this should not be an ongoing problem because, if the dose is set too low and facilities start having to repeat most scans, they will raise the dose. The radiologist on the Committee agreed lowering the dose until it is too hard to read and then increasing it incrementally is a common approach to setting dosage. It was agreed the potential risk for an individual was far lower than the population benefit.
- The developer seeks to use the measure for public reporting through the Joint Commission and a University of California San Francisco patient safety project.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-24; N-2

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received comments from two organizations. One comment noted the importance of education and accountability for following Pediatric Emergency Care Applied Research Network (PECARN) rules; it also noted the importance of clear terms for the measure to assist in implementation. One commenter supported the Committee's recommendation for endorsement.

Developer response:

- The point made here is a valid and important next step. But first, the adoption of a measure that asks facilities for the standardized collection of data on pediatric CT doses must occur, to help lead to standardizing radiation doses. Physicians who send patients to a facility can then ask that the doses that are used fall within certain accepted standards.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2842 Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

[Submission](#) | [Specifications](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA), which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 1, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-1: Caregivers of CMC should report that their child has a designated care coordinator.

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those

caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-5; M-15; L-2; I-2**; 1b. Performance Gap: **H-0; M-25; L-0; I-0**

Rationale:

- For the evidence supporting #2842, the developer provided information on 1 RCT, 1 cohort study, and 5 case series, case control, or historically controlled studies that demonstrated outcomes improve when caregivers of children with medical complex report their child has a designated care coordinator. The RCT timeframe was 6 months and involved 100 children. The Committee felt this time period was quite limited and perhaps insufficient to show improvements in chronic conditions. In addition, the RCT did not specifically focus on including a care coordinator, but on a multi-factorial intervention.
- The developer explained it had operationalized the survey to discover who exactly is coordinating care – whether it was the main provider, someone from the main provider's office, someone from the insurance company, etc. The developer further explained the language for the survey had been developed through a cognitive interview process with families. It noted bundled interventions are more likely to be successful, and it may not be possible nor advisable to extricate individual components. The developer stated evidence for this set of measures comes from the bundled interventions and is stronger for the entire set as opposed to any individual component.
- The Committee noted the patient's perception of whether there is a care coordinator may actually be more important than where the care coordinator is located.
- The developer explained the measures were submitted individually so providers could track their performance and see which areas of care coordination need improvement. It also explained not all of the measures apply to every patient or program, so providers need to be able to focus on the areas that matter to them.
- The Committee raised a concern that, with the measures split out, entities could pick and choose which to report on. The developer explained these measures are health plan or health system level measures, and they are intended to hold the plan or system accountable. The

developer added the groups that are currently using this set of measures report they are using the complete survey and set of measures.

- The Committee discussed at length whether the measures should be split or bundled for voting, due to the stronger evidence for some measures within the set, the lack of evidence the measures were stronger as a set than individually, the concerns regarding cherry-picking of some measures, etc. The developer stated users are currently implementing the complete survey, and it was field tested as a whole; based on the testing results, however, the measures were submitted as individual measures and not all items were submitted.
- Ultimately the Committee elected to vote on the measures separately because of questions about either the evidence or validity; it did not want to vote against the entire measure or the majority of measures because of problematic components. Committee members noted voting separately did not preclude requiring the survey as a whole to be completed and reported on when implemented.
- The Committee noted the developer did 6 different literature reviews and all pointed back to the same RCT.
- The Committee elected to vote on performance gap *en bloc* for the following 8 measures that had passed Evidence: #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850. Accordingly, there was a single discussion and vote for this subcriterion and that vote applies to all of these measures.
- The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and a lack of consensus on the size of the gap.
- It also was noted the field test results for #2842 demonstrate a gap in care.
- It was generally agreed that while CMC are a small population, this is a high-risk population and care coordination for these children has a significant impact.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-5; M-20; L-0; I-0** 2b. Validity: **H-2; M-21; L-1; I-1**

Rationale:

- The Committee elected to discuss and vote on Reliability for measures #2842, #2843, #2844, #2845, #2846, #2847, #2848, #2849, #2850, and #2851 in 3 batches based on the information provided. The measures were batched as follows: first batch: #2842; second batch: #2844, #2845, #2846, #2847, #2848, #2850, and #2851; third batch: #2843 and #2849.
- The Committee noted the developers had about 1,200 surveys, but performed reliability testing with 900 surveys. The developer explained it did not have practice-level information for some participants from Washington State Medicaid due to IRB stipulations. It also noted the measure is intended for aggregation at the state level, but the practice grouping was used since the test only included 2 states.
- The developer noted the individuals included in the reliability analysis largely matched the demographic characteristics of the entire group. The developer also compared the scores for the overall sample to the sample used for reliability testing, and found similar scores for all FECC measures with reliability testing (#2842, #2844, #2845, #2846, #2847, #2848, #2849, and #2851).

- The Committee also raised questions about the different sample sizes for the reliability testing. The developer responded this was because the eligibility varies based on responses and people with incomplete information were not included.
- Overall the Committee agreed the measure met the Reliability criterion.
- The Committee did not raise concerns about the validity of measure #2842.

3. Feasibility: H-1; M-21; L-3; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so feasibility for these 8 measures was discussed and voted on *en bloc*. Measure #2842 was judged feasible.
- The Committee noted the data are currently collected via caregiver survey, which is expensive and time-consuming; as a plan-level measure, however, it should be feasible. The Committee also acknowledged the developer's view that surveys are currently the most valid approach for collecting data on the quality of care for CMC. Administrative data (billing data) are used to identify children eligible for the denominator population.

4. Usability and Use: H-2; M-18; L-5; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so Usability and Use for these 8 measures was discussed and voted on *en bloc*. Measure #2842 was judged usable.
- This measure is currently in use for internal quality improvement by a number of organizations, including children's hospitals, universities, and health plans.
- The Committee raised no major concerns with the overall usability.

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718 : Children Who Had Problems Obtaining Referrals When Needed
- 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.

- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-23; N-2**6. Public and Member Comment: January 14, 2016 - February 12, 2016**

Comments received:

- One commenter submitted a series of similar comments on the FECC measures, discussed in the [Comments Received After Committee Evaluation section](#). In addition to the comments that applied to all of the FECC measures, the commenter noted strong support for care coordination in its comment for this measure.
- A second organization supported the Committee's recommendation for endorsement.

Developer response:

- Note that responses to the portions of the comment that were submitted on multiple measures are included in the [Comments Received After Committee Evaluation section](#) and are not repeated here.
- NOTE: This developer has elected to pull out and respond separately to each point of the comments received. The italicized sections in quote marks are quoted from the original comment. The developer's response follows.
- *"This is good for the patient, family, subspecialist(s), therapist(s), and PCP. Tracking referrals, medications, therapies, and follow-up appointments can take a burden off of all involved and improve efficiency of care, decrease missed appointments, and reduce costs of redundancy or poor compliance."*
- Thank you; we agree.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-16; N-0; A-0**8. Board of Directors Vote**

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2843 Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

[Submission](#) | [Specifications](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA), which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 3, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-3: Caregivers of CMC who report having a designated care coordinator and who require community services should also report that their care coordinator helped their child to obtain needed community services in the last year.

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be

gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-2; M-17; L-3; I-1**; 1b. Performance Gap: **H-0; M-25; L-0; I-0**

Rationale:

- Evidence supporting #2843 was 1 RCT, 1 cohort study, and 5 case series, case control, or historically controlled studies that demonstrated outcomes improve when caregivers of children with medical complex report that their child has a designated care coordinator. The RCT timeframe was 6 months and involved 100 children. The Committee felt this time period was too limited and perhaps insufficient to show improvements in chronic conditions. In addition, the RCT did not specifically focus on including a care coordinator, but on a multi-factorial intervention.
- The developer explained it had operationalized the survey to discover who exactly is coordinating care – whether it was the main provider, someone from the main provider's office, someone from the insurance company, etc. The developer further explained the language for the survey had been developed through a cognitive interview process with families. It noted bundled interventions are more likely to be successful, and it may not be neither possible nor advisable to extricate individual components. The developer stated evidence for this set of measures comes from the bundled interventions and is stronger for the entire set as opposed to any individual component.
- It was noted the developer did 6 different literature reviews and all pointed back to the same RCT.
- The Committee elected to vote on performance gap *en bloc* for the following 8 measures that passed Evidence: #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850. Accordingly, there was a single discussion and vote for this subcriterion and that vote applies to all of these measures.
- The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and a lack of consensus on the size of the gap. It also was noted the field test results for #2843 demonstrate a gap in care.

- It was generally agreed that while CMC are a small population, this is a high-risk population and care coordination for these children has a significant impact.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-X; M-X; L-X; I-X** 2b. Validity: **H-1; M-22; L-2; I-0**

Rationale:

- The developer was unable to establish reliability for measure #2843; this was attributed to a small sample size. As per NQF policy, data element level validity was used instead. No vote was taken on the Reliability criterion.
- The Committee noted the sensitivity and specificity of #2843 were 84 and 92, respectively, at one test site and 89 and 85 at the other, which it considered good. The data element level testing used the algorithm associated with the measure and compared whether the denominators were the same, using clinical chart review as the gold standard (n=700). The Committee noted that the results demonstrated both sensitivity and specificity, at both test sites (Seattle Children's and Washington Medicaid).

3. Feasibility: H-1; M-21; L-3; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so feasibility for these 8 measures was discussed and voted on *en bloc*. Measure #2843 was judged feasible.
- The Committee noted the data are currently collected via caregiver survey, which is expensive and time-consuming; as a plan-level measure, however, it should be feasible. The Committee also acknowledged the developer's view that surveys are currently the most valid approach for collecting data on the quality of care for CMC. Administrative data (billing data) are used to identify children eligible for the denominator population.

4. Usability and Use: H-2; M-18; L-5; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so Usability and Use for these 8 measures was discussed and voted on *en bloc*. Measure #2842 was judged usable.
- This measure is currently in use for internal quality improvement by a number of organizations, including children's hospitals, universities, and health plans.
- The Committee raised no major concerns with the overall usability.

5. Related and Competing Measures

- The following measures are related and not harmonized:

- 0718 : Children Who Had Problems Obtaining Referrals When Needed
- 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.
- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-22; N-3

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- One commenter submitted a series of similar comments on the FECC measures, discussed in the [Comments Received After Committee Evaluation section](#). In addition to the comments that applied to all of the FECC measures, the commenter noted this measure is stronger than 2842, since it measures whether the care coordinator actually helped. A second organization supported the Committee's recommendation for endorsement.

Developer response:

- Note that responses to the portions of the comment that were submitted on multiple measures are included in the [Comments Received After Committee Evaluation](#) section and are not repeated here.
- NOTE: This developer has elected to pull out and respond separately to each point of the comments received. The italicized sections in quote marks are quoted from the original comment. The developer's response follows.
- *"This is better than Measure 2842, since it assesses whether the Care Coordinator helped."*
We agree that it is important to assess not only whether there was someone helping to coordinate a child's care, but also the quality and perceived value of those services to the family. However, we believe that it is important to assess both items separately, in order to understand the current state of affairs and facilitate improvement. If Measure 2843 were to be used without Measure 2842, it would be unclear whether identified gaps were due to caregivers not having someone to help with care coordination, or if the designated person was failing to assist with specific, important elements of care coordination. The approach to addressing those two separate problems would be quite different.

Committee response:

- Thank you for your comment. The Committee discussed this issue during the in-person meeting in December, but ultimately decided the FECC measures that were recommended assess and meet different needs.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2844 Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

[Submission](#) | [Specifications](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA), which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 5, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not..

Numerator Statement:

FECC-5: Caregivers of CMC who report having a care coordinator and who report that their care coordinator has contacted them in the last 3 months should also report that their care coordinator asked them about the following:

- Caregiver concerns
- Health changes of the child

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-0; M-18; L-5; I-1**; 1b. Performance Gap: **H-0; M-25; L-0; I-0**

Rationale:

- The Committee noted measure #2844 shared the same evidence base from the single RCT (following 100 children over 6 months) as #2842 and #2843, but did not include other references that had been included for those measures. The developer explained the other studies did not include sufficient detail to determine in some cases precisely what the bundled

intervention encompasses. The developer stated that when it was not clear, the study was not cited.

- The Committee noted that, conceptually, having a care coordinator ask about concerns and health changes should be standard and is a practice included in all guidelines for care coordinators.
- The Committee discussed the length of time for contact, with a parent representative on the Committee noting 3 months seemed too frequent. The developer said the literature suggested monthly contact, but it received the same feedback from the parent representative during the development process and so specified quarterly contact.
- The Committee elected to vote on gap *en bloc* for the following 8 measures that passed Evidence: #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850. Accordingly, there was a single discussion and vote for this subcriterion and that vote applies to these measures.
- The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and a lack of consensus on the size of the gap. It also was noted the field test results for #2844 demonstrate a gap in care.
- It was generally agreed that while CMC are a small population, this is a high-risk population and care coordination for these children has a significant impact.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-2; M-23; L-0; I-0** 2b. Validity: **H-2; M-21; L-0; I-0**

Rationale:

- Measure #2844 is a multi-item measure and was tested and reported by analyzing the “within item set alpha,” resulting in an alpha of 0.86. Based on the literature, alpha statistics between 0.8 and 0.9 are considered good. The Committee had no concerns with the reliability for #2844.
- Measure #2844 achieved a strong face validity score (8 out of 9) from the developer’s Delphi panel. The Committee had no concerns with the face validity.

3. Feasibility: **H-1; M-21; L-3; I-0**

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so feasibility for these 8 measures was discussed and voted on *en bloc*. Measure #2844 was judged feasible.
- The Committee noted the data are currently collected via caregiver survey, which is expensive and time-consuming; as a plan-level measure, however, it should be feasible. The Committee also acknowledged the developer’s view that surveys are currently the most valid approach for collecting data on the quality of care for CMC. Administrative data (billing data) are used to identify children eligible for the denominator population.

4. Usability and Use: **H-2; M-18; L-5; I-0**

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so Usability and Use for these 8 measures was discussed and voted on *en bloc*. Measure #2844 was judged usable.
- This measure is currently in use for internal quality improvement by a number of organizations, including children's hospitals, universities, and health plans.
- The Committee raised no major concerns with the overall usability.

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718 : Children Who Had Problems Obtaining Referrals When Needed
- 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.
- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-21; N-4

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- One commenter submitted a series of similar comments on the FECC measures, discussed in the [Comments Received After Committee Evaluation section](#). In addition to the comments that applied to all of the FECC measures, the commenter noted this measure is stronger than 2842, since it measures whether the care coordinator actually helped.
- This measure also received a separate comment supporting the Committee's recommendation for endorsement.

Developer response:

- Note that responses to the portions of the comment that were submitted on multiple measures are included in the [Comments Received After Committee Evaluation section](#) and are not repeated here. NOTE: This developer has elected to pull out and respond separately to

each point of the comments received. The italicized sections in quote marks are quoted from the original comment. The developer's response follows.

- *"This is better than Measure 2842, since it assesses whether the Care Coordinator helped."*
We agree that it is important to assess not only whether there was someone helping to coordinate a child's care, but also the quality and perceived value of those services to the family. However, we believe that it is important to assess both items separately, in order to understand the current state of affairs and facilitate improvement. If Measure 2844 were to be used without Measure 2842, it would be unclear whether identified gaps were due to caregivers not having someone to help with care coordination, or if the designated person was failing to assist with specific, important elements of care coordination. The approach to addressing those two separate problems would be quite different.

Committee response:

- Thank you for your comment. The Committee discussed this issue during the in-person meeting in December, but ultimately decided the FECC measures that were recommended assess and meet different needs.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2845 Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

[Submission](#) | [Specifications](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA), which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 7, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services
 FECC-5: Care coordinator asked about concerns and health changes
 FECC-7: Care coordinator assisted with specialist service referrals
 FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs
 FECC-9: Appropriate written visit summary content
 FECC-14: Health care provider communicated with school staff about child's condition
 FECC-15: Caregiver has access to medical interpreter when needed
 FECC-16: Child has shared care plan
 FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-7: Caregivers of CMC who report having a care coordinator for their child should also report that the care coordinator assists them with specialty service referrals by ensuring that the appointment with the specialty service provider occurs

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015]

1. Importance to Measure and Report: The measure did not achieve consensus on the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-0; M-14; L-7; I-3**; 1b. Performance Gap: **H-0; M-25; L-0; I-0**

Rationale:

- NQF #2845 shares the same evidence base as #2842, #2843, and #2944, as well as additional pre-post design studies that address utilization.
- The Committee raised questions about the timing of this measure, noting it may not be possible to get specialist appointments within 3 months. The developer stated the measure does not require the appointment be held within 3 months. Specifically, the questions are:
 - During the last 12 months, did the main provider tell you that your child needed to see a specialist?
 - If yes, did the person who helped with managing your child's care contact you to make sure your child got an appointment to see a specialist?
- This measure did not achieve consensus on Evidence, but continued to be evaluated.
- The Committee elected to vote on gap *en bloc* for the following 8 measures that passed Evidence: #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850. Accordingly, there was a single discussion and vote for this subcriterion and that vote applies to all these measures.
- The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and a lack of consensus on the size of the gap. It also was noted the field test results for #2845 demonstrate a gap in care.
- It was generally agreed that while CMC are a small population, this is a high-risk population and care coordination for these children has a significant impact.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-2; M-23; L-0; I-0** 2b. Validity: **H-2; M-21; L-1; I-1**

Rationale:

- Measure #2845 was tested with the Spearman-Brown formula associated with the interclass correlation coefficient, showing a statistically significant variation by practice. The results demonstrated good to excellent (0.74-0.97) reliability, as defined by the literature, depending on the per-entity sample size. The Committee agreed the measure met the Reliability criteria.
- Measure #2845 achieved a face validity score of 7 (out of 9) from the developer's Delphi panel. The Committee did not raise concerns about the validity of measure #2845.

3. Feasibility: **H-1; M-21; L-3; I-0**

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so feasibility for these 8 measures was discussed and voted on *en bloc*. Measure #2845 was judged feasible.

- The Committee noted the data are currently collected via caregiver survey, which is expensive and time-consuming; as a plan-level measure, however, it should be feasible. The Committee also acknowledged the developer's view that surveys are currently the most valid approach for collecting data on the quality of care for CMC. Administrative data (billing data) are used to identify children eligible for the denominator population.

4. Usability and Use: H-2; M-18; L-5; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so Usability and Use for these 8 measures was discussed and voted on *en bloc*. Measure #2845 was judged usable.
- This measure is currently in use for internal quality improvement by a number of organizations, including children's hospitals, universities, and health plans.
- The Committee raised no major concerns with the overall usability.

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718 : Children Who Had Problems Obtaining Referrals When Needed
- 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.
- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-19; N-6

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- One commenter submitted a series of similar comments on the FECC measures, discussed in the [Comments Received After Committee Evaluation section](#). In addition to the comments that applied to all of the FECC measures, the commenter noted that this measure is stronger than 2842, since it measures whether the care coordinator actually helped.
- This measure also received a separate comment supporting the Committee's recommendation for endorsement.

Developer response:

- Note that responses to the portions of the comment that were submitted on multiple measures are included in the [Comments Received After Committee Evaluation section](#) and are not repeated here. NOTE: This developer has elected to pull out and respond separately to each point of the comments received. The italicized sections in quote marks are quoted from the original comment. The developer's response follows.
- *"This is better than Measure 2842, since it assesses whether the Care Coordinator helped."* We agree that it is important to assess not only whether there was someone helping to coordinate a child's care, but also the quality and perceived value of those services to the family. However, we believe that it is important to assess both items separately, in order to understand the current state of affairs and facilitate improvement. If Measure 2845 were to be used without Measure 2842, it would be unclear whether identified gaps were due to caregivers not having someone to help with care coordination, or if the designated person was failing to assist with specific, important elements of care coordination. The approach to addressing those two separate problems would be quite different.

Committee response:

- Thank you for your comment. The Committee discussed this issue during the in-person meeting in December, but ultimately decided the FECC measures that were recommended assess and meet different needs.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2846 Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

[Submission](#) | [Specifications](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity

(CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA), which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 8, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-8: Caregivers of CMC who report having a care coordinator should also report that their care coordinator:

- Was knowledgeable about their child's health
- Supported the caregiver
- Advocated for the needs of the child

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-0; M-19; L-3; I-2**; 1b. Performance Gap: **H-0; M-25; L-0; I-0**

Rationale:

- Again, this measure shares the same evidence base as the prior FECC measures (#2842, #2843, #2844, and #2845). These measures draw on 1 RCT of a multifactorial intervention focusing on improving outcomes for CMC; it included 100 children followed over 6 months. Three additional studies cited also show that outcomes improve when care coordinators are knowledgeable, supportive, and good advocates for the child's needs.
- The Committee agreed #2846 conceptually is the essence of care coordination, and accountability for providing a care coordinator who is knowledgeable, supportive, and advocates for the patient is important. Committee members raised questions about how the measure is operationalized; the developer reviewed the questions and explained the scoring system, noting the measure is a composite. The developer also explained providers can receive either full or partial credit on any of the items, which are then rolled up to a total score.
- The developer further noted if patients/caregiver answered don't know, skipped, or refused to answer a question needed for scoring the measure, that survey was removed from the calculations, since the developer did not feel it was appropriate to hold entities accountable for something a respondent may actually legitimately not know (e.g., that a care coordinator was working behind the scenes to help make appointments).
- The Committee discussed whether this measure, #2846, should be combined with #2842 (Has Care Coordinator), since #2846 is the most desirable outcome. The developer explained the 2 measures had been split so as not to penalize health plans twice if care coordinators were not provided, since there is a gap in performance on #2842.
- The Committee elected to vote on gap *en bloc* for the following 8 measures that passed Evidence: #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850. Accordingly, there was a single discussion and vote for this subcriterion and that vote applies to all these measures.
- The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and a lack of consensus on the size of the gap. It also was noted the field test results for #2846 demonstrate a gap in care.
- It was generally agreed that while CMC are a small population, this is a high-risk population and care coordination for these children has a significant impact.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-2; M-23; L-0; I-0** 2b. Validity: **H-2; M-21; L-1; I-1**

Rationale:

- Measure #2846 is a multi-item measure and was tested and reported by analyzing the “within item set alpha,” resulting in an alpha of 0.73. Based on the literature, alpha statistics between 0.7 and 0.8 are considered acceptable. The Committee had no concerns with the reliability of #2846.
- Measure #2844 achieved a face validity score of 7-8 (out of 9) from the developer’s Delphi panel. The developer indicated these results demonstrate convergent validity between #2846 and the CAHPS items that also would be expected to be influenced by the quality and degree of care coordination assistance a parent receives for a CMC. The Committee had no concerns with the validity testing.

3. Feasibility: H-1; M-21; L-3; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so feasibility for these 8 measures was discussed and voted on *en bloc*. Measure #2846 was judged feasible.
- The Committee noted the data are currently collected via caregiver survey, which is expensive and time-consuming; as a plan-level measure, however, it should be feasible. The Committee also acknowledged the developer’s view that surveys are currently the most valid approach for collecting data on the quality of care for CMC. Administrative data (billing data) are used to identify children eligible for the denominator population.

4. Usability and Use: H-2; M-18; L-5; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so Usability and Use for these 8 measures was discussed and voted on *en bloc*. Measure #2846 was judged usable.
- This measure is currently in use for internal quality improvement by a number of organizations, including children’s hospitals, universities, and health plans.
- The Committee raised no major concerns with the overall usability.

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718 : Children Who Had Problems Obtaining Referrals When Needed
- 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.
- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-24; N-1

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- One commenter submitted a series of similar comments on the FECC measures, discussed in the [Comments Received After Committee Evaluation section](#). In addition to the comments that applied to all of the FECC measures, the commenter noted that this measure is a patient satisfaction measure that supports family engagement.
- This measure also received a separate comment supporting the Committee's recommendation for endorsement.

Developer response:

- Note that responses to the portions of the comment that were submitted on multiple measures are included in the [Comments Received After Committee Evaluation section](#) and are not repeated here.
- NOTE: This developer has elected to pull out and respond separately to each point of the comments received. The italicized sections in quote marks are quoted from the original comment. The developer's response follows.
- *"This is a patient satisfaction process measure that support family engagement."*
We agree. As part of our measure development process, we conducted several focus groups with caregivers of children with medical complexity. Through this formative work we determined the importance of evaluating caregiver experiences with care coordination services as they relate to supporting family engagement in their child's care.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement
-

9. Appeals

- No appeals were received.
-

2847 Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

[Submission](#) | [Specifications](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA), which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 9, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-9: Caregivers of CMC who report receiving a written visit summary during the last 12 months from their child's main provider's office should report that it contained the following elements:

- Current problem list
- Current medication list

- Drug allergies
- Specialists involved in the child's care
- Planned follow-up
- What to do for problems related to outpatient visit

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015]

1. Importance to Measure and Report: The measure did not achieve consensus on the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-0; M-11; L-11; I-2**; 1b. Performance Gap: **H-0; M-25; L-0; I-0**

Rationale:

- NQF #2847 focuses on whether an after-visit summary was provided and included 6 key components: a problem list, a current medication list, drug allergies, specialist involved in care, planned follow-up, and what to do if there are problems related to the outpatient visit. The Committee noted much of the discussion during the workgroup call had centered on whether these are the correct 6 components.
- The Committee questioned how this measure ties into Meaningful Use, especially since this list is more comprehensive than the after-visit summary required by Meaningful Use. While the developer understood the Meaningful Use concerns, it also noted families encouraged the developer to include these various items within the measure.
- This measure did not achieve consensus on Evidence, but evaluation continued.

- The Committee elected to vote on gap *en bloc* for the following 8 measures: #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850. Accordingly, there was a single discussion and vote for this subcriterion, and that vote applies to all these measures.
- The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and a lack of consensus on the size of the gap. It also was noted the field test results for #2847 demonstrate a gap in care.
- It was generally agreed that while CMC are a small population, this is a high-risk population and care coordination for these children has a significant impact.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-2; M-23; L-0; I-0** 2b. Validity: **H-2; M-21; L-1; I-1**

Rationale:

- The developer stated this measure performed the highest in the validation analyses when compared with 4 different CAHPS measures.
- Measure #2847 is a multi-item measure and was tested and reported by analyzing the “within item set alpha,” resulting in an alpha of 0.86. Based on the literature, alpha statistics between 0.8 and 0.9 are considered good. The Spearman-Brown formula associated with the interclass correlation coefficient showed a statistically significant variation by practice. The results demonstrated good to excellent (0.46-0.90) reliability depending on the per-entity sample size. The Committee had no concerns with the reliability for #2847.
- Measure #2847 achieved a validity score of 7-8 (out of 9) from the developer’s Delphi panel. The Committee had no concerns with the validity testing.

3. Feasibility: H-1; M-21; L-3; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so feasibility for these 8 measures was discussed and voted on *en bloc*. Measure #2847 was judged feasible.
- The Committee noted the data are currently collected via caregiver survey, which is expensive and time-consuming; as a plan-level measure, however, it should be feasible. The Committee also acknowledged the developer’s view that surveys are currently the most valid approach for collecting data on the quality of care for CMC. Administrative data (billing data) are used to identify children eligible for the denominator population.

4. Usability and Use: H-2; M-18; L-5; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so Usability and Use for these 8 measures was discussed and voted on *en bloc*. Measure #2847 was judged usable.
- This measure is currently in use for internal quality improvement by a number of organizations, including children’s hospitals, universities, and health plans.
- The Committee raised no major concerns with the overall usability, but did note there could be problems with usability due to Meaningful Use, both in that this requires more than Meaningful Use does and there have been problems with “gaming,” (i.e., setting EHRs to include information in discharge summaries that was not discussed with the patient).

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718 : Children Who Had Problems Obtaining Referrals When Needed
- 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.
- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child’s doctor’s office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family’s self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-18; N-7

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- One commenter submitted a series of similar comments on the FECC measures, discussed in the [Comments Received After Committee Evaluation section](#); there were no new points specific to this measure. This measure also received a separate comment supporting the Committee’s recommendation for endorsement.

Developer response:

- Please note that responses are included in the [Comments Received After Committee Evaluation section](#) and are not repeated here.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2849 Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

[Submission](#) | [Specifications](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 1, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-15: Caregivers of CMC who self-identify as having a preference for conducting medical visits in a language other than English should have access to a professional medical interpreter (live or telephonic) at all visits for which an interpreter is needed.

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-5; M-19; L-0; I-0**; 1b. Performance Gap: **H-0; M-25; L-0; I-0**

Rationale:

- The Committee expressed concern that #2849 focuses on professional translation and noted a measure of general cultural competency also is needed.
- Committee members noted providing translation services is a legal requirement and, if not provided, providers are not following the law. The developer explained, and several Committee members concurred, that despite the law, much evidence exists that some institutions are not using professional translators to communicate with families with limited English proficiency; children or non-medical professional staff (e.g., housekeeping) are sometimes used.

- It was noted translation is a critical healthcare service, and it should be possible to extrapolate from the general body of evidence for this measure.
- The Committee elected to vote on gap *en bloc* for the following 8 measures that passed Evidence: #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850. Accordingly, there was a single discussion and vote for this subcriterion, and that vote applies to these measures.
- The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and a lack of consensus on the size of the gap. It also was noted the field test results for #2849 demonstrate a gap in care.
- It was generally agreed that while CMC are a small population, this is a high-risk population and care coordination for these children has a significant impact.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-X; M-X; L-X; I-X** 2b. Validity: **H-0; M-18; L-5; I-2**

Rationale:

- The developer was unable to establish reliability for measure #2849; this was attributed to a small sample size. As per NQF policy, data element level validity was used instead. No vote was taken on the Reliability criterion.
- The Committee raised concerns about the validity of this measure, in particular the results of the convergent validity testing, which did not show a significant association with overall provider rating (adjusted or unadjusted) or with getting all the care coordination help needed (unadjusted).
- Committee members did note convergent validity testing is likely less appropriate for this measure, and this measure had the highest face validity of the measures in this set (8 out of 9). The developer noted #2849 was also associated with significantly better experience in terms of access to care, with some of the largest beta coefficients of all the FECC measures, in both unadjusted and adjusted analyses.

3. Feasibility: H-1; M-21; L-3; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so feasibility for these 8 measures was discussed and voted on *en bloc*. Measure #2849 was judged feasible.
- The Committee noted the data are currently collected via caregiver survey, which is expensive and time-consuming; as a plan-level measure, however, it should be feasible to collect the data. The Committee also acknowledged the developer's view that surveys are currently the most valid approach for collecting data on the quality of care for CMC. Administrative data (billing data) are used to identify children eligible for the denominator population.

4. Usability and Use: H-2; M-18; L-5; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so Usability and Use for these 8 measures was discussed and voted on *en bloc*. Measure #2849 was judged usable.
- This measure is currently in use for internal quality improvement by a number of organizations, including children's hospitals, universities, and health plans.
- The Committee raised no major concerns with the overall usability.

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718 : Children Who Had Problems Obtaining Referrals When Needed
- 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.
- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-22; N-3

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received two supportive comments, one noting that it is "essential" to the provision of high quality care. However, that comment also noted this can only happen in systems where a care coordinator position exists and is supported, as discussed in the [Comments Received After Committee Evaluation section](#).

Developer response:

- Please note that responses are included in [the Comments Received After Committee Evaluation section](#) and are not repeated here.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

2850 Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

[Submission](#) | [Specifications](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 16, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-16: Caregivers of CMC should report that their child's primary care provider created a shared care plan for their child.

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015]**1. Importance to Measure and Report: The measure meets the Importance criterion**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-12; M1-11; L-1; I-0**; 1b. Performance Gap: **H-0; M-25; L-0; I-0**

Rationale:

- The Committee noted this measure had a particularly strong evidence base, with 7 RCTs, 3 cohort studies, 7 case series studies, and 2 consensus statements (including 1 from AAP), all showing better outcomes with shared care plans.
- The Committee requested additional information on how much commonality exists between the definitions of a shared care plan in the studies. The developer explained it was limited by the information provided in the studies, but it conceptualized the shared care plan for this measure, as follows:
 - Needed to be described as a shared care plan or an individualized plan tailored to that particular patient and/or family.
 - Needed to be developed by the patient and family in conjunction with the primary care provider or a care coordinator and then shared with a primary care provider.
 - Could also incorporate other providers in a multi-disciplinary team.

- One Committee member noted shared care plans often are not updated, which can lead to unintended, negative consequences, such as giving the wrong medication or wrong dose. The developer stated it had looked at a measure focused on whether the care plan had been updated in the last year. It found that despite relatively poor performance overall—about 40% of children had a shared care plan—the performance on additional details, such as having been updated in the last year, was good. The developer decided the data suggested it was not worth measuring subparts, such as updating, at this time, although it might in the future when more children have care plans.
- The Committee elected to vote on gap *en bloc* for the following 8 measures that passed Evidence: #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850. Accordingly, there was a single discussion and vote for this subcriterion and that vote that applies to these recommended measures.
- The Committee agreed a gap in care coordination for CMC exists and there is consensus that this is an important topic to measure, but there are limited data and a lack of consensus on the size of the gap. It also was noted the field test results for #2850 demonstrate a gap in care.
- It was generally agreed that while CMC are a small population, this is a high-risk population and care coordination for these children has a significant impact.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-2; M-23; L-0; I-0** 2b. Validity: **H-2; M-21; L-1; I-1**

Rationale:

- Measure #2850 was tested with the Spearman-Brown formula associated with the interclass correlation coefficient, showing a statistically significant variation by practice. The results demonstrated good to excellent (0.80-0.98) reliability depending on the per-entity sample size. The Committee agreed the measure met the Reliability criteria.
- Measure #2850 achieved a face validity score of 7 (out of 9) from the developer's Delphi panel. The Committee did not raise concerns about the validity of measure #2850.

3. Feasibility: **H-1; M-21; L-3; I-0**

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so feasibility for these 8 measures was discussed and voted on *en bloc*. Measure #2850 was judged feasible.
- The Committee noted the data are currently collected via caregiver survey, which is expensive and time-consuming; as a plan-level measure, however, it should be feasible. The Committee also acknowledged the developer's view that surveys are currently the most valid approach for collecting data on the quality of care for CMC. Administrative data (billing data) are used to identify children eligible for the denominator population.

4. Usability and Use: **H-2; M-18; L-5; I-0**

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Measures #2842, #2843, #2844, #2845, #2846, #2847, #2849, and #2850 are encompassed within the same survey instrument, so Usability and Use for these 8 measures was discussed and voted on *en bloc*. Measure #2850 was judged usable.
- This measure is currently in use for internal quality improvement by a number of organizations, including children's hospitals, universities, and health plans.
- The Committee raised no major concerns with the overall usability.

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718 : Children Who Had Problems Obtaining Referrals When Needed
- 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.
- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-22; N-3

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- One commenter submitted a series of similar comments on the FECC measures, discussed in the [Comments Received After Committee Evaluation section](#). For this measure, the commenter noted the need for a basic Shared Care Plan in the public domain that "could be widely adopted to move toward standardization and adapted to an electronic format. We have concerns about a provider's ability to do this for all patients with medical complexity, especially in light of the potential difficulty of including some subspecialists in the creation of a shared care plan." As with some of the other measures in this set, the commenter stated this measure is stronger than 2842, since it measures whether the care coordinator actually

helped and highlighted the need for supported care coordinator positions. This measure also received a separate comment supporting the Committee's recommendation for endorsement.

Developer response:

- Note that responses to the portions of the comment that were submitted on multiple measures are included in the [Comments Received After Committee Evaluation section](#) and are not repeated here.
- NOTE: This developer has elected to pull out and respond separately to each point of the comments received. The italicized sections in quote marks are quoted from the original comment. The developer's response follows.
- *"This can only happen in systems where a Care Coordinator position is available and reimbursed. This is only sustainable if the practice has support from the health plan or other sources."*

This FECC Survey measure assesses whether caregivers of children with complex needs report that their child's main provider created a shared care plan for their child during the last 12 months. A "shared care plan" is defined for the survey respondent as follows: "A shared care plan is a written document that contains information about your child's active health problems, medicines he or she is taking, special considerations that all people caring for your child should know, goals for your child's health, growth and development, and steps to take to reach those goals." The "main provider" is defined for the survey respondent as follows: "Your child's main provider is the doctor, physician assistant, nurse or other health care provider who knows the most about your child's health, and who is in charge of your child's care overall." Thus, fulfillment of this quality measure does not require that the child have a care coordinator and thus does not require that the system in which the child receives care has care coordinator positions available or reimbursed. This measure assesses the care being provided by the child's main healthcare provider, not the services being provided by a care coordinator.

- *"It would be tremendously helpful if there were a basic Share Care Plan available in the public domain, which could be widely adopted to move toward standardization and adapted to an electronic format. We have concerns about a provider's ability to do this for all patients with medical complexity, especially in light of the potential difficulty of including some subspecialists in the creation of a shared care plan."*

The quality improvement interventions suggested here by the commenter would certainly go a long way toward improving performance on this measure which had one of the lower scores in our FECC measure field test with only 44% of the 1209 participating families reporting their child had such a plan. We found in our two state field test of this measure, that primary care providers caring for children with medical complexity on average have very few (< 10) of these children in their practices, thus we disagree that creating shared care plans for these children would be a burdensome task for any single provider especially given the measure has no requirement for how often the plan is updated. The measure only assesses whether such a plan was developed for the child by their main provider during the last 12 months. While including subspecialists in the creation of such a plan would likely make it a more comprehensive document, the proposed quality measure does not require or specify that subspecialists be included in the creation of the plan.

Given the evidence supporting this quality measure, the benefits of instituting it to drive improvement on this aspect of care for children with medical complexity would seem to outweigh the risks. The evidence supporting this measure is laid out in section 1a.8.2 of the evidence summary attachment. Briefly, seven randomized controlled trials, 3 non-randomized

controlled trials, 6 uncontrolled interventions with a pre-post comparison, a non-systematic review including unpublished program evaluations, and a consensus statement from the AAP support that interventions that include a shared care plan are associated with improved health and healthcare outcomes among children and adults with chronic disease or medical complexity.

- *“This is better than Measure 2842, since it assesses whether the Care Coordinator helped.”*

As outlined above in our response to the first comment related to Measure 2850, this measure does not assess services provided by a care coordinator. It assesses care being provided by the child’s main provider defined for the survey respondent as follows: “Your child’s main provider is the doctor, physician assistant, nurse or other health care provider who knows the most about your child’s health, and who is in charge of your child’s care overall.” It is the child’s main provider who is held accountable for developing the shared care plan with the family not the child’s care coordinator. Measure 2842 is different but equally important in that it requires that children with medical complexity have a care coordinator. Without a care coordinator, many aspects of a shared care plan developed by the child’s main provider will likely not be successfully implemented.

Committee response:

- Thank you for your comment.

7. Consensus Standards Approval Committee (CSAC) Vote (April 12, 2016): Y-16; N-0; A-0

- **Decision:** Approved for Endorsement

8. Board of Directors Vote (May 2, 2016)

- **Decision:** Ratified for Endorsement

9. Appeals

- No appeals were received.

Measures Not Recommended

2799 Use of Multiple Concurrent Antipsychotics in Children and Adolescents

[Submission](#)

Description: The percentage of children and adolescents 1–17 years of age who were on two or more concurrent antipsychotic medications.

Numerator Statement: Children and adolescents who are on two or more antipsychotic medications concurrently for at least 90 days.

Denominator Statement: Children and adolescents who received 90 days or more of continuous antipsychotic medication treatment.

Exclusions: N/A

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan, Integrated Delivery System, Population: State

Setting of Care: Ambulatory Care: Clinician Office/Clinic, Behavioral Health/Psychiatric: Outpatient

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: National Committee on Quality Assurance

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence: 1b. Performance Gap)

1a. Evidence: **H-0; M-0; L-6; I-17**; Insufficient Evidence with Exception: **Y-17; N-7**; 1b. Performance Gap: **H-5; M-17; L-2; I-0**

Rationale:

- The rate in this measure (multiple concurrent antipsychotics) relates to the desired outcome (optimal mental and physical outcomes) in the following way: Healthcare provider does not prescribe multiple concurrent antipsychotics >>> Patient receives safer treatment for psychiatric condition present >>> Patient avoids adverse side effects associated with use of multiple concurrent antipsychotic medications >>> Patient experiences improvement in mental and physical outcomes (desired outcome).
- The developer stated that “The specific recommendation upon which this measure is based addresses the use of multiple antipsychotics concurrently and notes that the use of multiple antipsychotics has not been studied rigorously and should be avoided. This recommendation is based on established risks of antipsychotics, such as dangerous drug interactions, delirium, serious behavioral changes, cardiac arrhythmias, and death. These risks are in addition to the established side effects of antipsychotic medications that include metabolic disturbance, a serious concern for children.”
- The measure is based on clinical practice guidelines standards from 3 organizations, particularly the guidelines from the American Academy of Child and Adolescent Psychiatry (AACAP).

- Committee members agreed on the importance of measuring overuse of antipsychotic medications, but they noted the lack of empirical evidence to support this measure, particularly the specification of 2, versus more than 2, antipsychotic medications: In some cases, 2 antipsychotic medications may be appropriate. The Committee also noted no evidence-based threshold or goal for percent of patients on 2 or more antipsychotics exists, only that it should be low. Due to insufficient empirical evidence, this measure did not pass Evidence, but moved forward on Insufficient Evidence with Exception given the Committee's concern about the importance of the measure focus.

2. Scientific Acceptability of Measure Properties: The measure did not pass the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-0; M-10; L-12; I-2** 2b. Validity: **H-0; M-6; L-15; I-3**

Rationale:

- This measure was tested at the performance measures score level using a beta-binomial signal-to-noise analysis. The average state level reliability score was 0.99, and the minimum was 0.96, suggesting high reliability at the state level. The reliability score for Medicaid health plans averaged 0.64, with a minimum of 0.28. The reliability score for commercial health plans averaged 0.42, with a minimum of 0.08. The developer concluded this measure is reliable at the state level.
- Committee noted that based on the reliability scores, this measure is reliable in large state-level analyses, but challenges exist for other populations. The reliability issues derive from the number of children meeting denominator criteria. For example, at the commercial plan level, the developer eliminated 24 of 72 commercial plans because it had less than 30 patients in the denominator. The Committee highlighted that this measure should only be used in settings with sufficient samples of children meeting the denominator criteria.
- The Committee sought clarification on the 90-day continuous use of antipsychotic medications specification for the numerator, including whether the child must be on the same 2 antipsychotic medications for 90 consecutive days, or 1 antipsychotic medication for 90 days and a second antipsychotic medication for the first 45 days and a different "second" antipsychotic medication for the remaining 45 days to be included in the numerator. The developer clarified it is 90 days of sustained use.
- The Committee did not reach consensus on the Reliability criterion due to the size and/or mix of plan payer source.
- For validity, the measure was tested at the performance measure score level using both empirical testing and face validity. For the empirical testing, the developer assessed construct validity with 2 types of analyses: correlations among measures and rankings of health plans and states on measures on the three antipsychotic medication measures. Correlations were tested using only health plans. The results found that among Medicaid health plans, there were no statistically significant correlations between the Multiple Concurrent measure and the other measures addressing antipsychotic use in children and adolescents. Among national commercial plans, there was moderate negative correlation between the Follow-up Visit and Multiple Concurrent measures ($r=-.58$, $p=0.02$).
- Committee members expressed concern about the consistency of the measure specifications with the evidence. Specifically, the goal of the measure is to assess inappropriate prescribing of antipsychotic medication to children and adolescents, but the specifications do not measure

inappropriate prescribing of antipsychotic medications, instead using the number of medications (2 or more) and duration (90 days) as a proxy for inappropriateness. Based on this assessment, the Committee concluded #2799 did not meet the Validity criterion. Overall, the Committee felt the measure did not get to the specificity of the individual practitioner's problem with prescribing, and did not adequately address situations for which it would be appropriate to prescribe more than 1 antipsychotic at a time.

3. Feasibility: H-X; M-X; L-X; I-X

(3a. Data generated during care; 3b. Electronic sources; and 3c. Data collection can be implemented (eMeasure feasibility assessment of data elements and logic)

Rationale:

4. Usability and Use: H-X; M-X; L-X; I-X

(4a. Accountability/transparency; and 4b. Improvement – progress demonstrated; and 4c. Benefits outweigh evidence of unintended negative consequences)

Rationale:

5. Related and Competing Measures

- This measure directly relates to NQF-endorsed measure #2337: Antipsychotic Use in Children Under 5 Years Old. Measure #2799 has a different target population of those who have continuous use of antipsychotics for 90 days or more, includes more children (up to age 18 years), and has a different focus (i.e., a specific type of non-recommended practice [multiple concurrent use] as opposed to any use).

Steering Committee Recommendation for Endorsement: Y-X; N-X

6. Public and Member Comment: January 14, 2016 - February 12, 2016

- NCQA requested reconsideration of this measure; they provided additional materials on the validity of the measure.

Developer Rationale for Reconsideration:

- The developer [provided a memo](#) (linked) that summarizes the request for reconsideration and their testing results. It also noted additional information on the construct validity, based on first-year HEDIS results, had not been available for inclusion in the main submission (it was submitted later as a supplement). The developer also provided a report from the Office of the Inspector General (IG) (included in the memo) that examines the concordance of claims-based quality concerns with chart review findings; the developer notes the IG report examined the concordance of claims-based quality concerns with chart review finding, which it noted one Committee member had felt would be useful to demonstrate polypharmacy was related to poor practice and would help to further demonstrate validity. Finally, the developer provided a bulletin from CMS indicating the measure is included in the 2016 CHIP Core Measure Set

Comments received:

- Both comments received on this measure supported the Committee's decision not to recommend the measure. One comment also encouraged the Committee to further discuss

“whether using quantity as a proxy to assess safe and judicious use of a service or treatment, in this case prescribed medications, is in of itself an incorrect measurement approach.” The other comment noted a number of issues with the measure as specified, including the difficulties of using this measure for children in foster care; the difficulty finding psychiatrists for children on Medicaid; and medication changes that may incorrectly appear to be multiple concurrent medication usage

Developer response:

- Thank you for your comment. This state- and health-plan level measure is specifically constructed to assess potentially inappropriate *long-term* concurrent use of antipsychotics. To be eligible for the measure a child must have at least 90 days of continuous use of a dispensed antipsychotic. If a medication is discontinued after 1 week and the child is started on a different antipsychotic as described in your example, the child will not be numerator compliant. Further, the numerator includes a requirement of a full 90 days of concurrent antipsychotic use in order to sufficiently allow for switching between medications and appropriate titrations between medications. We appreciate the complexities around prescribing antipsychotics for children and adolescents. This measure was reviewed by several multistakeholder advisory panels which included representatives from Medicaid, primary care clinicians and child psychiatrists. We also presented the measure to a Foster Care Measurement Advisory Panel, which specifically reviewed the measure with the perspective of improving care for foster care children. Each of our panels concluded the measure as specified had good face validity to address the issue of multiple concurrent antipsychotic use in children.

Committee response:

- The Committee reviewed the materials provided by the developer and discussed whether the request, in particular the IG report, offered sufficient new information related to Validity. The Committee generally agreed the bulk of the information had been provided previously, and there was not enough new information to meet the Validity criteria. Following this discussion, the Committee voted on whether to reconsider this measure. Per NQF policy, greater than 60% of the Committee must vote to reconsider in order for a reconsideration request to move forward. This request failed to achieve greater than 60% of the Committee vote for reconsideration (Y-11, N-9; 55%).

2802 Overuse of Imaging for the Evaluation of Children with Post-Traumatic Headache

[Submission](#)

Description: Percentage of children, ages 2 through 17 years old, with post-traumatic headache who were evaluated in the emergency department (ED) within 24 hours after an injury, and imaging of the head (computed tomography [CT] or magnetic resonance imaging [MRI]) was obtained in the absence of documented neurologic signs or symptoms that suggest intracranial hemorrhage or basilar skull fracture.

Numerator Statement: The number of numerator eligible children, ages 2 through 17 years old, with post-traumatic headache who were evaluated in the ED within 24 hours after an injury, and imaging of the head (CT or MRI) was obtained in the absence of documented neurologic signs or symptoms that suggest intracranial hemorrhage or basilar skull fracture.

Denominator Statement: The number of children, ages 2 through 17 years old, with post-traumatic headache who were evaluated in the ED within 24 hours after an injury, and imaging of the head (CT or MRI) was obtained in the absence of suspected child abuse or neglect or a history of a medical condition that would otherwise warrant neuroimaging.

Exclusions: Children under evaluation for child abuse or neglect and children with a history of a medical condition that could otherwise warrant neuroimaging (e.g., bleeding disorder, intracranial tumor, hydrocephalus) for the evaluation of a post-traumatic headache were excluded from this overuse measure.

Children with a diagnosis of headache without a documented history of trauma and children with a diagnosis of concussion without documentation of headache as a symptom were excluded because post-traumatic headache is the focus of this measure.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

Measure Steward: Q-METRIC – The University of Michigan

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure did not achieve consensus on the Importance criterion

(1a. Evidence: 1b. Performance Gap)

1a. Evidence: **H-8; M-15; L-2; I-1**; 1b. Performance Gap: **H-2; M-9; L-11; I-5**

Rationale:

- This measure assesses overuse of imaging in children with low risk of clinically important traumatic brain injury. Overuse is defined as any patient who undergoes a test or procedure without an appropriate indication. The denominator for this measure is patients with post-traumatic headache who were evaluated in the ED within 24 hours after an injury, and imaging of the head (CT or MRI) was obtained in the absence of suspected child abuse or neglect or a history of a medical condition that would otherwise warrant neuroimaging.
- Reduction in overuse has many benefits, including cost savings, as well as short-term benefits (for this measure, lower risks associated with sedation and anesthesia), and long-term benefits (for this measure, reduced radiation exposure, which may cause cancer later in life).
- The Committee raised a number of issues, including why the measure was specified at the health plan level rather than the hospital level; why the numerator excludes patients without a documented neurological exam; and the fact it requires chart abstraction.
- The developer explained this measure was intended to focus on the Medicaid population, but it hopes to expand the measure to the hospital level in the future. The Committee also raised a concern about generalizing to all plans based on a measure tested only with Medicaid data.
- The developer explained patients undergoing scans without a neurological exam should be rare.
- The measure excludes children under evaluation for child abuse or neglect, and the Committee requested more information about this exclusion. The developer explained there are legal requirements for a medical exam of children with suspected abuse, and head imaging is

appropriate care in this situation, since a high prevalence of head injuries exists in cases of abuse. The developer noted the general workup for this diagnosis is different, and overuse would be a lesser issue than failing to identify child abuse in patients. However, the Committee felt this did not apply to children suspected of neglect. It was noted that excluding cases of potential child abuse should have only a small impact on the numbers.

- Committee members agreed the rate of CT scans performed varies widely, but they were unsure the same gap existed among the much smaller population of children with headache, especially since headache is often not coded in the ED.
- Although the measure passed the Evidence criterion, it did not achieve consensus on gap.

2. Scientific Acceptability of Measure Properties: The measure did not meet the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-0; M-12; L-13; I-2** 2b. Validity: **H-1; M-8; L-17; I-1**

Rationale:

- The Committee expressed concern this measure relies on chart review to identify neurological findings. Committee members noted the neurologic findings assessment is subjective, and the measure is vague on what constitutes the specific neurologic indications of concern.
- While the measure had a high degree of reliability in testing, the Committee questioned whether it would be possible to collect the data reliably on a national scale, especially since the low number of charts among the various sites would require many abstractors involved in subjective chart review.
- One Committee member noted children presenting with post-traumatic headache may not be coded as such; they may simply be given a diagnosis of head trauma—the headache and the associated clinical findings will more often be included in the progress note. If the measure limits the population to those with a coded diagnosis of post-traumatic headache, it will exclude many.
- The measure's exclusions are applied at the coding level, not by the chart abstractor. The Committee believed the specifications should include a list of diagnoses or trigger words to look for in chart abstraction that were not code-based, since most providers do not write codes in their notes.
- The measure did not achieve consensus on the Reliability criterion.
- The Committee expressed significant concern about the validity of the specifications and whether the current construction adequately measures the quality of care provided.
- The Committee ultimately agreed overuse of imaging is an important concern, but it felt limiting the measure to those with headache means the sample is too rarefied and has the potential to cause more errors and limit the impact. The Committee recommended a broader denominator population.
- The measure did not pass the Validity criterion.

3. Feasibility: H-X; M-X; L-X; I-X

(3a. Data generated during care; 3b. Electronic sources; and 3c. Data collection can be implemented (eMeasure feasibility assessment of data elements and logic))

Rationale:

4. Usability and Use: H-X; M-X; L-X; I-X

(4a. Accountability/transparency; and 4b. Improvement – progress demonstrated; and 4c. Benefits outweigh evidence of unintended negative consequences)

Rationale:

5. Related and Competing Measures

- The measure is related to 0668: Appropriate Head CT Imaging in Adults with Mild Traumatic Brain Injury. This measure focuses on children 2-18 years; 0668 includes adolescents 16-18 years.
-

Steering Committee Recommendation for Endorsement: Y-X; N-X

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- Two organizations supported the Committee's decision not to recommend this measure. One comment identified several issues the Committee had mentioned in its discussion, such as the level of analysis and the inclusion of headache. The second commenter supported the committee's deliberations, but requested more information: "[We] encourage further committee discussion (or clarification) as to whether a lack of testing in smaller populations warrants not moving it forward. Further, if the decision remains, is this an example of a "continued development/testing." It was unclear as to when that decision could be applied."

Developer response:

- Although we were unable to test the measure at the hospital/ED level, we agree that this quality measure would be appropriate for this level. We also agree that a more inclusive list of "concussion" or "head injury" ICD-9/10-CM code set of inclusion criteria would be more appropriate for capturing the population clinically. However, as a Center of Excellence for the Pediatric Quality Measures Program, our assignment from the Centers for Medicare & Medicaid Services was to address overuse of imaging for headache.

Committee response:

- The Committee discussed this measure and the comments received during the post-commenting call. One Committee member noted that although the measure only applies to a small group, it was technically acceptable, and questioned whether the Committee should reconsider. Other Committee members noted the concern that if recommended, this measure may be interpreted as the measure of overuse of imaging in children with head trauma, despite the fact it is not intended to be. They also noted the same concerns as during their prior review, including whether the measure met the validity criteria due to the small sample size; the issues around the training required to use the measure; and the fact it is a chart-review measure requiring intensive work that may also not capture all the cases.
- The Committee did not change their recommendation and the measure remains not recommended.

2805 Pediatric Psychosis: Timely Inpatient Psychiatric Consultation

[Submission](#)

Description: Percentage of children/adolescents age ≥ 5 to ≤ 19 years-old admitted to the hospital with psychotic symptoms who had a psychiatric consult (in person or by telepsychiatry) within 24 hours of admission.

Numerator Statement: Eligible patients with documentation of an in-person or telemedicine psychiatric consult within 24 hours of inpatient admission.

Denominator Statement: Patients aged 5 to 19 years-old admitted to the hospital with psychotic symptoms.

Exclusions: No patients were excluded from the target population.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility

Setting of Care: Hospital/Acute Care Facility, Behavioral Health/Psychiatric: Inpatient

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure did not meet the Importance criterion

(1a. Evidence: 1b. Performance Gap)

1a. Evidence: **H-0; M-1; L-6; I-6**; Insufficient Evidence with Exception: **Y-11; N-13**; 1b. Performance Gap: **H-X; M-X; L-X; I-X**

Rationale:

- The developer stated the evidence supporting this measure derive primarily from American Academy of Child and Adolescent Psychiatry (AACAP) 2013 guidelines, a Cochrane review, and a review of the literature by the developer. The developer acknowledged "Overall, though there is not extensive literature supporting this process measure, the benefits of measurement likely far outweigh the risks."
- The Committee noted the evidence is largely based on the consensus of experts, but agreed #2805 qualified for consideration under the criterion of Insufficient Evidence with Exception. At the same time, the Committee discussed accountability of providers and the need to ensure reasonable rigor for a national performance measure, and providing an exception for health plans or other measured entity where psychiatric consultations services may not be easily accessible.
- The Committee also voiced several concerns about the specifications, including: identifying psychotic symptoms versus diagnosis of psychosis, particularly patients who were admitted with psychotic symptoms or younger patients, but not discharged with a diagnosis of psychosis; defining a psychiatric consultation, as well as who is responsible for the consultation (i.e., any licensed mental health professional or only psychiatrist and psychologist); providing sufficient evidence to support the 24-hour limit; and demonstrating improved outcomes other than length of stay are associated with this measure. Also of concern was whether the testing results were

generalizable and could be operationalized, especially is community hospitals and not those that are pediatric-specific.

- NQF #2805 did not pass the must-pass criterion of Evidence. The Committee voted on whether the measure should advance under Insufficient Evidence with Exception, but it did not pass and so the measure is not recommended.

2. Scientific Acceptability of Measure Properties: N/A

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-X; M-X; L-X; I-X** 2b. Validity: **H-X; M-X; L-X; I-X**

Rationale:

3. Feasibility: H-X; M-X; L-X; I-X

(3a. Data generated during care; 3b. Electronic sources; and 3c. Data collection can be implemented (eMeasure feasibility assessment of data elements and logic)

Rationale:

4. Usability and Use: H-X; M-X; L-X; I-X

(4a. Accountability/transparency; and 4b. Improvement – progress demonstrated; and 4c. Benefits outweigh evidence of unintended negative consequences)

Rationale:

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-X; N-X

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- One commenter supported the Committee's decision not to recommend this measure, concurring with issues the Committee had mentioned in its discussion, including concerns with the definitions in the measure.
- A second comment also was received, that requested more information about the Committee's rationale: "We support the committee's deliberations, but encourage further committee discussion (or clarification) on a rationale provided. Specifically, "whether it could be operationalized in less specialized hospital settings (e.g., general hospitals that are not pediatric-specific)." The vulnerability of this population should be considered when applying assumptions about the ability to operationalize timely consultation. Further, we would like the committee to revisit the rationale of not moving this measure forward because some hospital settings may not have EHR; this rationale could be relevant to other previously endorsed measures."

Developer response:

- Thank you to the AAP for reviewing and commenting on the pediatric measure set and the measures (2805, 2806, and 2807) regarding mental health in particular.
Because patients are identified for measurement retrospectively, the patients with psychotic symptoms are identified based on a coded diagnosis of psychosis at discharge from the inpatient setting. Therefore, psychotic symptoms are defined in the population by their discharge diagnosis. The ICD-9 and ICD-10 codes for the discharge diagnosis set are delineated in the full application.
The measure specifications, including the ICD-9 codes, were field tested in an implementation at 3 children's hospitals across 253 patients.
The denominator definition we used is as follows:
Cases are identified from hospital administrative data. Patients aged ≥ 5 – ≤ 19 years-old
ICD-9: Patients have at least one of the following ICD-9 codes for psychosis, as a primary or secondary diagnosis: 291.3, 291.5, 292.11, 292.12, 293.81, 293.82, 295.30, 295.31, 295.32, 295.33, 295.34, 295.40, 295.41, 295.42, 294.43, 295.44, 295.70, 295.71, 295.72, 295.73, 295.74, 295.90, 295.91, 295.92, 295.93, 295.94, 296.24, 296.44, 297.1, 297.2, 297.3, 298.0, 298.1, 298.2, 298.3, 298.4, 298.8, 298.9
ICD-10 [ICD-10 codes are available in the Excel file referenced in item S.2b.] These codes were chosen by Members of the COE4CCN Mental Health Working Group (see Ad.1) co-chaired by Psychiatric Health Services Researchers Drs. Michael Murphy and Bonnie Zima.
Patients were included regardless of source of admission (from ED, direct admission, or transferred from outside hospital).

Committee response:

- The Committee discussed this measure during the post-comment call. While it appreciated the comment, serious concerns regarding the limited evidence base and the time frame remain. Committee members noted that mental health measures are very important and that they would like to push the field to offer more mental health services, but the Committee as a whole was concerned about requiring hospitals to provide a service for which there is only weak evidence. The Committee did not change its recommendation not to endorse the measure.

2807 Pediatric Danger to Self: Discharge Communication with Outpatient Provider

[Submission](#)

Description: Percentage of children/adolescents age ≥ 5 to ≤ 19 years-old admitted to the hospital with dangerous self-harm or suicidality, should have documentation in the hospital record of discussion between the hospital provider and the patient's outpatient provider regarding the plan for follow-up (discussion can be by phone or email).

Numerator Statement: Children/adolescents admitted to the hospital for dangerous self-harm or suicidality should have documentation in the hospital record of discussion between the hospital provider and the patient's outpatient provider regarding the plan for follow-up (discussion can be by phone or email) prior to discharge.

Denominator Statement: Patients aged ≥ 5 to ≤ 19 years-old admitted to the hospital with a discharge diagnosis of danger to self or suicidality.

Exclusions: Patients are excluded if they are transferred to an acute or non-acute inpatient facility, left against medical advice (AMA) or eloped. They are also excluded if the hospital provider is also the post-discharge provider or post-discharge follow-up is arranged to occur at the marker hospital's own outpatient psychiatric clinic.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility

Setting of Care: Hospital/Acute Care Facility, Behavioral Health/Psychiatric: Inpatient

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: **H-0; M-7; L-8; I-9**; Insufficient Evidence with Exception: **Y-14; N-10**; 1b. Performance Gap: **H-9; M-13; L-1; I-0**

Rationale:

- The developer links measuring processes of care to reducing re-presentation with danger to self/suicidality. Evidence for this process should demonstrate that improved communication will ensure continued access to needed treatment for severely ill patients, which leads to the desired outcomes of improved adherence to care and reduced risk of recurrence of active suicidal or self-harm behavior.
- The measure derives from a guideline of the American Academy of Child & Adolescent Psychiatry (AACAP), which in turn relies on a recommendation from the National Institute for Health and Care Excellence (NICE). The developer reported there were no trials cited to support the recommendation; the recommendation was an expert consensus statement, not one that assessed the quantity, quality, and consistency of evidence. The developer also conducted its own literature review examining processes and structures of care related to transitions between sites of care, generally. The developer provided information on two studies that focused on the communication between inpatient and outpatient providers, generally, that demonstrated improved outcomes; the developer noted bundled interventions were assessed, not the single intervention of discussion between the hospital provider and the patient's outpatient provider regarding the plan for follow-up, this measure's focus.
- The Committee noted the lack of strong empirical evidence—the majority of evidence is based on expert consensus and opinion—but agreed measure #2807 qualified for consideration under the Evidence criterion of Insufficient Evidence with Exception; the measure advanced on this basis.
- The developer provided performance results for this measure using data aggregated (N=177) over 2 years from 3 children's hospitals (i.e., Seattle Children's Hospital, Cincinnati Children's Hospital, and University of Minnesota Children's Hospital). The mean performance score was 20.5% across the 3 children's hospital.

- The Committee highlighted the low performance (20.5% for communication between the inpatient healthcare provider and the outpatient healthcare provider that will be assuming care), which suggests room for improvement.

2. Scientific Acceptability of Measure Properties: The measure did not achieve consensus on the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-6; M-15; L-3; I-0** 2b. Validity: **H-0; M-12; L-12; I-0**

Rationale:

- Reliability testing was conducted both at the critical data element level (i.e., inter-rater reliability) and performance score level (i.e., intra-class correlation coefficient). At the critical data element level, reliability was assessed on 40 charts using the prevalence adjusted bias adjusted kappa (PABAK) statistic for patient eligibility for measurement and the patient score for the quality measure. Results for the IRR for assessment of patient eligibility were Kappa=0.80; PABAK=0.85. The developer noted this generally is considered perfect. The developer stated the sample of cases was too small to calculate a Kappa or results for the patient score. The developer instead provided the percent agreement between abstractors regarding patient score for this measure, which was 88%. For reliability at the computed performance measure score, the developer performed ICC testing at the hospital level (the intended Level of Analysis). The ICC for N=3 hospitals was 0.34 (95%CI 0.03-0.92).
- The developer conducted both empirical validity testing and systematic assessment of face validity of the performance measure score for this measure. Empirical validity testing was used to assess the quality measure and the validation metrics (i.e., 30-day readmissions and 30-day ED revisits). There were no statistically significant differences between those meeting and those failing the measure in readmissions (OR=1.00) and ED revisits (OR=1.01). The developer noted the relatively low sample size of eligible patients may have led to limited power to demonstrate a difference in readmission or ED return visits for patients passing versus failing this measure. The developer performed systematic face validity assessment (RAND-UCLA Modified Delphi) of “whether panelists would consider providers who adhere more consistently to the quality measure to be providing higher quality care.”
- The Committee expressed concerns about identifying the primary provider; information not documented appropriately to actually calculate the rate; and communication within institutions, particularly with confidentiality interfering with the types of communication that happens within and outside of institutions. Toward these ends, the Committee noted the significant performance gap reported by the developer about the low rate of communication, which could have been attributed to a validity issue—i.e., that it was not documented or that it did not happen. The Committee did not reach consensus on the Validity criterion.

3. Feasibility: H-0; M-12; L-12; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The Committee had concerns about Feasibility, including testing that required trained nurse extractors and documenting all calls and emails.

4. Usability and Use: H-1; M-10; L-12; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The Committee expressed concerns about the challenges of documentation and accessibility to information, particularly that some types of communications, such as email, might not be HIPAA compliant due to security issues.

5. Related and Competing Measures

- This measure directly relates to the NQF-endorsed measure #0576: Follow-Up After Hospitalization for Mental Illness (FUH). This NQF-endorsed measure reports 2 rates: percentage of discharges for which the patient received follow-up within 7 days and within 30 days of discharge. Both measures focus on the transition from inpatient to outpatient care, however this new measure focuses on a narrower population (danger to self or suicidality) and different process (communication re: follow-up care).

Steering Committee Recommendation for Endorsement: Y-8; N-13

6. Public and Member Comment: January 14, 2016 - February 12, 2016

The Committee did not achieve consensus on this measure during the meeting for several of the criteria. The developer did not submit additional information to address the issues raised during the discussion, but they did respond to the comment received.

Comments received:

- This measure received one comment that noted it covers an important topic, but raising concern that the measure is “not yet ready for prime time” and suggesting improvements. This measure also received a comment requesting more information from NQF regarding the next steps for a “consensus not reached” measure.

Developer response:

- We appreciate the reviewer’s acknowledgment that this is an important area and that it should be a goal for all discharges. While there may be limitations in the current forms of documentation (lack of inclusion in the clinical document architecture [CDA]) and forms of communication (HIPAA-compliant DIRECT messaging systems that are not widely available), the timeline for improving on these systems is not clear. Given the severity of illness for this vulnerable population and the consensus regarding the importance of adequate communication for all populations, this measure is an important stop-gap while we wait for improvements in documentation and communication systems.

NQF response:

- Consensus not reached is an NQF designation for measures that receive between 40-60% approval from Committees during their review process. Measures not reaching consensus are listed as such in the draft report, and comments are specifically sought on these measures. The developer also is invited to provide additional information to address concerns raised during the Committee’s discussion. Following the review of this information, the Committee is asked to discuss the measure during the post-comment call and then revote on the measure to see if consensus can be

reached. If the measure is then recommended, it moves forward with the other recommended measures to NQF Member Vote. If the measure is not recommended, the measure does not move forward to Member Vote. If consensus is still not achieved, the measure will move forward to NQF Member Vote as consensus not reached, and the NQF membership will be asked to weigh in.

Committee response:

- The Committee reviewed its discussion from the in-person meeting, as well as the comment and response. The Committee agreed its prior concerns related to the Validity and Feasibility criteria had not been addressed. Since consensus had not been reached during the in-person meeting, the Committee voted again on an overall recommendation for endorsement in an attempt to reach consensus. For this second vote the measure was not recommended, Y-8; N-13.

2815 CAPQuaM PQMP Mental Health Follow Up Measure Timeliness 1: Delayed coordination of care following mental health discharge

[Submission](#)

Description: This measure describes the presence or absence of delay in follow up visits with mental health and primary care clinicians following hospital discharge of a child with a primary mental health diagnosis or from a mental health facility.

Numerator Statement: Whether or not follow up visits to a primary care clinician or a behavioral health clinician were delayed past 30 days after discharge from a qualifying hospitalization.

Denominator Statement: Hospital discharges of children from birth through their 21st birthday (0-21) discharged from an inpatient visit in a mental health facility or from any facility with a primary mental health diagnosis.

Exclusions: Children who are not continuously enrolled in any a program reporting data available to the reporting or accountability entity for at least 180 days following the date of discharge.

Children who are re-admitted to any hospital on the day of discharge.

Adjustment/Stratification: Stratification by risk category/subgroup

Level of Analysis: Population: Community, Population: County or City, Facility, Health Plan, Integrated Delivery System, Population: National, Population: Regional, Population: State

Setting of Care: Ambulatory Care: Clinician Office/Clinic, Hospital/Acute Care Facility, Behavioral Health/Psychiatric: Inpatient, Post Acute/Long Term Care Facility: Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility: Long Term Acute Care Hospital, Other, Behavioral Health/Psychiatric: Outpatient

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: University Hospitals Cleveland Medical Center

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure did not meet the Importance criterion

(1a. Evidence: 1b. Performance Gap)

1a. Evidence: **H-0; M-8; L-10; I-8**; 1b. Performance Gap: **H-X; M-X; L-X; I-X**

Rationale:

- The evidence for this measure was not based on a systematic review and grading of the empirical evidence. Instead, the developer conducted its own literature review, which was informed by parent focus groups and expert panelists who provided input on the development of the measure. The majority of the evidence summarized by the developer focused on evidence that follow-up rates are modifiable; gaps in follow-up care; types of interventions; and predictors of continuity of care (i.e., gender, age, race, type of admission diagnosis, urban vs. other settings) versus the relationship of follow-up to improvement in the undesired outcomes. No evidence was presented regarding the specific timeframe of 30 days for follow-up.
- The Committee noted there was no empirical evidence that demonstrated this measure results in improved outcomes and expressed concerns about the 30-day timeframe for visits not being informed by evidence. The Committee raised explicit concerns for mental health clinicians who may decide, after evaluation and treatment of a patient, that the correct follow up for this particular patient is 6 weeks. Despite the lack of empirical evidence for the 30-day timeframe, this mental health clinician would be penalized for the 6 week follow-up. The developer noted the 30-day timeframe was recommended by its expert panel and also it was intended to harmonize with the timeframe used for readmissions measures.
- For patients with multiple discharges, each discharge starts a new 30-day period, rather than a rolling 30-day period; the Committee sought clarification on why the measure was constructed this way. The developer stated the unit of analysis is the discharge, not the patient, and the measure was constructed this way to make it easier to use and was based on the input from the development advisory panel.
- Since this is a health plan-level measure, the Committee also noted concerns with the exclusion of children who are readmitted to any hospital on the day of discharge (since this is within 30 days of discharge), and of children who do not have 180 days of continuous enrollment after the discharge (versus a shorter time period). The developer explained 30 days of enrollment could be appropriate for this particular measure, but it had selected 180 days to harmonize with other measures. The developer explained the exclusion for day-of readmissions was intended to cover patients who are discharged for transfer to a different facility.
- The Committee voiced numerous concerns about the requirement for follow-up with both mental health and primary care providers: First, they noted hospitals do not have control over access to mental health providers, and have very little control over access to primary care providers. Second, a number of systems are beginning to integrate behavioral health and primary care in different ways; one such approach is patients are seen by the primary care provider, who then talks to a child psychiatrist or a mental health counselor while the patient is in the process of accessing mental/behavioral healthcare. This measure would not capture these innovative systems, especially since the measure requires follow-up with both mental health and primary care as opposed to one or the other. Other issues raised included the time required for families to visit healthcare providers, which can be a large burden.
- The developer agreed hospitals do not control the accessibility of the physicians; however, it noted they do control processes (e.g., follow-up reminders and scheduling before discharge) that have been found in the literature to be associated with follow-up rates. The developer stated there is some evidence from New York State Medicaid to show follow-up with both providers is associated with a reduction in readmissions, but not other outcomes.

- The developer stated its expert panel decided the measure should include both mental health and primary care. The Committee concluded there was insufficient evidence to support follow-up with both mental health and primary care rather than follow-up with a single provider type.
- Based on the concerns about evidence, #2815 did not pass the Evidence criterion, and the Committee also elected not to consider Insufficient Evidence with Exception since the developer made it clear the measure would remain as specified by its expert panel (as opposed to revising the measure to follow-up by a mental health OR primary care provider).

2. Scientific Acceptability of Measure Properties: N/A

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-X; M-X; L-X; I-X** 2b. Validity: **H-X; M-X; L-X; I-X**

Rationale:

3. Feasibility: H-X; M-X; L-X; I-X

(3a. Data generated during care; 3b. Electronic sources; and 3c. Data collection can be implemented (eMeasure feasibility assessment of data elements and logic)

Rationale:

4. Usability and Use: H-X; M-X; L-X; I-X

(4a. Accountability/transparency; and 4b. Improvement – progress demonstrated; and 4c. Benefits outweigh evidence of unintended negative consequences)

Rationale:

5. Related and Competing Measures

- This measure directly competes with NQF-endorsed measure #0576: Follow-up After Hospitalization for Mental Illness (NCQA). This new measure includes ages 0-21 years and the follow-up criteria appear to differ slightly; a code-by-code analysis would need to be performed by the developer. NQF #0576 reports two rates: percentage of discharges for which the patient received follow-up within 7 days and within 30 days of discharge.

Steering Committee Recommendation for Endorsement: Y-X; N-X

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received one comment agreeing with the Committee's decision not to recommend the measure and noting concern with the measure, including a lack of evidence for the 30-day window and a lack access to follow up care.

Committee response:

- Thank you for your comment.

2817 Accurate ADHD Diagnosis

[Submission](#)

Description: Percentage of patients aged 4 through 18 years whose diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) was based on a clinical exam with a physician or other healthcare professional, as appropriate which includes: confirmation of functional impairment in two or more settings AND assessment of core symptoms of ADHD including inattention, hyperactivity, and impulsivity, either through use of a validated diagnostic tool based on DMS-IV-TR criteria for ADHD or through direct assessment of the patient.

Numerator Statement: Patients whose diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) was based on a clinical exam with a physician or other healthcare professional, as appropriate which includes: confirmation of functional impairment in two or more settings (1) AND assessment of core symptoms of ADHD including inattention, hyperactivity, and impulsivity, either through use of a validated diagnostic tool (2) based on DMS-IV-TR criteria for ADHD or through direct assessment of the patient.

(1) Settings: Includes home, school, and community

(2) Validated diagnostic tool used may include any of the following examples, all of which are based on the DSM-IV criteria for ADHD:

Conners Rating Scales

Barkley ADHD Rating Scale

Vanderbilt Parent and Teacher Assessment Scales

ADHD Rating Scale-IV (DuPaul)

Swanson, Nolan, and Pelham-IV (SNAP IV) Questionnaire

Other ADHD diagnostic tools may be determined valid based on DSM-IV criteria and therefore would be acceptable for this measure and will be added to the list at periodic updates.

Denominator Statement: All patients aged 4 through 18 years with a diagnosis of ADHD.

Exclusions: n/a

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility, Clinician: Group/Practice

Setting of Care: Ambulatory Care: Clinician Office/Clinic, Behavioral Health/Psychiatric: Inpatient

Type of Measure: Process

Data Source: Electronic Clinical Data: Electronic Health Record, Paper Medical Records

Measure Steward: American Academy of Pediatrics

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure meets the Importance criterion

(1a. Evidence: 1b. Performance Gap, 1c. High Priority)

1a. Evidence: **H-2; M-16; L-5; I-2**; 1b. Performance Gap: **H-3; M-21; L-1; I-0**

Rationale:

- This measure was developed to assess rates of providers who accurately diagnose ADHD (i.e., inattention, hyperactivity, and impulsivity) by using validated diagnostic tools based on the

DSM-IV criteria for ADHD. The developer linked accurate diagnosis of ADHD to increases in appropriate treatment and decreases in inappropriate treatment, which lead to improved quality of life, grades, and functionality.

- The measure is based on a recommendation from the 2011 American Academy of Pediatrics' Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescent.
- The Committee agreed this was an important measure, given the significant implications for the children who are either diagnosed correctly, incorrectly, or not at all even when ADHD is present. The Committee noted there were no clinical trials or observational evidence about misdiagnoses, particularly documentation that inaccurate diagnoses lead to bad outcomes or documentation that this approach leads to better outcomes.
- The developer provided performance results for this measure using data abstracted from 118 charts across four outpatient clinician office networks in the Chicago area. Performance rates varied from 63.41% to 92.86% across the 4 sites.
- The Committee noted that although it would have preferred a broader sample to show more variation, sufficient evidence existed in the literature to suggest that the variation detected is likely to occur throughout the country.

2. Scientific Acceptability of Measure Properties: The measure did not meet the Scientific Acceptability criterion

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-0; M-12; L-10; I-3** 2b. Validity: **H-0; M-9; L-11; I-5**

Rationale:

- Reliability testing for this measure was conducted at the data element level. Inter-rater reliability was assessed by computing percentage agreement and the Kappa value. The developer reported Kappas ranging from 0.27 to 0.60 for the numerator. Specifically,
 - Evidence of clinical exam by physician in chart (yes/no) = Kappa 0.27
 - Evidence in the chart of assessment of core symptoms of ADHD, including inattention, hyperactivity and impulsivity through a validated diagnostic tool AND through direct assessment of the patient (yes/no) = Kappa 0.60
 - Evidence in the chart of assessment of impairment in two settings (yes/no) = Kappa 0.36
 - Overall ADHD measure (clinical exam by MD, evidence of impairment in two settings; and either assessment through validated tool or direct assessment) = Kappa 0.27
- No information was provided on reliability testing of the denominator, except the developer indicated the abstractors "received training on how to identify and select the charts for inclusion in testing." The developer further indicated the denominator ADHD diagnosis "can be identified by looking for an ADHD diagnostic code in the patient medical record."
- The Committee expressed concerns about the lack of reliability testing of the denominator. The developer indicated reliability testing of the denominator was conducted by pulling charts, then ensuring the diagnosis was present in the chart. However, the developer did not provide information on how many charts were excluded. The developer stated it will provide this information.
- The Committee noted that the operationalization of a clinical assessment of ADHD according to DSM criteria might be subject to variation based on the ability to pick up documentation, and the subjective interpretation of the elements that go into assessing the components of the 3 ADHD domains.

- The Committee questioned whether the measure appropriately handles patients relocating from one provider to another, particularly patients who were diagnosed elsewhere who arrive at a new practice: the full diagnostic assessment of the child would not be available within the patient's chart, only the current needs and recommendations for the ongoing management of the ADHD. The developer stated that generally when a child is moved from one clinician to another, it is standard of care that this information be provided to the pediatrician who is now responsible for the school accommodations and specific treatment—and if the information is not provided then the assessment should be redone. The Committee questioned whether the measure is assessing a different problem, since the problem is not one of a physician not doing an adequate assessment, but of a physician not being able to get records, and this is conflating those 2 issues within this single measure.
- The developer stated it conducted face validity testing and its 25-member Expert Panel agreed the measure can be used to distinguish good and poor quality care; the developer did not provide the data associated with the assessment. The developer also noted face validity was assessed via a 21-day public comment period and listed the organizations that provided comments. However, it did not describe if or how public commenters provided an assessment of the measure score as an indicator of quality, and no results were provided.
- The Committee expressed significant concerns with the numerator and denominator, including disagreement with the DSM criteria (i.e., that all 3 symptoms [inattention, hyperactivity, and impulsivity] needed to be present to accurately diagnose ADHD); what constituted meeting the numerator (i.e., either using a validated tool for the symptoms or using direct clinical assessment where the DSM criteria are used to evaluate those same criteria); appropriateness of the age group (children between 4 and 18 years old); and timing of diagnosis (i.e., diagnosis must be within the previous year from the visit).
- Although the Committee noted the importance of the measure, it did not reach consensus on the Reliability criterion, and #2817 did not pass the criterion of Validity.

3. Feasibility: H-X; M-X; L-X; I-X

(3a. Data generated during care; 3b. Electronic sources; and 3c. Data collection can be implemented (eMeasure feasibility assessment of data elements and logic)

Rationale:

4. Usability and Use: H-X; M-X; L-X; I-X

(4a. Accountability/transparency; and 4b. Improvement – progress demonstrated; and 4c. Benefits outweigh evidence of unintended negative consequences)

Rationale:

5. Related and Competing Measures

- This measure directly relates to NQF #0108: Follow-Up Care for Children Prescribed ADHD Medication (ADD) (NQF-endorsed). Both measures (i.e., #2817 and #0108) focus on children and adolescents with ADHD diagnoses, however, measure #2817 considers children and adolescents ages 4-18 years and focuses on accurate diagnosis. Measure #0108 considers children ages 6-12 years with a new prescription for ADHD medication who had at least 3 follow-up care visits within a 10-month period, one of which is within 30 days of when the first ADHD medication was dispensed.

Steering Committee Recommendation for Endorsement: Y-X; N-X**6. Public and Member Comment: January 14, 2016 - February 12, 2016**

- There were no comments received for this measure.

2818 ADHD Chronic Care Follow-up**[Submission](#)**

Description: Percentage of patients aged 4 through 18 years with a primary or secondary diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) in the year prior to the measurement year who have at least one follow-up visit in the measurement year with ADHD as the primary diagnosis.

Numerator Statement: Patients who attended at least one ADHD follow-up care visit within the calendar year.

Denominator Statement: All patients aged 4 through 18 years with a diagnosis of ADHD.

Exclusions: Documentation of medical reason(s) for not providing follow-up care (e.g., patient with multiple psychiatric conditions referred to other provider). Please see code list in section S.11.

Documentation of system reason(s) for not providing follow-up care (e.g., patient for whom the follow-up visits were not all with the same practice).

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan, Population: National

Setting of Care: Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: American Academy of Pediatrics

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]**1. Importance to Measure and Report:** The measure meets the Importance criterion

(1a. Evidence: 1b. Performance Gap, 1c. High Priority)

1a. Evidence: **H-2; M-17; L-3; I-2**; 1b. Performance Gap: **H-5; M-19; L-0; I-1**

Rationale:

- The developer linked follow-up visits for those with ADHD with increased treatment and, ultimately, improvements in function, quality of life, and decreased symptoms.
- The measure is based on a recommendation from the 2011 American Academy of Pediatrics' Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescent. The developer reported the body of evidence underlying the clinical practice guideline included 3 literature reviews and 1 systematic review of evidence for the medical home of at least 30 studies from 1999 to 2008. The developer also reported on an additional systematic review since the guideline.

- The developer noted longitudinal studies demonstrate ADHD persists for most patients throughout adolescence and adulthood, and symptoms of inattention, particularly, continue even if symptoms of hyperactivity and impulsivity decrease over time. The evidence underlying the guideline recommendation indicates improvements in desired outcomes for children treated in a medical home model and for those whose treatment follows the tenets of the chronic care model.
- The Committee agreed treatment should be managed fairly frequently in the first year; there should be several visits and phone calls to continuously measure and adjust the medication dosage or to assess behavior therapy. Using the medical home model for chronic conditions, the developer stated that following the first year after diagnosis, the patient should be seen by a clinician at least once yearly to manage ADHD. Although the Committee noted the importance of considering ADHD as a chronic condition that needs follow-up, Committee members were concerned 1 visit per year might not be adequate and was not grounded in the evidence provided.

2. Scientific Acceptability of Measure Properties: The measure did not meet the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-0; M-5; L-13; I-7** 2b. Validity: **H-X; M-X; L-X; I-X**

Rationale:

- The developer did not conduct reliability testing at the critical element level. Instead the developer conducted a basic analysis to determine the percentage of patients with various types of E&M visits and compared those frequencies to other sources.
- The Committee sought clarification from the developer about the meaning of calendar year (i.e., measurement year, prior year, or 12-month period).
- The Committee also questioned the health plan level of analysis and the downstream implications if a patient moves outside of the coverage network or does not have continuous enrollment for a specified period; in these circumstances the patients would no longer be included in the denominator.
- Committee members raised concerns about appropriate coding for well-child care and certain diagnoses. Specifically, they noted payers reimburse significantly better for preventive care than for acute care, and providers are encouraged not to code for certain diagnoses (e.g., asthma and ADHD) during visits that involved well-child care.
- Ultimately, #2818 did not pass the criterion of Reliability because the developer did not demonstrate that empirical reliability testing was conducted for this measure.

3. Feasibility: H-X; M-X; L-X; I-X

(3a. Data generated during care; 3b. Electronic sources; and 3c. Data collection can be implemented (eMeasure feasibility assessment of data elements and logic)

Rationale:

4. Usability and Use: H-X; M-X; L-X; I-X

(4a. Accountability/transparency; and 4b. Improvement – progress demonstrated; and 4c. Benefits outweigh evidence of unintended negative consequences)

Rationale:

5. Related and Competing Measures

- This measure directly relates to NQF #0108: Follow-Up Care for Children Prescribed ADHD Medication (ADD) (NQF-endorsed). Both measures (i.e., #2817 and #0108) focus on children and adolescents with ADHD diagnoses, however, measure #2818 considers children and adolescents ages 4-18 years and focuses on accurate diagnosis. Measure #0108 considers children ages 6-12 years with a new prescription for ADHD medication who had at least 3 follow-up care visits within a 10-month period, one of which is within 30 days of when the first ADHD medication was dispensed.

Steering Committee Recommendation for Endorsement: Y-X; N-X

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received one comment from the American Academy of Pediatrics agreeing with the Committee's recommendation not to endorse. The comment noted that the measure is not ready for use, and raised concerns with the lack of evidence for the 30-day window as well as a "lack of consideration regarding access to appropriate follow-up care". Further, the comment noted that appropriate follow up should be a goal with all discharges, no matter what the diagnosis, and that follow ups and hand-offs are comment pitfalls in ensuring compliance and preventing reoccurrence of illness.

Developer response:

- The AAP, in its capacity as measure steward on behalf of the AHRQ-CMS PQMP PMCoE, respects the concerns AAP members raised regarding this measure. Regarding the comment related to concerns about data collection & analysis: This measure is an administrative claims-based measure and includes codes for E&M visits in the specifications. E&M codes are also used for well child visits. Therefore, this measure has a provision such that ADHD follow-up for well controlled patients can occur at annual well visits. Regarding the comment related to a lack of data demonstrating a strong relationship to improved health: The PMCoE Consortium based this measure on the 2011 AAP ADHD Clinical Practice Guideline, in which this standard of recommended care quality was designated as a strong recommendation: "The primary care clinician should recognize ADHD as a chronic condition and, therefore, consider children and adolescents with ADHD as children and youth with special health care needs. Management of children and youth with special health care needs should follow the principles of the chronic care model and the medical home (quality of evidence B/strong recommendation)." It is recommended that children and youth with special health care needs be seen at least 1 time in a year as needed to coordinate care according to the Medical Home Model. Providing "care that promotes strong partnerships and honest communication is especially important when caring for children and youth with special health care needs." There is evidence that ADHD treatment can improve the likelihood of a positive outcome and reduce the negative consequences of ADHD in the short term; however, residual benefits of pharmacological treatment may subside when medication is discontinued (see Barkley R, Fischer M, Edelbrock C, Smallish L. The adolescent outcome of hyperactive children diagnosed by research criteria: an 8-year prospective follow-up study. *J AM Acad Child Adolesc*

Psychiatry. 1990;29(4):546-557). Therefore, given that ADHD symptoms may manifest for as long as 8 years after diagnosis and that ADHD treatment has been shown to work in the short-term although it may require many modifications, regular ADHD follow-up care is to ensure that a child is adhering to a treatment plan.

Committee response:

- Thank you for your comment.

2848 Family Experiences with Coordination of Care (FECC) -14: Health care provider communicated with school staff about child's condition

Submission

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA), which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 14, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-14: Caregivers of CMC who report their child's condition causes difficulty learning, understanding, or paying attention in class should also report that one of their child's health care providers (i.e., primary care physician, specialist physician, care coordinator, nurse practitioner, nurse, social worker, etc.)

communicated with school staff at least once a year about the educational impacts of the child's condition.

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure did not meet the Importance criterion

(1a. Evidence: 1b. Performance Gap, 1c. High Priority)

1a. Evidence: **H-0; M-2; L-15; I-7** 1b. Performance Gap: **H-X; M-X; L-X; I-X;**

Rationale:

- Evidence initially provided by the developer for #2848 was 1 study on 66 children with traumatic brain injury that found perceived better outcomes if the school and providers had good communication as the child transitioned back to school. After the workgroup call, however, the developer provided additional evidence, including a study on school reentry after cardiac transplantation, a systematic review of 10 qualitative studies, and the AAP Medical Home Policy of 2002. The Committee noted no evidence was directly applicable.
- The parent representatives on the Committee voiced concerns about #2848. One parent noted it could be a burden or complication for families. Another parent noted having a provider communicating with a school may not be appropriate or desired in all cases. It also was noted individualized healthcare plans are frequently an addendum to individualized education plans, and if those are being followed properly, this additional follow-up is unnecessary. Pediatrician and school nurse Committee members noted, however, this information is important for schools

to have, and not all parents are equally equipped to advocate for their children to ensure schools have the information they need.

- Measure #2848 did not pass the Evidence criterion.

2. Scientific Acceptability of Measure Properties: N/A

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-X; M-X; L-X; I-X** 2b. Validity: **H-X; M-X; L-X; I-X**

Rationale:

3. Feasibility: H-X; M-X; L-X; I-X

(3a. Data generated during care; 3b. Electronic sources; and 3c. Data collection can be implemented (eMeasure feasibility assessment of data elements and logic)

Rationale:

4. Usability and Use: H-X; M-X; L-X; I-X

(4a. Accountability/transparency; and 4b. Improvement – progress demonstrated; and 4c. Benefits outweigh evidence of unintended negative consequences)

Rationale:

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718: Children Who Had Problems Obtaining Referrals When Needed
- 0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719) The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.
- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-X; N-X

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received one comment agreeing with the Committee's decision not to recommend the measure. The comment noted concerns with the measure, stating the definition is too broad and would not be feasible for implementation. It also raised the same concern as with the other care coordination measures, regarding the need for system support for care coordinators, as discussed in the [Comments Received After Committee Evaluation section](#).

Developer response:

- Note that responses to the portions of the comment that were submitted on multiple measures are included in the [Comments Received After Committee Evaluation section](#) and are not repeated here.

- *"This definition is too broad (difficulty learning, understanding, or paying attention in class) and it is not feasible for this to be done as written."*

As part of the measure development process (described in section 2b2.2 of the testing attachment), cognitive interviews were performed with caregivers of children with medical complexity, in English and Spanish, to assess their understanding and interpretation of the survey items. These interviews revealed that there was consistent caregiver understanding of what was meant by the survey items used to assess this measure.

- *"This can only happen in systems where a Care Coordinator position is available and reimbursed. This is only sustainable if the practice has support from the health plan or other sources."*

For this measure, the contact with the school could be initiated by anyone in the main provider's office; having a designated care coordinator, or even an individual identified as helping the caregiver to manage the child's care, is not required. There are therefore multiple ways in which a medical home might provide this service, even in the absence of support for a care coordinator position.

Committee response:

- Thank you for your comment.

2851 Family Experiences with Coordination of Care (FECC) -17: Child has emergency care plan [Submission](#)

Description: The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA), which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 17, described below. The short descriptions of each quality measure follows:

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not.

Numerator Statement:

FECC-17: Caregivers of CMC should report that their child's main provider created an emergency care plan for their child.

Denominator Statement: The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

Exclusions: Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

Adjustment/Stratification: Case mix adjustment

Level of Analysis: Health Plan, Population : State

Setting of Care: Other

Type of Measure: Process

Data Source: Administrative claims, Patient Reported Data/Survey

Measure Steward: Seattle Children's Research Institute

STEERING COMMITTEE MEETING [12/01/2015-12/02/2015]

1. Importance to Measure and Report: The measure does not meet the Importance criterion

(1a. Evidence: 1b. Performance Gap)

1a. Evidence: **H-0; M-3; L-9; I-12**; Evidence Exception: **Y-8; N-15**; 1b. Performance Gap: **H-X; M-X; L-X; I-X**

Rationale:

- NQF #2851 was submitted without an empirical evidence review, but the developer provided 2 AAP consensus statements. After the workgroup call, the developer identified an RCT and a cohort study that were related, but neither provided direct data to support the measure.
- The Committee noted having an emergency care plan is important, but it may not be technically possible at this time given the limitations of data portability.
- The Committee voted 50% insufficient evidence and 50% low. The measure did not pass a second vote on Insufficient Evidence with Exception.

2. Scientific Acceptability of Measure Properties: N/A

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-X; M-X; L-X; I-X** 2b. Validity: **H-X; M-X; L-X; I-X**

Rationale:

3. Feasibility: **H-X; M-X; L-X; I-X**

(3a. Data generated during care; 3b. Electronic sources; and 3c. Data collection can be implemented (eMeasure feasibility assessment of data elements and logic)

Rationale:

4. Usability and Use: **H-X; M-X; L-X; I-X**

(4a. Accountability/transparency; and 4b. Improvement – progress demonstrated; and 4c. Benefits outweigh evidence of unintended negative consequences)

Rationale:

5. Related and Competing Measures

- The following measures are related and not harmonized:
- 0718: Children Who Had Problems Obtaining Referrals When Needed
- 0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

According to the developer:

- The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set.
- The measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719). The FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC.

- The FECC measures differ from currently-endorsed measures with regard to focus. The currently-available measures largely focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. The FECC measures focus more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature.

Steering Committee Recommendation for Endorsement: Y-X; N-X

6. Public and Member Comment: January 14, 2016 - February 12, 2016

Comments received:

- This measure received one comment agreeing with the Committee's decision not to recommend the measure. Problems highlighted in the comment included the prior issue discussed in the [Comments Received After Committee Evaluation section](#) of the need for system support for care coordinators; the need for the PMCA to be updated to include ICD-10 and SNOMED codes; and a request for the data demonstrating a relationship to improved health. In addition, the commenter noted the need within the pediatric community for "a standardized Emergency Care Plan which is available in the public domain, widely adopted, and has the ability to be adapted for EHR incorporation before we add burdens of support for this among PCPs. While in theory this is great, ideally it would be electronic, part of a CDA, and available to parents and other caregivers at all times on a portal or phone for access."

Developer response:

- Note that responses to the portions of the comment that were submitted on multiple measures are included in the [Comments Received After Committee Evaluation section](#) and are not repeated here.
- *"We believe the pediatric community needs a standardized Emergency Care Plan which is available in the public domain, widely adopted, and has the ability to be adapted for EHR incorporation before we add burdens of support for this among PCPs. While in theory this is great, ideally it would be electronic, part of a CDA, and available to parents and other caregivers at all times on a portal or phone for access."*
The quality improvement interventions suggested here by the commenter would certainly go a long way toward improving performance on this measure, which had some of the lowest scores in the FECC measure field test among 1209 families of children with medical complexity across 2 states.
- *"This may not be feasible to do for all medically complex children, and for some it may not even be necessary."*
We agree that the evidence supporting this measure is weak, despite the calls for all children with special health care needs to have such plans. This measure was primarily based on an AAP policy statement suggesting that this should be a standard of care.
- *"Where are the data demonstrating a relationship to improved health?"*
The evidence supporting this measure is laid out in section 1a.8.2 of the evidence summary attachment. Briefly, an RCT with poor follow-up, a manuscript describing an intervention and reporting improved outcomes but with an unclear comparison group, and 2 consensus statements from the American Academy of Pediatrics support the importance of having an emergency care plan for children with complex medical problems for optimizing outcomes.

Overall, the empirical evidence is of moderate to low quality, with fairly strong expert consensus from the AAP.

Committee response:

- Thank you for your comment.

Measures Withdrawn from Consideration

Three measures were withdrawn during the endorsement evaluation process.

Measure	Reason for withdrawal
2794 Asthma I: Rate of Emergency Department Visit Use for Children Managed for Identifiable Asthma	Information provided on the measure did not meet NQF's minimum standards for testing.
2816 Asthma 5: Appropriateness of Emergency Department Visits for Children and Adolescents with Identifiable Asthma	Information provided on the measure did not meet NQF's minimum standards for testing.
2821 Quality of Pediatric Hospital-to-Home Transitions Measure Set	Information provided on the measure did not meet NQF's minimum standards for testing.

Appendix B: NQF Pediatric Portfolio and Related Measures

NQF's portfolio of measures related to pediatrics consists of 123 measures. All measures within the pediatric portfolio have been assigned, for various reasons, to other Standing Committees, including for example: Patient Safety (adverse outcomes), HEENT (ear infection measures), Care Coordination (discharge planning measures), and Health and Well-Being (screening measures).

This appendix provides information on the portfolio of pediatric measures overseen by the other standing committees. Only endorsed measures are included.

Fifteen measures in red (and with a † dagger symbol) were endorsed in the Pediatric Measures project in 2016.

Behavioral Health

- 0004 Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET)
- 0108 Follow-Up Care for Children Prescribed ADHD Medication (ADD)
- 0418 Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan
- 0576 Follow-Up After Hospitalization for Mental Illness (FUH)
- 0722 Pediatric Symptom Checklist (PSC)
- 1364 Child and Adolescent Major Depressive Disorder: Diagnostic Evaluation
- 1365 Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment
- †2800 Metabolic Monitoring for Children and Adolescents on Antipsychotics
- †2801 Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics
- †2803 Tobacco Use and Help with Quitting Among Adolescents
- †2806 Adolescent Psychosis: Screening for Drugs of Abuse in the Emergency Department

Cancer

- 0381 Oncology: Treatment Summary Communication – Radiation Oncology
- 0382 Oncology: Radiation Dose Limits to Normal Tissues
- 0383 Oncology: Plan of Care for Pain – Medical Oncology and Radiation Oncology (paired with 0384)
- 0384 Oncology: Pain Intensity Quantified – Medical Oncology and Radiation Oncology (paired with 0383)
- 0650 Melanoma: Continuity of Care – Recall System
- 1822 External Beam Radiotherapy for Bone Metastases

Cardiovascular

- 0715 Standardized adverse event ratio for children < 18 years of age undergoing cardiac catheterization

Care Coordination

- 0646 Reconciled Medication List Received by Discharged Patients (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)

- 0647 Transition Record with Specified Elements Received by Discharged Patients (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
- 0648 Timely Transmission of Transition Record (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
- 0649 Transition Record with Specified Elements Received by Discharged Patients (Emergency Department Discharges to Ambulatory Care [Home/Self Care] or Home Health Care)
- †2789 Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care
- †2842 Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator
- †2843 Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services
- †2844 Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health
- †2845 Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals
- †2846 Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs
- †2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content
- †2849 Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed
- †2850 Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Endocrine

- 0060 Hemoglobin A1c (HbA1c) Testing for Pediatric Patients

Health and Well-Being

- 0024 Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)
- 0038 Childhood Immunization Status (CIS)
- 0041 Influenza Immunization
- 0717 Number of School Days Children Miss Due to Illness
- 0718 Children Who Had Problems Obtaining Referrals When Needed
- 0719 Children Who Receive Effective Care Coordination of Healthcare Services When Needed
- 0720 Children Who Live in Communities Perceived as Safe
- 0721 Children Who Attend Schools Perceived as Safe
- 0723 Children Who Have Inadequate Insurance Coverage For Optimal Health
- 0724 Measure of Medical Home for Children and Adolescents
- 1330 Children With a Usual Source for Care When Sick
- 1332 Children Who Receive Preventive Medical Visits
- 1333 Children Who Receive Family-Centered Care
- 1334 Children Who Received Preventive Dental Care
- 1335 Children Who Have Dental Decay or Cavities

- 1337 Children With Inconsistent Health Insurance Coverage in the Past 12 Months
- 1340 Children with Special Health Care Needs (CSHCN) who Receive Services Needed for Transition to Adult Health Care
- 1346 Children Who Are Exposed To Secondhand Smoke Inside Home
- 1348 Children Age 6-17 Years who Engage in Weekly Physical Activity
- 1349 Child Overweight or Obesity Status Based on Parental Report of Body-Mass-Index (BMI)
- 1361 Intervention no later than 6 months of age
- 1385 Developmental screening using a parent completed screening tool (Parent report, Children 0-5)
- 1392 Well-Child Visits in the First 15 Months of Life
- 1407 Immunizations for Adolescents
- 1448 Developmental Screening in the First Three Years of Life
- 1516 Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
- 1653 Pneumococcal Immunization
- 1659 Influenza Immunization
- 2508 Prevention: Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk
- 2509 Prevention: Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk
- 2511 Utilization of Services, Dental Services
- 2517 Oral Evaluation, Dental Services
- 2528 Prevention: Topical Fluoride for Children at Elevated Caries Risk, Dental Services
- +2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Head, Eye, Ear, Nose, and Throat (HEENT)

- 0653 Acute Otitis Externa: Topical therapy
- 0654 Acute Otitis Externa: Systemic antimicrobial therapy – Avoidance of inappropriate use
- 0655 Otitis Media with Effusion: Antihistamines or decongestants – Avoidance of inappropriate use
- 0656 Otitis Media with Effusion: Systemic corticosteroids – Avoidance of inappropriate use
- 0657 Otitis Media with Effusion: Systemic antimicrobials – Avoidance of inappropriate use
- 1354 Hearing screening prior to hospital discharge
- 1360 Audiological Evaluation no later than 3 months of age (EHDI-3)
- 2695 Follow-Up after Emergency Department Visit by Children for Dental Caries
- 2689 Ambulatory Care Sensitive Emergency Department Visits for Dental Caries in Children

Infectious Disease

- 0069 Appropriate Treatment for Children With Upper Respiratory Infection (URI)
- 0404 HIV/AIDS: CD4 Cell Count or Percentage Performed
- 0405 HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) Prophylaxis
- 0408 HIV/AIDS: Tuberculosis (TB) Screening
- 0409 HIV/AIDS: Sexually Transmitted Diseases – Screening for Chlamydia, Gonorrhea, and Syphilis

Palliative and End-of-Life Care

- 1625 Hospitalized Patients Who Die an Expected Death with an ICD that Has Been Deactivated

Perinatal and Reproductive Health

- 0304 Late sepsis or meningitis in Very Low Birth Weight (VLBW) neonates (risk-adjusted)
- 0475 Hepatitis B Vaccine Coverage Among All Live Newborn Infants Prior to Hospital or Birthing Facility Discharge
- 0478 Neonatal Blood Stream Infection Rate (NQI #3)
- 0480 PC-05 Exclusive Breast Milk Feeding and the subset measure PC-05a Exclusive Breast Milk Feeding Considering Mother's Choice
- 0483 Proportion of infants 22 to 29 weeks gestation screened for retinopathy of prematurity.
- 0716 Healthy Term Newborn
- 1382 Percentage of low birthweight births
- 1391 Frequency of Ongoing Prenatal Care (FPC)
- 1517 Prenatal & Postpartum Care (PPC)
- 1731 PC-04 Health Care-Associated Bloodstream Infections in Newborns

Person- and Family-Centered Care

- 0010 Young Adult Health Care Survey (YAHCS)
- 0011 Promoting Healthy Development Survey (PHDS)
- 0725 Validated family-centered survey questionnaire for parents' and patients' experiences during inpatient pediatric hospital stay
- 2548 Child Hospital CAHPS (HCAHPS)

Pulmonary/Critical Care

- 0343 PICU Standardized Mortality Ratio
- 0334 PICU Severity-adjusted Length of Stay
- 0335 PICU Unplanned Readmission Rate
- 0548 Suboptimal Asthma Control (SAC) and Absence of Controller Therapy (ACT)
- 1799 Medication Management for People With Asthma (MMA)
- 1800 Asthma Medication Ratio (AMR)

Readmissions

- 2393 Pediatric All-Condition Readmission Measure
- 2414 Pediatric Lower Respiratory Infection Readmission Measure
- 2505 Emergency Department Use without Hospital Readmission During the First 30 Days of Home Health

Renal

- 1423 Minimum spKt/V for Pediatric Hemodialysis Patients
- 1424 Monthly Hemoglobin Measurement for Pediatric Patients

- 1425 Measurement of nPCR for Pediatric Hemodialysis Patients
- 1667 Pediatric Kidney Disease : ESRD Patients Receiving Dialysis: Hemoglobin Level < 10g/dL
- 2704 Minimum Delivered Peritoneal Dialysis Dose
- 2706 Pediatric Peritoneal Dialysis Adequacy: Achievement of Target Kt/V

Safety

- 0337 Pressure Ulcer Rate (PDI 2)
- 2337 Antipsychotic Use in Children Under 5 Years Old
- 2720 National Healthcare Safety Network (NHSN) Antimicrobial Use Measure
- 2723 Wrong-Patient Retract-and-Reorder (Wrong Patient-RAR) Measure
- 2726 Prevention of Central Venous Catheter (CVC)-Related
- †2820: Pediatric Computed Tomography (CT) Radiation Dose

Surgery

- 0339 RACHS-1 Pediatric Heart Surgery Mortality Rate (PDI 06)
- 0340 RACHS-1 Pediatric Heart Surgery Volume (PDI 7)
- 0713 Ventriculoperitoneal (VP) shunt malfunction rate in children
- 0714 Standardized mortality ratio for neonates undergoing non-cardiac surgery
- 0732 Surgical Volume for Pediatric and Congenital Heart Surgery: Total Programmatic Volume and Programmatic Volume Stratified by the 5 STAT Mortality Categories
- 2681 Perioperative Temperature Management
- 2683 Risk-Adjusted Operative Mortality for Pediatric and Congenital Heart Surgery

Appendix C: Pediatric Portfolio—Use in Federal Programs

NQF #	Title	Federal Programs: Finalized as of December 1, 2015
0004	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET)	Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults; Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0024	Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)	Children's Health Insurance Program Reauthorization Act Quality Reporting; Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0038	Childhood Immunization Status (CIS)	Children's Health Insurance Program Reauthorization Act Quality Reporting; Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0041	Influenza Immunization	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Medicare Shared Savings Program; Physician Compare; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0060	Hemoglobin A1c (HbA1c) Testing for Pediatric Patients	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0069	Appropriate Treatment for Children With Upper Respiratory Infection (URI)	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0108	Follow-Up Care for Children Prescribed ADHD Medication (ADD)	Children's Health Insurance Program Reauthorization Act Quality Reporting; Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0382	Oncology: Radiation Dose Limits to Normal Tissues	Physician Feedback; Physician Quality Reporting System (PQRS); PPS-Exempt Cancer Hospital Quality Reporting; Value-Based Payment Modifier Program
0383	Oncology: Plan of Care for Pain – Medical Oncology and Radiation Oncology (paired with 0384)	Physician Feedback; Physician Quality Reporting System (PQRS); PPS-Exempt Cancer Hospital Quality Reporting; Value-Based Payment Modifier Program
0384	Oncology: Pain Intensity Quantified – Medical Oncology and Radiation Oncology (paired with 0383)	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); PPS-Exempt Cancer Hospital Quality Reporting; Value-Based Payment Modifier Program
0404	HIV/AIDS: CD4 Cell Count or Percentage Performed	Physician Feedback; Value-Based Payment Modifier Program

NQF #	Title	Federal Programs: Finalized as of December 1, 2015
0405	HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) Prophylaxis	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0409	HIV/AIDS: Sexually Transmitted Diseases – Screening for Chlamydia, Gonorrhea, and Syphilis	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0418	Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan	Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults; Meaningful Use (EHR Incentive Program) - Eligible Professionals; Medicare Shared Savings Program; Physician Compare; Physician Feedback; Physician Quality Reporting System (PQR
0422	Functional status change for patients with Knee impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0423	Functional status change for patients with Hip impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0424	Functional status change for patients with Foot and Ankle impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0425	Functional status change for patients with lumbar impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0426	Functional status change for patients with Shoulder impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0427	Functional status change for patients with elbow, wrist and hand impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0428	Functional status change for patients with General orthopaedic impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0480	PC-05 Exclusive Breast Milk Feeding and the subset measure PC-05a Exclusive Breast Milk Feeding Considering Mother's Choice	Hospital Inpatient Quality Reporting; Meaningful Use (EHR Incentive Program) - Hospitals, CAHs

NQF #	Title	Federal Programs: Finalized as of December 1, 2015
0576	Follow-Up After Hospitalization for Mental Illness (FUH)	Children's Health Insurance Program Reauthorization Act Quality Reporting; Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults; Inpatient Psychiatric Hospital Quality Reporting; Medicare Part C Display Measure; Physician Quality
0648	Timely Transmission of Transition Record (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)	Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults
0650	Melanoma: Continuity of Care – Recall System	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0653	Acute Otitis Externa: Topical therapy	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0654	Acute Otitis Externa: Systemic antimicrobial therapy – Avoidance of inappropriate use	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0716	Healthy Term Newborn	Hospital Inpatient Quality Reporting; Meaningful Use (EHR Incentive Program) - Hospitals, CAHs
1335	Children Who Have Dental Decay or Cavities	Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
1354	Hearing screening prior to hospital discharge	Hospital Inpatient Quality Reporting; Meaningful Use (EHR Incentive Program) - Hospitals, CAHs
1365	Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment	Children's Health Insurance Program Reauthorization Act Quality Reporting; Meaningful Use (EHR Incentive Program) - Eligible Professionals; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
1382	Percentage of low birthweight births	Children's Health Insurance Program Reauthorization Act Quality Reporting
1391	Frequency of Ongoing Prenatal Care (FPC)	Children's Health Insurance Program Reauthorization Act Quality Reporting
1392	Well-Child Visits in the First 15 Months of Life	Children's Health Insurance Program Reauthorization Act Quality Reporting
1407	Immunizations for Adolescents	Children's Health Insurance Program Reauthorization Act Quality Reporting; Physician Quality Reporting System (PQRS)
1423	Minimum spKt/V for Pediatric Hemodialysis Patients	Dialysis Facility Compare; End-Stage Renal Disease Quality Incentive Program
1448	Developmental Screening in the First Three Years of Life	Children's Health Insurance Program Reauthorization Act Quality Reporting

NQF #	Title	Federal Programs: Finalized as of December 1, 2015
1516	Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	Children's Health Insurance Program Reauthorization Act Quality Reporting
1517	Prenatal & Postpartum Care (PPC)	Children's Health Insurance Program Reauthorization Act Quality Reporting; Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults
1653	Pneumococcal Immunization	Hospital Compare
1659	Influenza Immunization	Hospital Compare; Hospital Inpatient Quality Reporting; Hospital Value-Based Purchasing; Inpatient Psychiatric Hospital Quality Reporting
1667	Pediatric Kidney Disease : ESRD Patients Receiving Dialysis: Hemoglobin Level < 10g/dL	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
1799	Medication Management for People With Asthma (MMA)	Children's Health Insurance Program Reauthorization Act Quality Reporting
1822	External Beam Radiotherapy for Bone Metastases	PPS-Exempt Cancer Hospital Quality Reporting
2508	Prevention: Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk	Children's Health Insurance Program Reauthorization Act Quality Reporting

Appendix D: Project Steering Committee and NQF Staff

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Appendix E: Measure Specifications

2800 Metabolic Monitoring for Children and Adolescents on Antipsychotics

STATUS

Endorsed

STEWARD

National Committee on Quality Assurance

DESCRIPTION

The percentage of children and adolescents 1–17 years of age who had two or more antipsychotic prescriptions and had metabolic testing.

TYPE

Process

DATA SOURCE

Administrative claims This measure is part of the Healthcare Effectiveness Data and Information Set (HEDIS). As part of HEDIS, this measure pulls from administrative claims collected in the course of providing care to health plan members. NCQA collects the HEDIS data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system.

This measure has also been tested at the state level and could be reported by states if added to a relevant program.

No data collection instrument provided Attachment XXXX_APM_Value_Sets.xlsx

LEVEL

Health Plan, Integrated Delivery System, Population : State

SETTING

Ambulatory Care : Clinician Office/Clinic, Laboratory, Behavioral Health/Psychiatric : Outpatient

NUMERATOR STATEMENT

Children and adolescents who received glucose and cholesterol tests during the measurement year.

NUMERATOR DETAILS

Children and adolescents who received at least one test for blood glucose (Glucose Tests Value Set) or HbA1c (HbA1c Tests Value Set) and at least one test for LDL-C (LDL-C Tests Value Set) or cholesterol (Cholesterol Tests Other Than LDL Value Set) during the measurement year (January 1 – December 31). See attachment for all value sets (S.2b).

DENOMINATOR STATEMENT

Children and adolescents who had ongoing use of antipsychotic medication (at least two prescriptions).

DENOMINATOR DETAILS

Children and adolescents age 1-17 as of December 31 of the measurement year (January 1 – December 31) who had at least two antipsychotic medication dispensing events (Table APM-A) of the same or different medications, on different dates of service during the measurement year.

Table APM-A: Antipsychotic Medications

First-generation antipsychotic medications: Chlorpromazine HCL; Fluphenazine HCL; Fluphenazine decanoate; Fluphenazine enanthate; Haloperidol; Haloperidol decanoate; Haloperidol lactate; Loxapine HCL; Loxapine succinate; Molindone HCL; Perphenazine; Pimozide; Promazine HCL; Thioridazine HCL; Thiothixene; Thiothixene HCL; Trifluoperazine HCL; Triflupromazine HCL

Second-generation antipsychotic medications: Aripiprazole; Asenapine; Clozapine; Iloperidone; Lurasidone; Olanzapine; Olanzapine pamoate; Paliperidone; Paliperidone palmitate; Quetiapine fumarate; Risperidone; Risperidone microspheres; Ziprasidone HCL; Ziprasidone mesylate

Combinations: Olanzapine-fluoxetine HCL (Symbyax); Perphenazine-amitriptyline HCL (Etrafon, Triavil [various])

EXCLUSIONS

No exclusions

EXCLUSION DETAILS

N/A

RISK ADJUSTMENT

No risk adjustment or risk stratification

N/A

STRATIFICATION

Report three age stratifications and a total rate:

1–5 years.

6–11 years.

12–17 years.

Total (sum of the age stratifications).

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

Step 1: Determine the eligible population, or the denominator, by identifying the number of patients in the specified age range who had at least two antipsychotic medication dispensing events (Table APM-A) of the same or different medications, on different dates of service during the measurement year.

Step 2: Determine the numerator by identifying the number of patients in the eligible population who received at least one glucose and one cholesterol test during the measurement year.

Step 3: Divide the numerator by the denominator to calculate the rate. No diagram provided

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5.1 Identified measures: 1932 : Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

2337 : Antipsychotic Use in Children Under 5 Years Old

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: This new measure assesses metabolic monitoring during the measurement year among children and adolescents who are prescribed antipsychotics. Below we detail how this measure is related to measures 2337 and 1932 but how it addresses a different target population and measure focus. Measure 2337 assesses whether children under 5 are prescribed an antipsychotic at some point during the measurement year. Similar to the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure, this measure is specified for the health plan level and uses administrative claims as the data source. Measure 2337 focuses on all children under 5 years of age; our measure focuses on a broader range of children (up to age 18) who have been prescribed antipsychotics in order to assess whether they are receiving recommended testing. Measure 1932 assesses whether adults with schizophrenia or bipolar disorder who were prescribed antipsychotics are screened for diabetes. Similar to the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure, this measure is specified for the health plan level and uses administrative claims as the data source. The measures have different target populations but a similar measure focus. Measure 1932 focuses on adults 18 to 64 years of age who have schizophrenia or bipolar disorder and who are prescribed antipsychotics. The Metabolic Monitoring for Children and Adolescents on Antipsychotics measure includes all children and adolescents up to 18 years of age who are prescribed antipsychotics and does not focus on any specific conditions. Measure 1932 is focused on diabetes screening by receipt of a glucose test. While the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure also includes assessing whether a glucose test was received, it additionally assesses whether a cholesterol test was received since the focus is not just diabetes screening. The two measures are aligned in the way glucose testing is identified and measured.

5b.1 If competing, why superior or rationale for additive value: N/A

2801 Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

STATUS

Endorsed

STEWARD

National Committee on Quality Assurance

DESCRIPTION

Percentage of children and adolescents 1–17 years of age with a new prescription for an antipsychotic, but no indication for antipsychotics, who had documentation of psychosocial care as first-line treatment.

TYPE

Process

DATA SOURCE

Administrative claims This measure is part of the Healthcare Effectiveness Data and Information Set (HEDIS). As part of HEDIS, the measure pulls from administrative claims collected in the course of providing care to health plan members. NCQA collects the HEDIS data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system.

The measure has also been tested at the state level and could be reported by states if added to a relevant program.

No data collection instrument provided Attachment XXXX_APP_Value_Sets.xlsx

LEVEL

Health Plan, Integrated Delivery System, Population : State

SETTING

Ambulatory Care : Clinician Office/Clinic, Behavioral Health/Psychiatric : Inpatient, Behavioral Health/Psychiatric : Outpatient

NUMERATOR STATEMENT

Children and adolescents from the denominator who had psychosocial care as first-line treatment prior to (or immediately following) a new prescription of an antipsychotic.

NUMERATOR DETAILS

Children and adolescents who had documentation of psychosocial care (Psychosocial Care Value Set) in the 121-day period from 90 days prior to the index prescription start date (IPSD) through 30 days after the IPSD during the measurement year (January 1 – December 31). See attachment for all value sets (S.2b).

The Psychosocial Care Value Set contains claims codes for behavioral health acute inpatient and outpatient encounters, including psychotherapy for patients, families, and/or groups; psychophysiological therapy; hypnotherapy; activity therapy, such as music, dance, or art; training and educational services related to the care and treatment of mental health issues; community and rehabilitations programs; and crisis interventions. These services align with a recent Institute of Medicine (IOM) report*, which defined psychosocial interventions for mental health and substance use disorders as “interpersonal or informational activities, techniques, or strategies that target biological, behavioral, cognitive, emotional, interpersonal, social, or environmental factors with the aim of reducing symptoms of these disorders and improving functioning or well-being.” The IOM notes these interventions include psychotherapies, vocational rehabilitation and peer support services, and that they can utilize different formats, including individual, family, or group therapy.

DEFINITIONS

IPSD: The earliest prescription dispensing date for an antipsychotic medication where the date is in the Intake Period and there is a Negative Medication History.

Negative Medication History: A period of 120 days (4 months) prior to the IPSD when the member had no antipsychotic medications dispensed for either new or refill prescriptions.

*Institute of Medicine. Committee on Developing Evidence-Based Standards for Psychosocial Interventions for Mental Disorders, Board on Health Sciences Policy. England MJ, Butler AS and Gonzalez ML, eds. Psychosocial Interventions for Mental and Substance Use Disorders: a Framework for Establishing Evidence-Based Standards. 2015. National Academies Press; Washington, DC (Prepublication copy).

DENOMINATOR STATEMENT

Children and adolescents who had a new prescription of an antipsychotic medication for which they do not have a U.S Food and Drug Administration primary indication.

DENOMINATOR DETAILS

Children and adolescents age 1-17 as of December 31 of the measurement year (January 1 – December 31) who had a new prescription for an antipsychotic medication (Table APP-A) during the intake period (January 1 through December 1 of the measurement year).

Table APP-A: Antipsychotic Medications

First-generation antipsychotic medications: Chlorpromazine HCL; Fluphenazine HCL; Fluphenazine decanoate; Fluphenazine enanthate; Haloperidol; Haloperidol decanoate; Molindone HCL; Perphenazine; Pimozide; Haloperidol lactate; Loxapine HCL; Loxapine succinate; Promazine HCL; Thioridazine HCL; Thiothixene; Thiothixene HCL; Trifluoperazine HCL; Triflupromazine HCL

Second-generation antipsychotic medications: Aripiprazole; Asenapine; Clozapine; Iloperidone; Lurasidone; Olanzapine; Olanzapine pamoate; Paliperidone; Paliperidone palmitate; Quetiapine fumarate; Risperidone; Risperidone microspheres; Ziprasidone HCL; Ziprasidone mesylate

Combinations: Olanzapine-fluoxetine HCL (Symbyax); Perphenazine-amitriptyline HCL (Etrafon, Triavil [various])

EXCLUSIONS

Exclude children and adolescents with a diagnosis of a condition for which antipsychotic medications have a U.S. Food and Drug Administration indication and are thus clinically appropriate: schizophrenia, bipolar disorder, psychotic disorder, autism, tic disorders.

EXCLUSION DETAILS

Exclude children and adolescents for whom first-line antipsychotic medications may be clinically appropriate. Any of the following during the measurement year (January 1 – December 31) meet criteria:

Children and adolescents who have at least one acute inpatient encounter with a diagnosis of schizophrenia, bipolar disorder or other psychotic disorder during the measurement year. Any of the following code combinations meet criteria:

- BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
- BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set.
- BH Stand Alone Acute Inpatient Value Set with Other Psychotic Disorders Value Set.

- BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Schizophrenia Value Set.
 - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Bipolar Disorder Value Set.
 - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Other Psychotic Disorders Value Set.
- Children and adolescents who have at least two visits in an outpatient, intensive outpatient or partial hospitalization setting, on different dates of service, with a diagnosis of schizophrenia, bipolar disorder or other psychotic disorder during the measurement year. Any of the following code combinations meet criteria:
- BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
 - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Schizophrenia Value Set.
 - BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set.
 - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Bipolar Disorder Value Set.
 - BH Stand Alone Outpatient/PH/IOP Value Set with Other Psychotic Disorders Value Set.
 - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Other Psychotic Disorders Value Set.
- See attachment for all value sets (S.2b).

RISK ADJUSTMENT

No risk adjustment or risk stratification
N/A

STRATIFICATION

Report three age stratifications and a total rate:
1–5 years.
6–11 years.
12–17 years.
Total (sum of the age stratifications).

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

- Step 1: Determine the eligible population, or the denominator, by identifying the number of children and adolescents in the specified age range who were dispensed an antipsychotic medication (Table APP-A) during the intake period (January 1 – December 1).
- Step 2: Exclude those who did not have a negative medication history and who have a diagnosis for which antipsychotic medications are clinically appropriate (see S.10).
- Step 3: Determine the numerator by identifying the number of children and adolescents in the eligible population who had documentation of psychosocial care in the 121-day period from 90 days prior through 30 days after the new prescription of an antipsychotic.

Step 4: Divide the numerator by the denominator to calculate the rate. No diagram provided

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5.1 Identified measures: 2337 : Antipsychotic Use in Children Under 5 Years Old

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: This new measure assesses receipt of psychosocial care among children and adolescents who are prescribed antipsychotics without a primary indication. Both measures address use of antipsychotics. However, 2337 assesses if children under 5 are prescribed an antipsychotic. Our Psychosocial Care measure assesses children of a broader age range (up to age 18) who are currently on antipsychotics but do not have a primary indication. Our measure also addresses a different focus: whether these children received first-line psychosocial care.

5b.1 If competing, why superior or rationale for additive value: N/A

2803 Tobacco Use and Help with Quitting Among Adolescents

STATUS

Endorsed

STEWARD

National Committee for Quality Assurance

DESCRIPTION

Percentage of adolescents 12 to 20 years of age during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user.

TYPE

Process

DATA SOURCE

Electronic Clinical Data This measure has been newly added to the Physician Quality Reporting System, which is a reporting program that uses a combination of incentive payments and payment adjustments to promote reporting of quality information by eligible professionals.

No data collection instrument provided No data dictionary

LEVEL

Clinician : Group/Practice

SETTING

Ambulatory Care : Clinician Office/Clinic

NUMERATOR STATEMENT

Adolescents who are not smokers OR Adolescents who are smokers but are receiving cessation counseling.

NUMERATOR DETAILS

Documentation that the adolescent is not a tobacco user

OR

Documentation that the adolescent is a tobacco user AND any of the following:

- Advice given to quit smoking or tobacco use
- Counseling on the benefits of quitting smoking or tobacco use (e.g., “5-A” Framework)
- Assistance with or referral to external smoking or tobacco cessation support programs (e.g., telephone counseling ‘quit line’)
- Current enrollment in smoking or tobacco use cessation program

DENOMINATOR STATEMENT

Adolescents who turn 12 through 20 years of age during the measurement year.

DENOMINATOR DETAILS

Adolescents who turn 12 through 20 years of age during the measurement year and had documentation of a face-to-face visit with a primary care practice during the 12 months prior to the measurement year.

EXCLUSIONS

N/A

EXCLUSION DETAILS

N/A

RISK ADJUSTMENT

No risk adjustment or risk stratification

N/A

STRATIFICATION

N/A

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

Step 1: Identify the eligible population (denominator).

Step 1a: Identify adolescents who turn 12 through 20 years of age during the measurement period.

Step 1b: Identify adolescents in Step 1a who had a face-to-face visit.

Step 2: Identify tobacco users (numerator).

Step 2a: From the denominator, identify adolescents documented as non-tobacco users.

Step 2b: From the remaining adolescents in the denominator, identify adolescents documented as tobacco users who received help with quitting.

Step 3: Sum adolescents identified in Steps 2a and 2b.

Step 4: Divide the total in Step 3 by the denominator to get the rate. No diagram provided

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5.1 Identified measures: 0028 : Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: NQF 0028 measures tobacco use in adults aged 18 and older. The proposed measure will assess tobacco use in adolescents who are between the ages of 12 and 20.

5b.1 If competing, why superior or rationale for additive value:

2806 Adolescent Psychosis: Screening for Drugs of Abuse in the Emergency Department

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

Percentage of children/adolescents age =12 to =19 years-old seen in the emergency department with psychotic symptoms who are screened for alcohol or drugs of abuse

TYPE

Process

DATA SOURCE

Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Medical Records
The data collection tool is publicly available on the website in S.1. and also attached in the Appendix materials.

Title: "Medical Record Measure Electronic Abstraction and Scoring Tool" under "Mental Health Measures"

Available at measure-specific web page URL identified in S.1 Attachment
PSYCHOSIS_ICD9_and_ICD10_Codes_for_Denominator_Identification_SUBMITTED-635803493103736421.xlsx

LEVEL

Facility

SETTING

Emergency Medical Services/Ambulance, Hospital/Acute Care Facility

NUMERATOR STATEMENT

Eligible patients with documentation of drug and alcohol screening using urine drug or serum alcohol tests.

NUMERATOR DETAILS

Patients passing the quality measure are identified during medical record abstraction using the guidelines below. The item numbers match the “Medical Records Abstraction Tool Guidelines” under “Mental Health Measures” provided on the website in S.1. This language is also in the “Medical Records Electronic Abstraction and Scoring Tool” on the website.

11. Urine Drug Screening /Serum Alcohol Screening – [Module: Psychosis, ED care] This item applies to children and adolescents presenting with psychotic symptoms who were admitted to the marker ED. Indicate if the patient had a urine drug screen and/or serum alcohol screen while in the ED. The alcohol test will be a separate test from the drug tests. The drug test must be comprehensive in that it tests for multiple types of illicit drugs. Do NOT give credit for tests that include results of just a single drug. Drug screens commonly include tests for benzodiazepines, barbiturates, methamphetamine, cocaine, methadone, opiates, tetrahydrocannabinol, etc.

DENOMINATOR STATEMENT

Patients aged =12 to =19 years-old seen in the emergency department with psychotic symptoms.

DENOMINATOR DETAILS

Cases are identified from hospital administrative data.

Patients aged =12 to =19 years-old

Patients have at least one of the following ICD9 codes for psychosis, as a primary or secondary diagnosis: 291.3, 291.5, 292.11, 292.12, 293.81, 293.82, 295.30, 295.31, 295.32, 295.33, 295.34, 295.40, 295.41, 295.42, 294.43, 295.44, 295.70, 295.71, 295.72, 295.73, 295.74, 295.90, 295.91, 295.92, 295.93, 295.94, 296.24, 296.44, 297.1, 297.2, 297.3, 298.X

These codes were chosen by Members of the COE4CCN Mental Health Working Group (see Ad.1) co-chaired by Psychiatric Health Services Researchers Drs. Michael Murphy and Bonnie Zima.

EXCLUSIONS

No patients were excluded from the target population.

EXCLUSION DETAILS

N/A

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

N/A

TYPE SCORE

Ratio better quality = higher score

ALGORITHM

- Step 1. Identify eligible population at hospital using administrative data. N=total population
- Step 2. Assess patient chart for indicator status. Pass (A=1) if documentation present of urine drug testing or both urine drug testing and serum alcohol testing. Pass (B=1) if documentation present of serum alcohol testing or both urine drug testing and serum alcohol testing.
- Step 3. Calculate Patient score= $100 \times (A+B)/2$. Results=0, 50, 100
- Step 4. Calculate hospital score=Sum(Patient score)/N Available in attached appendix at A.1

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5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

2842 Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 1, described below. The short descriptions of each quality measure follows; full details of FECC-1 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

TYPE

Process

DATA SOURCE

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_120715_FECC_1.xlsx

LEVEL

Health Plan, Population : State

SETTING

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici

NUMERATOR STATEMENT

The numerator for FECC-1 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-1 follows:

FECC-1: Caregivers of CMC should report that their child has a designated care coordinator.

NUMERATOR DETAILS

The numerators for each of the care coordination quality measures included within the FECC measure set are specified in the Detailed Measure Specifications (S.2b).

DENOMINATOR STATEMENT

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

DENOMINATOR DETAILS

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

EXCLUSIONS

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

EXCLUSION DETAILS

Please see S2.b.

RISK ADJUSTMENT

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be "mixed-mode").

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories

with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

STRATIFICATION

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

TYPE SCORE

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

ALGORITHM

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718: Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

2843 Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 3, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

TYPE

Process

DATA SOURCE

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_120715_FECC_3-635851074631328247.xlsx

LEVEL

Health Plan, Population : State

SETTING

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinic

NUMERATOR STATEMENT

The numerators for each of the 10 FECC quality measures included within the FECC measures set are specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC 3 follows:

FECC-3: Caregivers of CMC who report having a designated care coordinator and who require community services should also report that their care coordinator helped their child to obtain needed community services in the last year.

NUMERATOR DETAILS

The numerator for FECC 3 is specified in the Detailed Measure Specifications (S.2b).

DENOMINATOR STATEMENT

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

DENOMINATOR DETAILS

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

EXCLUSIONS

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

EXCLUSION DETAILS

Please see S2.b.

RISK ADJUSTMENT

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

- 1=8th grade or less
- 2=Some high school, but did not graduate
- 3=High school graduate or GED
- 4=Some college or 2-year degree
- 5=4-year college graduate
- 6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

STRATIFICATION

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

TYPE SCORE

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

ALGORITHM

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

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5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718: Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care

coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

2844 Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 5, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator
 FECC-3: Care coordinator helped to obtain community services
 FECC-5: Care coordinator asked about concerns and health changes
 FECC-7: Care coordinator assisted with specialist service referrals
 FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs
 FECC-9: Appropriate written visit summary content
 FECC-14: Health care provider communicated with school staff about child's condition
 FECC-15: Caregiver has access to medical interpreter when needed
 FECC-16: Child has shared care plan
 FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

TYPE

Process

DATA SOURCE

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment
 NQF_detailed_specs_FECC_PMCA_FECC_5.xlsx

LEVEL

Health Plan, Population : State

SETTING

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici

NUMERATOR STATEMENT

The numerator for FECC-5 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description follows:

FECC-5: Caregivers of CMC who report having a care coordinator and who report that their care coordinator has contacted them in the last 3 months should also report that their care coordinator asked them about the following:

- Caregiver concerns
- Health changes of the child

NUMERATOR DETAILS

The numerators for each of the care coordination quality measures included within the FECC measure set are specified in the Detailed Measure Specifications (S.2b).

DENOMINATOR STATEMENT

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

DENOMINATOR DETAILS

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

EXCLUSIONS

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

EXCLUSION DETAILS

Please see S2.b.

RISK ADJUSTMENT

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be

imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

STRATIFICATION

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

TYPE SCORE

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

ALGORITHM

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information

3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

COPYRIGHT / DISCLAIMER

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718: Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of

care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

2845 Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 7, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended

care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

TYPE

Process

DATA SOURCE

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment
NQF_detailed_specs_FECC_PMCA_FECC_7.xlsx

LEVEL

Health Plan, Population : State

SETTING

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici

NUMERATOR STATEMENT

The numerator for FECC-7 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-7 follows:

FECC-7: Caregivers of CMC who report having a care coordinator for their child should also report that the care coordinator assists them with specialty service referrals by ensuring that the appointment with the specialty service provider occurs

NUMERATOR DETAILS

The numerators for each of the care coordination quality measures included within the FECC measure set are specified in the Detailed Measure Specifications (S.2b).

DENOMINATOR STATEMENT

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and

laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

DENOMINATOR DETAILS

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

EXCLUSIONS

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

EXCLUSION DETAILS

Please see S2.b.

RISK ADJUSTMENT

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be "mixed-mode").

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

- 1=8th grade or less
- 2=Some high school, but did not graduate
- 3=High school graduate or GED
- 4=Some college or 2-year degree
- 5=4-year college graduate
- 6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

STRATIFICATION

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

TYPE SCORE

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

ALGORITHM

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

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5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718: Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

2846 Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 8, described below. The short descriptions of each quality measure follows; full details for FECC-8 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

TYPE

Process

DATA SOURCE

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_FECC_8.xlsx

LEVEL

Health Plan, Population : State

SETTING

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinic

NUMERATOR STATEMENT

The numerator for FECC-8 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-8 follows:

FECC-8: Caregivers of CMC who report having a care coordinator should also report that their care coordinator:

- Was knowledgeable about their child's health
- Supported the caregiver
- Advocated for the needs of the child

NUMERATOR DETAILS

The numerator for FECC-8 is specified in the Detailed Measure Specifications (S.2b).

DENOMINATOR STATEMENT

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

DENOMINATOR DETAILS

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

EXCLUSIONS

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

EXCLUSION DETAILS

Please see S2.b.

RISK ADJUSTMENT

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

STRATIFICATION

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

TYPE SCORE

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

ALGORITHM

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

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5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718: Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care

coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

2847 Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 9, described below. The short descriptions of each quality measure follows; full details for FECC-9 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator
 FECC-3: Care coordinator helped to obtain community services
 FECC-5: Care coordinator asked about concerns and health changes
 FECC-7: Care coordinator assisted with specialist service referrals
 FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs
 FECC-9: Appropriate written visit summary content
 FECC-14: Health care provider communicated with school staff about child's condition
 FECC-15: Caregiver has access to medical interpreter when needed
 FECC-16: Child has shared care plan
 FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

TYPE

Process

DATA SOURCE

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment
 NQF_detailed_specs_FECC_PMCA_FECC_9.xlsx

LEVEL

Health Plan, Population : State

SETTING

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici

NUMERATOR STATEMENT

The numerator for FECC-9 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-9 follows:

FECC-9: Caregivers of CMC who report receiving a written visit summary during the last 12 months from their child's main provider's office should report that it contained the following elements:

- Current problem list
- Current medication list

- Drug allergies
- Specialists involved in the child's care
- Planned follow-up
- What to do for problems related to outpatient visit

NUMERATOR DETAILS

The numerator for FECC 9 is specified in the Detailed Measure Specifications (S.2b).

DENOMINATOR STATEMENT

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

DENOMINATOR DETAILS

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

EXCLUSIONS

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

EXCLUSION DETAILS

Please see S2.b.

RISK ADJUSTMENT

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend

adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

STRATIFICATION

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

TYPE SCORE

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

ALGORITHM

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

COPYRIGHT / DISCLAIMER

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718: Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set

would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

2849 Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 15, described below. The short descriptions of each quality measure follows; full details for FECC-15 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

TYPE

Process

DATA SOURCE

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment
NQF_detailed_specs_FECC_PMCA_FECC_15.xlsx

LEVEL

Health Plan, Population : State

SETTING

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici

NUMERATOR STATEMENT

The numerator for FECC-15 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-15 follows:

FECC-15: Caregivers of CMC who self-identify as having a preference for conducting medical visits in a language other than English should have access to a professional medical interpreter (live or telephonic) at all visits for which an interpreter is needed.

NUMERATOR DETAILS

The numerator for FECC-15 is specified in the Detailed Measure Specifications (S.2b).

DENOMINATOR STATEMENT

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality

measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

DENOMINATOR DETAILS

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

EXCLUSIONS

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

EXCLUSION DETAILS

Please see S2.b.

RISK ADJUSTMENT

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be "mixed-mode").

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

STRATIFICATION

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

TYPE SCORE

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

ALGORITHM

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

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5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718: Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

2850 Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

STATUS

Endorsed

STEWARD

Seattle Children's Research Institute

DESCRIPTION

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 16, described below. The short descriptions of each quality measure follows; full details for FECC-16 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

TYPE

Process

DATA SOURCE

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_FECC_16.xlsx

LEVEL

Health Plan, Population : State

SETTING

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinic

NUMERATOR STATEMENT

The numerator for FECC-16 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-16 follows:

FECC-16: Caregivers of CMC should report that their child's primary care provider created a shared care plan for their child.

NUMERATOR DETAILS

The numerator for FECC-16 is specified in the Detailed Measure Specifications (S.2b).

DENOMINATOR STATEMENT

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

DENOMINATOR DETAILS

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

EXCLUSIONS

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

EXCLUSION DETAILS

Please see S2.b.

RISK ADJUSTMENT

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

STRATIFICATION

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

TYPE SCORE

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

ALGORITHM

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

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5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718: Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we

found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

2797 Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

STATUS

Endorsed

STEWARD

Q-METRIC – University of Michigan

DESCRIPTION

The percentage of children ages 2 through 15 years old with sickle cell anemia (Hemoglobin SS) who received at least one transcranial Doppler (TCD) screening within a year.

TYPE

Process

DATA SOURCE

Administrative claims N/A

No data collection instrument provided Attachment Q-METRIC_SCD_Code_Table_ICD9_ICD10.xlsx

LEVEL

Health Plan

SETTING

Other Any setting represented with claims data

NUMERATOR STATEMENT

The numerator is the number of children ages 2 through 15 years old with sickle cell anemia who received at least one TCD screening within the measurement year.

NUMERATOR DETAILS

Cases from target population with target process (Receipt of TCD screening): Receipt of TCD screening is identified as the presence of at least one CPT code for any of five acceptable ultrasonography tests within the measurement year among children in the target population. Acceptable CPT codes are: 93886 (complete study), 93888 (limited study), 93890 (vasoreactivity study), 93892 (emboli detection without intravenous microbubble injection), and 93893 (emboli detection with intravenous microbubble injection).

DENOMINATOR STATEMENT

The denominator is the number of children ages 2 through 15 years with sickle cell anemia within the measurement year.

DENOMINATOR DETAILS

Children with sickle cell anemia are identified through the presence of at least three separate healthcare encounters related to sickle cell anemia (defined as hemoglobin [Hb]SS) within the measurement year. Sickle cell anemia-related healthcare encounters are identified through ICD codes. The ICD-9-CM codes to identify HbSS-related healthcare encounters are as follows: 282.61 (Hb-SS disease w/o crisis) and 282.62 (Hb-SS disease with crisis). The ICD-10-CM codes for HbSS-related healthcare encounters are as follows: D57.00 (Hb-SS disease with crisis, unspecified); D57.01 (Hb-SS disease with acute chest syndrome); and D57.02 (Hb-SS disease with splenic sequestration). Children ages 2 through 15 years are included within the target population (i.e., must not have a 2nd or 16th birthday within the measurement year).

It is important to note that accurate calculation of this measure requires that the target population be selected from among children who have all of their health services for the measurement year included in the administrative claims data set. For children who have dual enrollment in other health plans, their claims may not be complete since some of their health services may have been paid for by another health plan. Inclusion of children with other health insurance would potentially cause this measure to be understated. As a consequence, this measure requires that children must not only be continuously enrolled within the health plan from which claims are available, the enrollment files must also be assessed to determine whether other forms of health insurance existed during the measurement year. Children with evidence of other insurance during the measurement year (i.e., coordination of benefits) are excluded from the target population.

EXCLUSIONS

There are no denominator exclusions.

EXCLUSION DETAILS

N/A

RISK ADJUSTMENT

No risk adjustment or risk stratification

N/A

STRATIFICATION

N/A

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and diagnosis requirements within the measurement year.
2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.
3. Calculate the rate (numerator / denominator). No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

2789 Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

STATUS

Endorsed

STEWARD

Center of Excellence for Pediatric Quality Measurement

DESCRIPTION

The Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care measures the quality of preparation for transition from pediatric-focused to adult-focused health care as reported in a survey completed by youth ages 16-17 years old with a chronic health condition. The ADAPT survey generates measures for each of the 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning.

TYPE

PRO

DATA SOURCE

Patient Reported Data/Survey Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care Survey.

The ADAPT survey is available in English and Spanish. The recommended mode of administration is by mail. For a detailed explanation of survey administration modes, see S.21 – Survey/Patient Reported Data.

Available in attached appendix at A.1 Attachment ADAPT_Data_Dictionary.xlsx

LEVEL

Facility, Clinician : Group/Practice, Health Plan

SETTING

Ambulatory Care : Clinician Office/Clinic

NUMERATOR STATEMENT

The ADAPT survey consists of 26 questions assessing the quality of health care transition preparation for youth with chronic health conditions, based on youth report of whether specific recommended processes of care were received. The ADAPT survey generates measures for each of 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning. ADAPT measure scores are calculated using the sum of the proportions of positive responses to between 3 and 5 individual items. Complete instructions for measure score calculations are provided in the Detailed Measure Specifications (Appendix A).

1) Counseling on Transition Self-Management:

The numerator is the sum of the proportions of positive responses to the five questions about counseling on transition self-management, among respondents with valid responses to all questions.

2) Counseling on prescription medication:

The numerator is the sum of the proportions of positive responses to the three questions about counseling on prescription medication, among respondents who indicate that they take prescription medication every day and with valid responses to all questions.

3) Transfer planning:

The numerator is the sum of the proportions of positive responses to the four questions about transfer planning, among respondents who report being treated by a pediatric provider and with valid responses to all questions.

NUMERATOR DETAILS

ADAPT measure scores are calculated using the sum of the proportions of positive responses to between 3 and 5 individual items. Complete instructions for measure score calculations are provided in the Detailed Measure Specifications (Appendix A).

MEASURE 1. Counseling on Transition Self-Management:

For any individual respondent, the numerator is the number of positive responses to the five questions about counseling on transition self-management divided by five. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents with valid responses to all questions.

This measure is produced by combining responses to questions 4-8:

- Q4: In the last 12 months, did you talk with this provider without your parent or guardian in the room?
- Q5: In the last 12 months, did you and this provider talk about your being more in charge of your health?

- Q6: In the last 12 months, did you and this provider talk about your scheduling your own appointments with this provider instead of your parent or guardian?
- Q7: In the last 12 months, how often did you schedule your own appointments with this provider?
- Q8: In the last 12 months, did you and this provider talk about how your health insurance might change as you get older?

MEASURE 2. Counseling on prescription medication:

For any individual respondent, the numerator is the number of positive responses to the three questions about counseling on prescription medication divided by three. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents who indicate that they take prescription medication every day and with valid responses to all questions.

The measure is produced by combining responses to questions 10, 12, and 13:

- Q10: In the last 12 months, how often did you and this provider talk about all of your prescription medicines at each visit?
- Q12: In the last 12 months, did you and this provider talk about remembering to take your medicines?
- Q13: In the last 12 months, did you and this provider talk about you refilling your own prescriptions instead of your parent or guardian?

MEASURE 3. Transfer planning:

For any individual respondent, the numerator is the number of positive responses to the four questions about transfer planning divided by four. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents who report being treated by a pediatric provider and with valid responses to all questions.

The measure is produced by combining responses to questions 15, 16, 17, and 18:

- Q15: In the last 12 months, did you and this provider talk about whether you may need to change to a new provider who treats mostly adults?
- Q16: In the last 12 months, did this provider ask if you had any questions or concerns about changing to a new provider who treats mostly adults?
- Q17: In the last 12 months, did you and this provider talk about a specific plan for changing to a new provider who treats mostly adults?
- Q18: Did this provider give you this plan in writing?

DENOMINATOR STATEMENT

The target population of the survey is 16- or 17-year-old adolescents with a chronic health condition who are either (a) receiving health care services in a clinical program or (b) enrolled in a health plan or similar defined population.

The denominator for each measure is the number of respondents with valid responses for all of the questions in the measure.

DENOMINATOR DETAILS

SURVEY

The denominator for the survey is youth who meet the following criteria:

1. Either (a) receiving health care services in a particular clinical program or (b) enrolled in a health plan or similar defined population
2. Age 16 to 17 years old at the time of survey completion
3. At least 1 chronic health condition. In the case of a defined population (e.g., a health plan), tools such as the Pediatric Medical Complexity Algorithm (PMCA) can be used to identify eligible patients by chronic condition status.[1] The PMCA is a publicly available algorithm that uses International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9) diagnosis codes in health plan claims to identify children with either complex chronic disease (C-CD) or noncomplex chronic disease (NC-CD).
4. At least 1 outpatient visit with a health care provider in the preceding 12 months
5. For health plan sampling, current enrollment at the time of the survey and enrollment over the preceding 12 months (allowing <45 day gaps during that period, if present)

MEASURE SCORES

A valid response for each question is that entered by the respondent or assigned according to the decision rules outlined in Appendix L.

For Measure 1, the denominator is the number of respondents with valid responses to all of the questions within the measure (Questions 4-8).

For Measure 2, the denominator is the number of respondents with responses of “Yes” to Question 11 and valid responses to all of the questions within the measure (Question 10, 12, 13).

For Measure 3, the denominator is the number of respondents with responses of “Yes,” “Don’t know,” or left blank to Question 14 and valid responses to all of the questions within the measure (Question 15-18).

References:

1. Simon TD, Cawthon ML, Stanford S, Popalisky J, Lyons D, Woodcox P, Hood M, Chen AY, Mangione-Smith R, Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN) Medical Complexity Working Group. Pediatric medical complexity algorithm: a new method to stratify children by medical complexity. *Pediatrics*. 2014;133(6):e1647-1654. doi:10.1542/peds.2013-3875.

EXCLUSIONS

SURVEY SAMPLE

Exclude patients in the following categories from the ADAPT survey sample frame:

1. “No-publicity” patients (i.e., those who requested that they not be contacted)
2. Court/law enforcement patients
3. Patients with a foreign home address
4. Patients who cannot be surveyed because of local, state, or federal regulations

SURVEY RESPONSE

Exclude survey respondents based on the following clinical and non-clinical criteria:

1. Undeliverable survey, i.e., the survey is returned by US Mail as undeliverable. “Undeliverable” should not be assumed merely because of non-response.
2. The survey is returned with clear indication that the patient does not meet eligibility criteria (e.g., ineligible age or lack of a chronic health condition).

3. Patient unable to complete survey independently: This must be indicated by the appropriate checkbox in the cover letter or equivalent clear indication by the parent/guardian that the patient is unable to complete the survey independently (e.g., due to cognitive limitation).
4. Exclude all respondents who answered “None” to ADAPT question 3 (“In the last 12 months, how many times did you visit this provider?”).

EXCLUSION DETAILS

Court/law enforcement patients (i.e., prisoners) are excluded from the sample frame because of the logistical difficulties of administering the survey in a timely manner and regulations governing surveys of this population.

Patients with a foreign home address are excluded because of the logistical difficulty and added expense of calling or mailing outside of the United States. (The US territories—American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands—are not considered foreign addresses and are not excluded.)

Some state regulations place further restrictions on which patients may be contacted for surveys. It is the responsibility of the health plan, clinical program, or survey vendor to identify any applicable laws or regulations and to exclude those patients as required in the state in which the entity operates.

Note: Include patients in the sample frame unless there is positive evidence that they are ineligible or fall within an excluded category. If information is missing on any variable that affects survey eligibility when the sample frame is constructed, do not exclude the patient from the sample frame because of that variable.

RISK ADJUSTMENT

Statistical risk model

Case-mix adjustment:

One of the methodological issues associated with making comparisons across populations is the need to adjust appropriately for case-mix differences. Case-mix refers to patient characteristics, such as demographic characteristics and health status, which may affect measures of outcomes or processes. Systematic effects of this sort create the potential for a population’s scores to be higher or lower because of its characteristics, rather than because of the quality of care provided, making comparisons of unadjusted scores misleading. The basic goal of adjusting for case-mix is to estimate how different clinical programs or health plans would be rated if they all provided care to comparable groups of patients.

Case-mix adjustment using linear regression is used to adjust clinical program/health plan-level ADAPT measure scores based on patient characteristics, thus facilitating comparisons among clinical programs/health plans. We recommend adjusting for respondent age and self-reported health status.

The case-mix data are obtained from questions in the “About You” section of the survey: 1)

Respondent age: ADAPT Q19, and 2) Self-reported health status: ADAPT Q21

Detailed instructions regarding how to use the case-mix adjustment model can be found in Case-Mix Adjustment Methodology (Appendix B).

Provided in response box S.15a

STRATIFICATION

Stratification is not required. However, users of the survey may choose to stratify scores. In a defined population (e.g., a health plan), potential variables for stratification could include type of chronic health condition or diagnosis.

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

There are 3 domain-level measures included in the ADAPT survey. The calculation of measure scores is described below.

1) Counseling on Transition Self-Management:

This measure is produced by combining responses to 5 questions:

- Q4: In the last 12 months, did you talk with this provider without your parent or guardian in the room?
- Q5: In the last 12 months, did you and this provider talk about your being more in charge of your health?
- Q6: In the last 12 months, did you and this provider talk about your scheduling your own appointments with this provider instead of your parent or guardian?
- Q7: In the last 12 months, how often did you schedule your own appointments with this provider?
- Q8: In the last 12 months, did you and this provider talk about how your health insurance might change as you get older?

The 5 questions are scored as indicated in Figure 1 in Appendix A.

Response options for questions 4-6 and 8 are “Yes” or “No”:

- Assign a score of 0 for No
- Assign a score of 1 for Yes

Response options for question 7 are “Never,” “Sometimes,” “Usually,” or “Always”:

- Assign a score of 0 for Never
- Assign a score of 1 for Sometimes, Usually, or Always

Questions 6 and 7 are evaluated together as if they were a single question (Q67), the score of which is calculated as follows:

- Assign a score of 0 if Q6 = 0 AND Q7 = 0
- Assign a score of 1 if Q6 = 1 AND/OR Q7 = 1

The basic steps to calculate the measure score for a population are as follows:

- For each question, identify responses with non-missing values for that question
- For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure
- Calculate the numerator and denominator of the measure:
 - Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents
 - Denominator = the number of respondents with valid responses (i.e., non-missing values)

For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:

$$P = (Q4 + Q5 + Q67 + Q8)/4$$

$$\text{Measure score} = (\text{summation of values of P for N respondents}/N) * 100$$

Where N = the number of respondents with valid responses for P4, P5, P6, P7, and P8.

2) Counseling on prescription medication:

The measure is produced by combining responses to questions 10, 12, and 13:

- Q10: In the last 12 months, how often did you and this provider talk about all of your prescription medicines at each visit?
- Q12: In the last 12 months, did you and this provider talk about remembering to take your medicines?
- Q13: In the last 12 months, did you and this provider talk about you refilling your own prescriptions instead of your parent or guardian?

The 3 questions are scored as indicated in Figure 2 in Appendix A.

This measure score is calculated only for respondents who indicate on questions 9 (“in the last 12 months, did you take any prescription medicine?”) and 11 (“in the last 12 months, were you prescribed any medicine to take every day for at least a month?”) that they take prescription medication every day.

For each question, identify cases with non-missing values and for which the response for both question 9 and question 11 is “Yes”:

- Respondents who do not report taking prescription medicine every day (responses of “No” to either questions 9 or 11) are not included in the population for which this measure is calculated
- Response options for question 10 are “Never,” “Sometimes,” “Usually,” or “Always”

- Assign a score of 0 for Never
- Assign a score of 1 for Sometimes, Usually, or Always

Response options for questions 12 and 13 are “Yes” or “No”

- Assign a score of 0 for No
- Assign a score of 1 for Yes

The basic steps to calculate the measure score for a population are as follows:

- For each question, identify responses with non-missing values for that question
- For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure
- Calculate the numerator and denominator of the measure:
 - Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents
 - Denominator = the number of respondents with valid responses (i.e., non-missing values)

For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:

$$P = (Q10 + Q12 + Q13)/3$$

$$\text{Measure score} = (\text{summation of values of P for N respondents}/N) * 100$$

Where N = the number of respondents with valid responses for P10, P12, and P13.

3) Transfer planning:

The measure is produced by combining responses to questions 15, 16, 17, and 18:

- Q15: In the last 12 months, did you and this provider talk about whether you may need to change to a new provider who treats mostly adults?
- Q16: In the last 12 months, did this provider ask if you had any questions or concerns about changing to a new provider who treats mostly adults?
- Q17: In the last 12 months, did you and this provider talk about a specific plan for changing to a new provider who treats mostly adults?
- Q18: Did this provider give you this plan in writing?

Only respondents who answer “Yes” or “Don’t Know” to question 14 (“Does this provider treat mostly children and teens?”) are included in the population for which this measure is calculated.

The 4 questions are scored as indicated in Figure 3 in Appendix A.

For each question, identify cases with non-missing values and for which the response for question 14 is “Yes,” “Don’t know,” or left blank:

- Respondents who indicate the provider does not mostly treat children and teens (response of “No” to question 14) are not included in the population for which this measure is calculated

Response options for Questions 15-18 are “Yes” or “No.” Valid responses for questions 16, 17, and 18 are provided by the respondent or assigned according to the decisions rules outlined in Appendix L.

- Assign a score of 0 for No
- Assign a score of 1 for Yes

The basic steps to calculate the measure score for a population are as follows:

- For each question, identify responses with non-missing values for that question
- For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure
- Calculate the numerator and denominator of the measure:
- Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents
- Denominator = the number of respondents with valid responses (i.e. non-missing response OR assigned responses [see decision rules outlined in Appendix L])

For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:

$$P = (Q15 + Q16 + Q17 + Q18)/4$$

$$\text{Measure score} = (\text{summation of values of P for N respondents}/N) * 100$$

Where N = the number of respondents with valid responses for P15, P16, P17, and P18.

Available in attached appendix at A.1

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5.1 Identified measures: 0005 : CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: ADAPT was developed with similar principles to CG CAHPS. If administered following a health care visit for an

adolescent, the CG CAHPS survey is intended to be completed by parents of an adolescent as opposed to the adolescents themselves. However, both surveys target the outpatient care setting experience. The ADAPT survey complements the CG CAHPS survey well and has the potential to be administered concurrently, with both surveys mailed to the patient residence so that parents can complete the CG CAHPS survey and adolescents can complete the ADAPT survey.

5b.1 If competing, why superior or rationale for additive value:

2820 Pediatric Computed Tomography (CT) Radiation Dose

STATUS

Endorsed

STEWARD

University of California, San Francisco

DESCRIPTION

The measure requires hospitals and outpatient facilities that conduct Computed Tomography (CT) examinations in children to: 1. Review their CT radiation dose metrics, 2. calculate the distribution of the results, and 3. compare their results to benchmarks. This would then imply a fourth step to investigate instances where results exceed a trigger value for underlying cause, such as issues with protocol, tech, equipment, patient, etc.

It is important to review doses of radiation used for CT, as the doses are far higher than conventional radiographs (x-rays), the doses are in the same range known to be carcinogenic (Pearce, Lancet, 2012; Ozasa, Radiation Research, 2012), and the higher the doses, the greater the risk of subsequent cancer (Miglioretti, JAMA Pediatrics, 2013) Thus the goal of the measure is to provide a framework where facilities can easily assess their doses, compare them to benchmarks, and take corrective action to lower their doses if they exceed threshold values, as per specifications in benchmarks.

The measure calls for assessment of doses for the most frequently conducted CT examination types, and compare these doses to published benchmarks. The measure calls for the assessment of radiation doses within four anatomic areas (CT's of the head, chest, abdomen/pelvis and combined chest/abdomen/pelvis.) The measure provides a simple framework for how facilities can assess their dose, compare their doses to published benchmarks (Smith-Bindman, Radiology, 2015) and identify opportunities to improve if their doses are higher than the benchmarks. For example, If a hospital finds their doses are higher than published benchmarks, they can review the processes and procedures they use for performance of CT in children and take corrective action, and follow published guidelines for how to lower doses (such as "child sizing" the doses, reducing multiple phase scans, and reducing scan lengths).

Published benchmarks for radiation dose in children exist (Smith-Bindman, Radiology, 2015) and additional benchmarks are under development and will be published within the year by us. (Kumar, 2015) Other groups have also published benchmarks (Goeske) or in the process of doing so.

Our work and that of others have shown that institutional review of dose metrics as outlined in this measure results in a significant lowering of average and outlier doses. (Demb, 2015;

Greenwood, RadioGraphics, 2015; Miglioretti, JAMA Pediatrics, 2013; Keegan, JACR, 2104; Wilson, ARRS, 2015).

This measure is being proposed for diagnostic CT in children, but can also be used for CT in adults, and CT used in conjunction with radiation therapy for cancer. Whenever context the doses are used, the doses should be compared with appropriate benchmarks.

A similar measure (#0739) was previously endorsed by the NQF in 2011. The NQF did not provide ongoing endorsement when the measure was up for renewal in 2015, primarily because there was no evidence that assessing doses as called for in the measure would result in an improvement in outcomes (i.e. patient dose). Since that time, there has been additional research that has shown that assessing doses using the format outlined in the measure does indeed result in lower doses, and thus we are re-submitting a similar although updated measure.

Of note, the surrogate measure we are using for outcomes is radiation dose. The true outcome of interest is the number of cancers that result from imaging. Because of the lag time between exposure to radiation and cancer development (years to decades) it is not feasible to use cancer cases as the outcome of a quality improvement effort. Thus while there is ample evidence that radiation causes cancer (sited below), and evidenced that cancer risk is proportional to dose, there are no direct data that suggest that lowering doses lowers cancer risk. However, we have used mathematical modeling to try to understand the relationship between lowering doses and cancers and estimated that if the top quartile of doses were reduced in children (i.e. the very high doses are brought down the average doses), the number of cancer cases would be reduced by approximately 43%, the equivalent to preventing 4,350 cancer cases / year in the US among children (Miglioretti, JAMA Pediatrics 2013).

Cited in this section:

Demb J, manuscript under preparation. CT Radiation Dose Standardization Across the University of California Medical Centers Using Audits to Optimize Dose. 2015.

Following an in-person meeting regarding CT radiation dose, radiologists, technologists and medical physicists from University of California medical centers strategized how to best optimize dosing practices at their sites, which were then analyzed for effectiveness and success after implementation.

Greenwood T, Lopez-Costa R, Rhoades P, et al. CT Dose Optimization in Pediatric Radiology: A Multiyear Effort to Preserve the Benefits of Imaging While Reducing the Risks. RadioGraphics. Jan 2015;35(5):1539-1554

“This systematic approach involving education, streamlining access to magnetic resonance imaging and ultrasonography, auditing with comparison with benchmarks, applying modern CT technology, and revising CT protocols has led to a more than twofold reduction in CT radiation exposure between 2005 and 2012...” – Conclusion statement from Abstract

Keegan J, Miglioretti DL, Gould R, Donnelly LF, Wilson ND, Smith-Bindman R. Radiation Dose Metrics in CT: Assessing Dose Using the National Quality Forum CT Patient Safety Measure. Journal of the American College of Radiology: JACR; 11(3):309-315.

<http://download.journals.elsevierhealth.com/pdfs/journals/1546-1440/PIIS1546144013006625.pdf>. Mar 2014

Looking at dose metrics as per compliance with the previously endorsed #0739 NQF measure results in reasonably timed acquisition of CT doses, and seeing such doses resulted in 30-50% dose reduction.

Kumar K, manuscript under preparation. Radiation Dose Benchmarks in Children.

This paper will describe dose metrics among 29,000 children within age strata <1, 1-4 years, 5-9 years, 10-14 years, and 15-19 years. 2015.

Miglioretti D, Johnson E, Vanneman N, Smith-Bindman R, et al. Use of Computed Tomography and Associated Radiation Exposure and Leukemia Risk in Children and Young Adults across Seven Integrated Healthcare Systems from 1994 – 2010. JAMA Pediatrics Published online June 10, 2013 joi:10.1001/jamapediatrics2013311, 2013.

Radiation-induced cancers in children could be dramatically reduced if the highest quartile of CT radiation doses were lowered.

Miglioretti, YX Zhang, E Johnson, N Vanneman, R Smith-Bindman. Personalized Technologist Dose Audit Feedback for Reducing Patient Radiation Exposure from Computed Tomography. Journal of the American College of Radiology: JACR 2014.

“Personalized audit feedback and education can change technologists' attitudes about, and awareness of, radiation and can lower patient radiation exposure from CT imaging.” – Conclusion statement from Abstract

Ozasa K, Shimizu Y, Suyama A, et al. Studies of the mortality of atomic bomb survivors, Report 14, 1950-2003: an overview of cancer and noncancer diseases. Radiation Research; 177(3):229-243. Mar 2012

Fourteenth follow-up report on the lifetime health effects from radiation on atomic bomb survivor showing that: 58% of the 86,611 LSS cohort members with DS02 dose estimates have died, 17% more cancer deaths especially among those under age 10 at exposure (58% more deaths).

Pearce MS, Salotti JA, Little MP, et al. Radiation exposure from CT scans in childhood and subsequent risk of leukaemia and brain tumours: a retrospective cohort study. Lancet;380(9840):499-505. Aug 4 2012

“Use of CT scans in children to deliver cumulative doses of about 50 mGy might almost triple the risk of leukaemia and doses of about 60 mGy might triple the risk of brain cancer... although clinical benefits should outweigh the small absolute risks, radiation doses from CT scans ought to be kept as low as possible” – Conclusion statement from Abstract

Smith-Bindman R, Moghadassi M, Wilson N, et al. Radiation Doses in Consecutive CT Examinations from Five University of California Centers. Radiology 2015;277: 134–141

“These summary dose data provide a starting point for institutional evaluation of CT radiation doses.” – Conclusion statement from Abstract

Wilson N. CT Radiation Dose Standardization Across the Five University of California Medical Centers. ARRS: Annual Toronto Meeting presentation. April 19-24, 2015

Understanding the reasons for variation in commonly performed CT procedures, and figuring out how to standardize them.

TYPE

Intermediate Clinical Outcome

DATA SOURCE

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Imaging/Diagnostic Study, Electronic Clinical Data : Registry The data sources will include electronic CT images [captured from the CT console at the time of scanning or harvested from

the PACS (Picture Archiving Communication System) - the computerized systems for reviewing and storing imaging data], Radiology Information System, EPIC, printed CT images, or information stored in the medical record. Numerous other software products are now available for capturing these data (Bayer, GE, etc.) and several free ware programs are also available. Of note, the 2012 California law now requires the reporting of several of the dose metrics outlined in this measure in the patient medical record, and as a results, many software companies have provided techniques for collating these data.

No data collection instrument provided No data dictionary

LEVEL

Facility, Integrated Delivery System

SETTING

Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinician Office/Clinic, Hospital/Acute Care Facility, Imaging Facility, Ambulatory Care : Outpatient Rehabilitation, Ambulatory Care : Urgent Care

NUMERATOR STATEMENT

Radiation Dose metrics among consecutive patients, who have undergone CT of the head, chest, abdomen/pelvis, or chest/abdomen/pelvis. The metrics are 1) mean dose as measured using DLP, CTDIvol, and SSDE: within age strata. And 2) the proportion of exams with doses greater than the 75th percentile of the benchmark you are comparing with for the same anatomic area strata (Kumar, 2015; Smith-Bindman, Radiology, 2015; Goske, Radiology, 2013)

The CTDIvol and DLP are directly reported by the scanner using an “industry wide” standardized dose report (DICOM Radiation Dose Structured Report). The data should be assembled for the entire CT examination. If there are several series, the CTDIvol values should be averaged, and the DLP values should be added.

SSDE can be calculated using any dose monitoring software product, or using published multiplier coefficients which are highly valid.

These different metrics are highly correlated, but nonetheless reveal important differences regarding radiology practice and performance and are thus complimentary. However, if a practice only assesses data from a single metric, there is substantial opportunity for data-driven improvement.

CTDIvol reflects the average dose per small scan length. Modern CT scanners directly generate this.

DLP reflects the CTDIvol x scan length, and is directly generated by modern CT scanners.

SSDE is a modified measure of CTDIvol that takes into account the size of the patient scanned and is useful for scaling dose to patient size. Several current radiation tracking software tools directly report SSDE.

Cited in this section

Goske MJ, Strauss KJ, Coombs LP, et al. Diagnostic reference ranges for pediatric abdominal CT. Radiology. Jul 2013;268(1):208-218.

“Calculation of reference doses as a function of BW (body weight) for an individual practice provides a tool to help develop site-specific CT protocols that help manage pediatric patient radiation doses.” – Conclusion statement from Abstract

Kumar K, manuscript under preparation. Radiation Dose Benchmarks in Children.

This paper will describe dose metrics among 29,000 children within age strata <1, 1-4 years, 5-9 years, 10-14 years, and 15-19 years. 2015.

Smith-Bindman R, Moghadassi M, Wilson N, et al. Radiation Doses in Consecutive CT Examinations from Five University of California Centers. *Radiology* 2015;277: 134–141

“These summary dose data provide a starting point for institutional evaluation of CT radiation doses.” – Conclusion statement from Abstract

Smith-Bindman R, Miglioretti DL. CTDIvol, DLP, and Effective Dose are excellent measures for use in CT quality improvement. *Radiology*. Dec 2011;261(3):999; author reply 999-1000.

An explanation as to why these radiation dose metrics are useful in calculating a patient’s absorbed doses.

Huda W, Ogden KM, Khorasani MR. Converting dose-length product to effective dose at CT. *Radiology*. Sep 2008;248(3):995-1003.

“This article describes a method of providing CT users with a practical and reliable estimate of adult patient EDs by using the DLP displayed on the CT console at the end of any given examination.” – Conclusion statement from Abstract

NUMERATOR DETAILS

Radiation dose distribution for the three metrics (CTDIvol, DLP, and SSDE) need to be recorded for a consecutive sample of CT examinations within anatomic area and age stratum. The mean, median, and the percent of examinations above the published 75% percentile needs to be generated.

These data can be extracted from the CT examinations in several ways. These numbers can be written down directly from the CT scanner itself at the time of the examination; they can be written down from the PACS (computer terminal where images are reviewed and stored); or can be written down from the medical record if the facility stores these data as part of the medical record (all facilities in California due this based on statutory requirements.) The CT manufacturers have agreed (through MITA, Medical Imaging and Technology Alliance, the professional trade association of imaging manufacturers) to make these data electronically available through export from the CT machines to a local server), and these data can also be collected electronically. A growing number of companies are leveraging the standardized data format to systematically collect dose metrics directly from a facilities imaging infrastructure. This not only improves the accuracy of the data but also markedly reduces the costs of data collection. From the PACS, Radiology Information System, EPIC program if the data are exported there, or using any number of dose monitoring software programs allowing the collection and reporting of these dose data. The easiest way to collect these data is through one of the 6 or so commercial software programs developed for dose tracking, and several free-ware programs that enable directly extracting CT dose information from the PACS. We have published (Keegan, JACR 2014) several examples of techniques for dose extraction that can be completed even by a small facility.

The strata for this measure include:

Anatomic area strata: head, chest, abdomen/pelvis, Chest/abdomen/pelvis

Age strata: infant (<1); small child (1-5); medium child (>5 - 10); large child (>10-15) and adult (>15)

NOTE: The SSDE was developed as a metric for adjusting for size. However, it does not completely adjust for size and analysis within age strata are still needed among children to account for the different doses that are used and should be used for infants to obese children.

Cited in this section:

Keegan J, Miglioretti DL, Gould R, Donnelly LF, Wilson ND, Smith-Bindman R. Radiation Dose Metrics in CT: Assessing Dose Using the National Quality Forum CT Patient Safety Measure. Journal of the American College of Radiology: JACR; 11(3):309-315.

<http://download.journals.elsevierhealth.com/pdfs/journals/1546-1440/PIIS1546144013006625.pdf>. Mar 2014

Looking at dose metrics as per compliance with the previously endorsed #0739 NQF measure results in reasonably timed acquisition of CT doses, and seeing such doses resulted in 30-50% dose reduction.

DENOMINATOR STATEMENT

Consecutive sample of CTs conducted in the head, chest, abdomen/pelvis and chest/abdomen/pelvis. No examinations should be excluded

DENOMINATOR DETAILS

Consecutive sample of CTs conducted in the head, chest, abdomen/pelvis, chest/abdomen/pelvis

EXCLUSIONS

CT examinations conducted in anatomic areas not included above (such as CTs of the extremities or lumbar spine) or that combine several areas (head and chest) should not be included. In children, these four included categories will reflect approximately 80% of CT scans. Examinations performed as part of diagnostic procedures – such as biopsy procedures – should not be included. CT examinations performed as part of surgical planning or radiation therapy should not be included.

Examinations that are considered "limited abdomen" or "limited pelvis" studies should be included in the abdomen and pelvis category. Any examinations that include any parts of the abdomen and or pelvis should count in the abdomen/pelvis category.

EXCLUSION DETAILS

Most abdominal/pelvis CT scans in adult patients include scanning of the abdomen and pelvis as one contiguous area. If examinations are conducted limited to one region, these should also be included, as it is difficult/impossible to define what areas would be considered limited.

RISK ADJUSTMENT

No risk adjustment or risk stratification

N/A

Available in attached Excel or csv file at S.2b

STRATIFICATION

Anatomic area strata: head, chest, abdomen/pelvis, chest/abdomen/pelvis

These were chosen based on being the most common CT examination types conducted in the US, comprising >80% of all CT scans, and because dose varies by these groups.

Age strata: infant (<1); small child (1-5); medium child (>5 - 10); large child (>10-15) and adult (>15)

These patient age groups were chosen based on the variation of CT settings and resulting radiation dose based on patient size (and age is frequently used as a surrogate for size.) The ICRU (International Commission on Radiation Units and Measurements) uses these child size categories, they correspond to available phantoms, and they are the ones found to be most reliable

Geographic location where studies were done (zip code or state), to facilitate using the data to create geographically specific benchmarks

TYPE SCORE

ALGORITHM

N/A No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: N/A

Appendix F1: Related and Competing Measures (tabular format)

Several of the measures in this project were potentially related or competing with other NQF-endorsed measures that were not reviewed in this project. Because the measures were not in the same review cycle, the Committee did not discuss the related and competing measures as they were only directed to discuss measures within the current cycle. NQF encourages harmonization to the extent possible and will review related and competing issues in future work.

Comparison of NQF #2789 and NQF #0005

	2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care	0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child
Steward	Center of Excellence for Pediatric Quality Measurement	Agency for Healthcare Research and Quality
Description	<p>The Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care measures the quality of preparation for transition from pediatric-focused to adult-focused health care as reported in a survey completed by youth ages 16-17 years old with a chronic health condition. The ADAPT survey generates measures for each of the 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning.</p>	<p>The Consumer Assessment of Healthcare Providers and Systems Clinician & Group Survey (CG-CAHPS) is a standardized survey instrument that asks patients to report on their experiences with primary or specialty care received from providers and their staff in ambulatory care settings over the preceding 12 months.</p> <p>The survey includes standardized questionnaires for adults and children. All questionnaires can be used in both primary care and specialty care settings. The adult survey is administered to patients aged 18 and over. The child survey is administered to the parents or guardians of pediatric patients under the age of 18. Patients who have had at least one visit during the past 12-months are eligible to be surveyed.</p> <p>CG-CAHPS Survey Version 1.0 was endorsed by NQF in July 2007 (NQF #0005). The development of the survey is through the CAHPS consortium and sponsored by the Agency for Healthcare Research and Quality. The survey is part of the CAHPS family of patient experience surveys and is available in the public domain at https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html.</p> <p>The Adult CG-CAHPS Survey includes one global rating item and 39 items in which 13 items can be organized into three composite measures and one global item for the following categories of care or services provided in the medical office:</p> <ol style="list-style-type: none"> 1. Getting Timely Appointments, Care, and Information (5 items)

	2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care	0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child
		<p>2. How Well Providers Communicate With Patients (6 items)</p> <p>3. Helpful, Courteous, and Respectful Office Staff (2 items)</p> <p>4. Overall Rating of Provider (1 item)</p> <p>The Child CG-CAHPS Survey includes one global rating item and 54 items in which 24 items can be organized into five composite measures and one global item for the following categories of care or services provided in the medical office,:</p> <p>1. Getting Timely Appointments, Care, and Information (5 items)</p> <p>2. How Well Providers Communicate With Patients (6 items)</p> <p>3. Helpful, Courteous, and Respectful Office Staff (2 items)</p> <p>4. Overall Rating of Provider (1 item)</p> <p>5. Provider's Attention to Child's Growth and Development (6 items)</p> <p>6. Provider's Advice on Keeping Your Child Safe and Healthy (5 items)</p>
Type	PRO	PRO
Data Source	<p>Patient Reported Data/Survey Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care Survey.</p> <p>The ADAPT survey is available in English and Spanish. The recommended mode of administration is by mail. For a detailed explanation of survey administration modes, see S.21 – Survey/Patient Reported Data.</p> <p>Available in attached appendix at A.1 Attachment ADAPT_Data_Dictionary.xlsx</p>	<p>Patient Reported Data/Survey CAHPS Clinician & Group, Adult Survey 2.0</p> <p>CAHPS Clinician & Group, Child Survey 2.0</p> <p>Available in English and Spanish at https://cahps.ahrq.gov/surveys-guidance/cg/instructions/surveysummary.html</p> <p>Available at measure-specific web page URL identified in S.1 Attachment CG_CAHPS_Main_Supplementary_Tables_5-05-14.xlsx</p>
Level	Facility, Clinician : Group/Practice, Health Plan	Clinician : Group/Practice, Clinician : Individual
Setting	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	The ADAPT survey consists of 26 questions assessing the quality of health care transition preparation for youth with chronic health conditions, based on youth report of whether specific recommended processes of care were received. The ADAPT survey generates measures for each	<p>We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they “always” received the desired care or service for a given measure.</p> <p>The top box numerator for the Overall Rating of Provider is the</p>

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	<p>of 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning. ADAPT measure scores are calculated using the sum of the proportions of positive responses to between 3 and 5 individual items. Complete instructions for measure score calculations are provided in the Detailed Measure Specifications (Appendix A).</p> <p>1) Counseling on Transition Self-Management: The numerator is the sum of the proportions of positive responses to the five questions about counseling on transition self-management, among respondents with valid responses to all questions.</p> <p>2) Counseling on prescription medication: The numerator is the sum of the proportions of positive responses to the three questions about counseling on prescription medication, among respondents who indicate that they take prescription medication every day and with valid responses to all questions.</p> <p>3) Transfer planning: The numerator is the sum of the proportions of positive responses to the four questions about transfer planning, among respondents who report being treated by a pediatric provider and with valid responses to all questions.</p>	<p>number of respondents who answered 9 or 10 for the item, with 10 indicating “Best provider possible”.</p> <p>For more information on the calculation of reporting measures, see How to Report Results of the CAHPS Clinician & Group Survey, available at https://cahps.ahrq.gov/surveys-guidance/cg/cgkit/HowtoReportResultsofCGCAHPS080610FINAL.pdf.</p>
Numerator Details	<p>ADAPT measure scores are calculated using the sum of the proportions of positive responses to between 3 and 5 individual items. Complete instructions for measure score calculations are provided in the Detailed Measure Specifications (Appendix A).</p> <p>MEASURE 1. Counseling on Transition Self-Management: For any individual respondent, the numerator is the number of positive responses to the five questions about counseling on transition self-management divided by five. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents</p>	<p>For each individual item, the top box numerator is the number of respondents who answered “Always” (the most positive response) for the item.</p> <p>There are two basic steps to calculating a composite score for a practice site:</p> <ol style="list-style-type: none"> 1. Calculate the proportion of patient responses in the top box or most positive response category for each item in a composite. 2. Calculate the mean top-box proportions across all items in a composite to determine the composite’s top box score. <p>Step 1 – Calculate the proportion of cases in the top box or most positive response for each item in a composite</p>

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	<p>with valid responses to all questions.</p> <p>This measure is produced by combining responses to questions 4-8:</p> <ul style="list-style-type: none"> • Q4: In the last 12 months, did you talk with this provider without your parent or guardian in the room? • Q5: In the last 12 months, did you and this provider talk about your being more in charge of your health? • Q6: In the last 12 months, did you and this provider talk about your scheduling your own appointments with this provider instead of your parent or guardian? • Q7: In the last 12 months, how often did you schedule your own appointments with this provider? • Q8: In the last 12 months, did you and this provider talk about how your health insurance might change as you get older? <p>MEASURE 2. Counseling on prescription medication:</p> <p>For any individual respondent, the numerator is the number of positive responses to the three questions about counseling on prescription medication divided by three. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents who indicate that they take prescription medication every day and with valid responses to all questions.</p> <p>The measure is produced by combining responses to questions 10, 12, and 13:</p> <ul style="list-style-type: none"> • Q10: In the last 12 months, how often did you and this provider talk about all of your prescription medicines at each visit? • Q12: In the last 12 months, did you and this provider talk about remembering to take your medicines? • Q13: In the last 12 months, did you and this provider talk about you refilling your own prescriptions instead of your parent or guardian? <p>MEASURE 3. Transfer planning:</p>	<p>Example: Applying the Proportional Scoring Method to the composite “Helpful, Courteous, and Respectful Office Staff”:</p> <p>Step 1 – Calculate the proportion of cases in the top box or most positive response for each item in a composite</p> <p>Example: Items in “Helpful, Courteous, and Respectful Office Staff” (2 items) have four response options: Never, Sometimes, Usually, Always. The top box percentage for each item in the composite is the proportion of respondents who answered “Always.”</p> <p>Item #1 “Clerks and receptionists at this provider’s office were as helpful as you thought they should be.” = Proportion of respondents who answered “Always” = 80%</p> <p>Item #2 “Clerks and receptionists at the provider’s office treat you with courtesy and respect.” = Proportion of respondents who answered “Always” = 90%</p> <p>Step 2 – Average the top box item scores to form the overall composite top box score</p> <p>Calculate the average top box score across the items in the composite. In the above example, the calculation would be as follows:</p> <p>Top box score for “Helpful, Courteous, and Respectful Office Staff” = $(\text{Item1} * \text{Item2}) / 2 = (80\% + 90\%) / 2 = 85\%$</p>

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	<p>For any individual respondent, the numerator is the number of positive responses to the four questions about transfer planning divided by four. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents who report being treated by a pediatric provider and with valid responses to all questions.</p> <p>The measure is produced by combining responses to questions 15, 16, 17, and 18:</p> <ul style="list-style-type: none"> • Q15: In the last 12 months, did you and this provider talk about whether you may need to change to a new provider who treats mostly adults? • Q16: In the last 12 months, did this provider ask if you had any questions or concerns about changing to a new provider who treats mostly adults? • Q17: In the last 12 months, did you and this provider talk about a specific plan for changing to a new provider who treats mostly adults? • Q18: Did this provider give you this plan in writing? 	
Denominator Statement	<p>The target population of the survey is 16- or 17-year-old adolescents with a chronic health condition who are either (a) receiving health care services in a clinical program or (b) enrolled in a health plan or similar defined population.</p> <p>The denominator for each measure is the number of respondents with valid responses for all of the questions in the measure.</p>	<p>The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.</p> <p>For more information on the calculation of reporting measures, see How to Report Results of the CAHPS Clinician & Group Survey, available at https://cahps.ahrq.gov/surveys-guidance/cg/cgkit/HowtoReportResultsofCGCAHPS080610FINAL.pdf.</p>
Denominator Details	<p>SURVEY</p> <p>The denominator for the survey is youth who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Either (a) receiving health care services in a particular clinical program or (b) enrolled in a health plan or similar defined population 	<p>For each item in a composite and the provider rating item, the top box denominator is the number of respondents who answered the item per aggregate-level entity (e.g., a physician or practice site). For each composite score, the denominator is the number of respondents who answer at least one item within the composite. Composite scores are the average proportion of respondents who</p>

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	<p>2. Age 16 to 17 years old at the time of survey completion</p> <p>3. At least 1 chronic health condition. In the case of a defined population (e.g., a health plan), tools such as the Pediatric Medical Complexity Algorithm (PMCA) can be used to identify eligible patients by chronic condition status.[1] The PMCA is a publicly available algorithm that uses International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9) diagnosis codes in health plan claims to identify children with either complex chronic disease (C-CD) or noncomplex chronic disease (NC-CD).</p> <p>4. At least 1 outpatient visit with a health care provider in the preceding 12 months</p> <p>5. For health plan sampling, current enrollment at the time of the survey and enrollment over the preceding 12 months (allowing <45 day gaps during that period, if present)</p> <p>MEASURE SCORES</p> <p>A valid response for each question is that entered by the respondent or assigned according to the decision rules outlined in Appendix L.</p> <p>For Measure 1, the denominator is the number of respondents with valid responses to all of the questions within the measure (Questions 4-8).</p> <p>For Measure 2, the denominator is the number of respondents with responses of “Yes” to Question 11 and valid responses to all of the questions within the measure (Question 10, 12, 13).</p> <p>For Measure 3, the denominator is the number of respondents with responses of “Yes,” “Don’t know,” or left blank to Question 14 and valid responses to all of the questions within the measure (Question 15-18).</p> <p>References:</p> <p>1. Simon TD, Cawthon ML, Stanford S, Popalisky J, Lyons D,</p>	<p>gave the highest rating across the items in the composite (as discussed in S.6).</p>

	2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care	0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child
	Woodcox P, Hood M, Chen AY, Mangione-Smith R, Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN) Medical Complexity Working Group. Pediatric medical complexity algorithm: a new method to stratify children by medical complexity. Pediatrics. 2014;133(6):e1647-1654. doi:10.1542/peds.2013-3875.	
Exclusions	<p>SURVEY SAMPLE</p> <p>Exclude patients in the following categories from the ADAPT survey sample frame:</p> <ol style="list-style-type: none"> 1. “No-publicity” patients (i.e., those who requested that they not be contacted) 2. Court/law enforcement patients 3. Patients with a foreign home address 4. Patients who cannot be surveyed because of local, state, or federal regulations <p>SURVEY RESPONSE</p> <p>Exclude survey respondents based on the following clinical and non-clinical criteria:</p> <ol style="list-style-type: none"> 1. Undeliverable survey, i.e., the survey is returned by US Mail as undeliverable. “Undeliverable” should not be assumed merely because of non-response. 2. The survey is returned with clear indication that the patient does not meet eligibility criteria (e.g., ineligible age or lack of a chronic health condition). 3. Patient unable to complete survey independently: This must be indicated by the appropriate checkbox in the cover letter or equivalent clear indication by the parent/guardian that the patient is unable to complete the survey independently (e.g., due to cognitive limitation). 4. Exclude all respondents who answered “None” to ADAPT question 3 (“In the last 12 months, how many times did you visit this provider?”). 	<p>The following are excluded when constructing the sampling frame:</p> <ul style="list-style-type: none"> • Patients that had another member of their household already sampled. • Patients who are institutionalized (put in the care of a specialized institution) or deceased.
Exclusion Details	Court/law enforcement patients (i.e., prisoners) are	The following should be excluded from the denominator:

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	<p>excluded from the sample frame because of the logistical difficulties of administering the survey in a timely manner and regulations governing surveys of this population.</p> <p>Patients with a foreign home address are excluded because of the logistical difficulty and added expense of calling or mailing outside of the United States. (The US territories—American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands—are not considered foreign addresses and are not excluded.)</p> <p>Some state regulations place further restrictions on which patients may be contacted for surveys. It is the responsibility of the health plan, clinical program, or survey vendor to identify any applicable laws or regulations and to exclude those patients as required in the state in which the entity operates.</p> <p>Note: Include patients in the sample frame unless there is positive evidence that they are ineligible or fall within an excluded category. If information is missing on any variable that affects survey eligibility when the sample frame is constructed, do not exclude the patient from the sample frame because of that variable.</p>	<p>1) Survey users and vendors should exclude surveys where the respondent reports he or she has not visited the sampled entity (e.g., a physician or practice site). This might be indicated by a “no” response to Question 1 (e.g., “Our records show that you got care from the provider named below in the last 12 months. Is that right?”).</p> <p>2) Individuals from a household that has already been sampled.</p> <p>3) Respondents who did NOT answer at least one item of the measure are NOT included in the denominator.</p> <p>Some users also exclude a survey from scoring and analysis if someone else answered the questions (as a proxy) for the respondent. (Question #34 on Adult survey.)</p> <p>Survey code specifications --- including how to code an appropriately skipped item, multiple marks or blank items --- can be found in the Instructions for Analyzing Data available at https://cahps.ahrq.gov/surveys-guidance/docs/2015_instructions_for_analyzing_data.pdf.</p>
Risk Adjustment	<p>Statistical risk model</p> <p>Case-mix adjustment:</p> <p>One of the methodological issues associated with making comparisons across populations is the need to adjust appropriately for case-mix differences. Case-mix refers to patient characteristics, such as demographic characteristics and health status, which may affect measures of outcomes or processes. Systematic effects of this sort create the potential for a population’s scores to be higher or lower because of its characteristics, rather than because of the quality of care provided, making comparisons of unadjusted scores misleading. The basic goal of adjusting for case-mix is to estimate how different clinical programs or health plans would be rated if they all provided care to</p>	<p>Statistical risk model</p> <p>Case-mix adjustment is done via linear regression. The CAHPS consortium recommends self-reported overall health, age, and education as adjusters. CG-CAHPS Version 2.0 has introduced a new measure, self-reported overall mental and emotional health that can be used for case-mix adjustment. These items are printed in the “About You” section of the survey.</p> <p>Items Recommended for Case-Mix Adjustment</p> <p>In general, how would you rate your overall health?</p> <p>1=Excellent 2=Very good 3=Good 4=Fair</p>

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	<p>comparable groups of patients.</p> <p>Case-mix adjustment using linear regression is used to adjust clinical program/health plan-level ADAPT measure scores based on patient characteristics, thus facilitating comparisons among clinical programs/health plans. We recommend adjusting for respondent age and self-reported health status.</p> <p>The case-mix data are obtained from questions in the “About You” section of the survey: 1) Respondent age: ADAPT Q19, and 2) Self-reported health status: ADAPT Q21</p> <p>Detailed instructions regarding how to use the case-mix adjustment model can be found in Case-Mix Adjustment Methodology (Appendix B).</p> <p>Provided in response box S.15a</p>	<p>5=Poor</p> <p>What is your age?</p> <p>1=18 to 24 years</p> <p>2=25 to 34 years</p> <p>3=35 to 44 years</p> <p>4=45 to 54 years</p> <p>5=55 to 64 years</p> <p>6=65 to 74 years</p> <p>7=75 years or older</p> <p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less</p> <p>2=Some high school, but did not graduate</p> <p>3=High school graduate or GED</p> <p>4=Some college or 2-year degree</p> <p>5=4-year college graduate</p> <p>6=More than 4-year college degree</p> <p>The case-mix adjustment uses a regression methodology, also called covariance adjustment. If data are missing for an adjuster variable, the program either (at the option of the user) deletes the case or imputes the entity mean for that variable. The latter procedure avoids losing observations because of missing data; it is acceptable in this setting because, typically, both the size of the adjustment and the amount of missing data on adjusters are small.</p> <p>Available in attached Excel or csv file at S.2b</p>
Stratification	<p>Stratification is not required. However, users of the survey may choose to stratify scores. In a defined population (e.g., a health plan), potential variables for stratification could include type of chronic health condition or diagnosis.</p>	<p>If survey users want to combine data for reporting from different sampling strata, they will need to create a text file that identifies the strata and indicates which ones are being combined and the identifier of the entity obtained by combining them.</p> <p>See pages 18-19 of the Instructions for Analyzing Data available at https://cahps.ahrq.gov/surveys-guidance/docs/2015_instructions_for_analyzing_data.pdf.</p>

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Type Score	Rate/proportion better quality = higher score	Other (specify): 1.) Top-box score; 2) case-mix adjusted score better quality = higher score
Algorithm	<p>There are 3 domain-level measures included in the ADAPT survey. The calculation of measure scores is described below.</p> <p>1) Counseling on Transition Self-Management: This measure is produced by combining responses to 5 questions:</p> <ul style="list-style-type: none"> • Q4: In the last 12 months, did you talk with this provider without your parent or guardian in the room? • Q5: In the last 12 months, did you and this provider talk about your being more in charge of your health? • Q6: In the last 12 months, did you and this provider talk about your scheduling your own appointments with this provider instead of your parent or guardian? • Q7: In the last 12 months, how often did you schedule your own appointments with this provider? • Q8: In the last 12 months, did you and this provider talk about how your health insurance might change as you get older? <p>The 5 questions are scored as indicated in Figure 1 in Appendix A.</p> <p>Response options for questions 4-6 and 8 are “Yes” or “No”:</p> <ul style="list-style-type: none"> • Assign a score of 0 for No • Assign a score of 1 for Yes <p>Response options for question 7 are “Never,” “Sometimes,” “Usually,” or “Always”:</p> <ul style="list-style-type: none"> • Assign a score of 0 for Never • Assign a score of 1 for Sometimes, Usually, or Always <p>Questions 6 and 7 are evaluated together as if they were a single question (Q67), the score of which is calculated as follows:</p>	<p>Top Box Score Calculation:</p> <ol style="list-style-type: none"> 1) Target Population: Patients that had at least one visit during the past 12-months 2) Exclusions = Patients who did not answer at least one item of the composite measures or rating item. 3) Screener items. Example: Patients who answered “No” to the first item indicating that they did not receive care from the provider entity in the last 12 months 4) Top-box scores (percent with highest rating) are computed for each item 5) Top-box scores are averaged across the items within each composite, weighting each item equally. <p>Case-mix Adjusted Scores:</p> <p>The steps for user-defined calculations of risk-adjusted scores can be found in Instructions for Analyzing Data from CAHPS® Surveys: Using the CAHPS Analysis Program Version 4.1 available at https://cahps.ahrq.gov/surveys-guidance/docs/2015_instructions_for_analyzing_data.pdf No diagram provided</p>

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	<ul style="list-style-type: none"> • Assign a score of 0 if Q6 = 0 AND Q7 = 0 • Assign a score of 1 if Q6 = 1 AND/OR Q7 = 1 <p>The basic steps to calculate the measure score for a population are as follows:</p> <ul style="list-style-type: none"> • For each question, identify responses with non-missing values for that question • For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure • Calculate the numerator and denominator of the measure: • Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents • Denominator = the number of respondents with valid responses (i.e., non-missing values) <p>For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:</p> $P = (Q4 + Q5 + Q67 + Q8)/4$ <p>Measure score = (summation of values of P for N respondents/N)*100</p> <p>Where N = the number of respondents with valid responses for P4, P5, P6, P7, and P8.</p> <p>2) Counseling on prescription medication:</p> <p>The measure is produced by combining responses to questions 10, 12, and 13:</p> <ul style="list-style-type: none"> • Q10: In the last 12 months, how often did you and this provider talk about all of your prescription medicines at each visit? • Q12: In the last 12 months, did you and this provider talk about remembering to take your medicines? 	

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	<ul style="list-style-type: none"> • Q13: In the last 12 months, did you and this provider talk about you refilling your own prescriptions instead of your parent or guardian? <p>The 3 questions are scored as indicated in Figure 2 in Appendix A.</p> <p>This measure score is calculated only for respondents who indicate on questions 9 (“in the last 12 months, did you take any prescription medicine?”) and 11 (“in the last 12 months, were you prescribed any medicine to take every day for at least a month?”) that they take prescription medication every day.</p> <p>For each question, identify cases with non-missing values and for which the response for both question 9 and question 11 is “Yes”:</p> <ul style="list-style-type: none"> • Respondents who do not report taking prescription medicine every day (responses of “No” to either questions 9 or 11) are not included in the population for which this measure is calculated <p>Response options for question 10 are “Never,” “Sometimes,” “Usually,” or “Always”</p> <ul style="list-style-type: none"> • Assign a score of 0 for Never • Assign a score of 1 for Sometimes, Usually, or Always <p>Response options for questions 12 and 13 are “Yes” or “No”</p> <ul style="list-style-type: none"> • Assign a score of 0 for No • Assign a score of 1 for Yes <p>The basic steps to calculate the measure score for a population are as follows:</p> <ul style="list-style-type: none"> • For each question, identify responses with non-missing values for that question • For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure • Calculate the numerator and denominator of the 	

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	<p>measure:</p> <ul style="list-style-type: none"> • Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents • Denominator = the number of respondents with valid responses (i.e., non-missing values) <p>For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:</p> $P = (Q10 + Q12 + Q13)/3$ <p>Measure score = (summation of values of P for N respondents/N)*100</p> <p>Where N = the number of respondents with valid responses for P10, P12, and P13.</p> <p>3) Transfer planning:</p> <p>The measure is produced by combining responses to questions 15, 16, 17, and 18:</p> <ul style="list-style-type: none"> • Q15: In the last 12 months, did you and this provider talk about whether you may need to change to a new provider who treats mostly adults? • Q16: In the last 12 months, did this provider ask if you had any questions or concerns about changing to a new provider who treats mostly adults? • Q17: In the last 12 months, did you and this provider talk about a specific plan for changing to a new provider who treats mostly adults? • Q18: Did this provider give you this plan in writing? <p>Only respondents who answer “Yes” or “Don’t Know” to question 14 (“Does this provider treat mostly children and teens?”) are included in the population for which this measure is calculated.</p> <p>The 4 questions are scored as indicated in Figure 3 in Appendix A.</p>	

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	<p>For each question, identify cases with non-missing values and for which the response for question 14 is “Yes,” “Don’t know,” or left blank:</p> <ul style="list-style-type: none"> • Respondents who indicate the provider does not mostly treat children and teens (response of “No” to question 14) are not included in the population for which this measure is calculated <p>Response options for Questions 15-18 are “Yes” or “No.” Valid responses for questions 16, 17, and 18 are provided by the respondent or assigned according to the decisions rules outlined in Appendix L.</p> <ul style="list-style-type: none"> • Assign a score of 0 for No • Assign a score of 1 for Yes <p>The basic steps to calculate the measure score for a population are as follows:</p> <ul style="list-style-type: none"> • For each question, identify responses with non-missing values for that question • For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure • Calculate the numerator and denominator of the measure: • Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents • Denominator = the number of respondents with valid responses (i.e. non-missing response OR assigned responses [see decision rules outlined in Appendix L]) <p>For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:</p> <p>$P = (Q15 + Q16 + Q17 + Q18)/4$</p> <p>Measure score = (summation of values of P for N</p>	

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	<p>respondents/N)*100</p> <p>Where N = the number of respondents with valid responses for P15, P16, P17, and P18. Available in attached appendix at A.1</p>	
Submission items	<p>5.1 Identified measures: 0005 : CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: ADAPT was developed with similar principles to CG CAHPS. If administered following a health care visit for an adolescent, the CG CAHPS survey is intended to be completed by parents of an adolescent as opposed to the adolescents themselves. However, both surveys target the outpatient care setting experience. The ADAPT survey complements the CG CAHPS survey well and has the potential to be administered concurrently, with both surveys mailed to the patient residence so that parents can complete the CG CAHPS survey and adolescents can complete the ADAPT survey.</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: Not applicable.</p> <p>5b.1 If competing, why superior or rationale for additive value: Not Applicable.</p>

Comparison of NQF #2800, NQF #1932, and NQF #2337

	2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics	1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)	2337: Antipsychotic Use in Children Under 5 Years Old
Steward	National Committee on Quality Assurance	National Committee for Quality Assurance	Pharmacy Quality Alliance (PQA, Inc.)
Description	The percentage of children and adolescents 1–17 years of age who had two or more antipsychotic prescriptions and had metabolic testing.	The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.	The percentage of children under age 5 who were dispensed antipsychotic medications during the measurement period.
Type	Process	Process	Process
Data Source	Administrative claims This measure is part of the Healthcare Effectiveness Data and Information Set (HEDIS). As part of HEDIS, this measure pulls from administrative claims collected in the course of providing care to health plan members. NCQA collects the HEDIS data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system. This measure has also been tested at the state level and could be reported by states if added to a relevant program. No data collection instrument provided Attachment XXXX_APM_Value_Sets.xlsx	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Pharmacy Not applicable. Attachment	Administrative claims Health plan (e.g., Medicaid, other) enrollment data Health plan (e.g., Medicaid, other) prescription claims data No data collection instrument provided No data dictionary
Level	Health Plan, Integrated Delivery System, Population : State	Health Plan, Integrated Delivery System, Population : State	Health Plan, Population : State
Setting	Ambulatory Care : Clinician Office/Clinic, Laboratory, Behavioral Health/Psychiatric : Outpatient	Ambulatory Care : Clinician Office/Clinic, Other Any outpatient setting represented with Medicaid claims data	Other Health plan
Numerator Statement	Children and adolescents who received glucose and cholesterol tests during the measurement year.	One or more glucose or HbA1c tests performed during the measurement year.	The number of patients under 5 years of age with one or more prescription claims for an antipsychotic medication with days

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			supply that total greater than or equal to 30 days.
Numerator Details	Children and adolescents who received at least one test for blood glucose (Glucose Tests Value Set) or HbA1c (HbA1c Tests Value Set) and at least one test for LDL-C (LDL-C Tests Value Set) or cholesterol (Cholesterol Tests Other Than LDL Value Set) during the measurement year (January 1 – December 31). See attachment for all value sets (S.2b).	A glucose test (Glucose Tests Value Set) or an HbA1c test (HbA1c Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data. See corresponding Excel document for the Glucose Tests Value Set and the HbA1c Tests Value Set.	Numerator Step 1: Of those included in the denominator, count the number of patients with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days. Step 2: Of those identified in Step 1, include only those patients for whom a prescription claim for an antipsychotic medication was generated when the patient was under the age of 5. The number of patients remaining after completing Step 2 represents the numerator for this measure. Antipsychotic Medications for this measure include: aripiprazole, asenapine, chlorpromazine, clozapine, fluphenazine, haloperidol, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, perphenazine, pimozide, quetiapine, risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone. (Note: Includes combination products that contain any of the above-listed medications. The active ingredients are limited to oral, sublingual, injectable, and intramuscular formulations only.)
Denominator Statement	Children and adolescents who had ongoing use of antipsychotic medication (at least two prescriptions).	Patients ages 18 to 64 years of age as of the end of the measurement year (e.g., December 31) with a schizophrenia or bipolar disorder diagnosis and who were prescribed an antipsychotic medication.	Children who are less than 5 years old at any point during the measurement period, and also enrolled in a health plan for one month or longer during the measurement period.

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Denominator Details	<p>Children and adolescents age 1-17 as of December 31 of the measurement year (January 1 – December 31) who had at least two antipsychotic medication dispensing events (Table APM-A) of the same or different medications, on different dates of service during the measurement year.</p> <p>Table APM-A: Antipsychotic Medications</p> <p>First-generation antipsychotic medications: Chlorpromazine HCL; Fluphenazine HCL; Fluphenazine decanoate; Fluphenazine enanthate; Haloperidol; Haloperidol decanoate; Haloperidol lactate; Loxapine HCL; Loxapine succinate; Molindone HCL; Perphenazine; Pimozide; Promazine HCL; Thioridazine HCL; Thiothixene; Thiothixene HCL; Trifluoperazine HCL; Triflupromazine HCL</p> <p>Second-generation antipsychotic medications: Aripiprazole; Asenapine; Clozapine; Iloperidone; Lurasidone; Olanzapine; Olanzapine pamoate; Paliperidone; Paliperidone palmitate; Quetiapine fumarate; Risperidone; Risperidone microspheres; Ziprasidone HCL; Ziprasidone mesylate</p> <p>Combinations: Olanzapine-fluoxetine HCL (Symbyax); Perphenazine-amitriptyline HCL (Etrafon, Triavil [various])</p>	<p>Follow the steps below to identify the eligible population.</p> <p>Step 1: Identify patients with schizophrenia or bipolar disorder as those who met at least one of the following criteria during the measurement year:</p> <p>At least one acute inpatient encounter, with any diagnosis of schizophrenia or bipolar disorder. Any of the following code combinations meet criteria:</p> <ul style="list-style-type: none"> – BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set. – BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set. – BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Schizophrenia Value Set. – BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Bipolar Disorder Value Set. <p>At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:</p> <ul style="list-style-type: none"> – BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set. – BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Schizophrenia Value Set. – ED Value Set with Schizophrenia Value Set. 	<p>The denominator includes all patients who were under 5 years of age at any time during the measurement period, and also enrolled in a health plan for one month or longer during the measurement period.</p> <p>Denominator Calculation:</p> <p>Step 1: Identify patients that are less than 5 years of age at any point during the measurement period.</p> <p>Step 2: Of those patients identified in Step 1, only include those patients that were enrolled in a health plan for one month or longer during the measurement period.</p> <p>The number of patients identified in Step 2 is the denominator for the measure.</p>

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		<ul style="list-style-type: none"> – BH ED Value Set with BH ED POS Value Set and Schizophrenia Value Set. – BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set. – BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set and Schizophrenia Value Set. <p>At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of bipolar disorder. Any two of the following code combinations meet criteria:</p> <ul style="list-style-type: none"> – BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set. – BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Bipolar Disorder Value Set. – ED Value Set with Bipolar Disorder Value Set. – BH ED Value Set with BH ED POS Value Set and Bipolar Disorder Value Set. – BH Stand Alone Nonacute Inpatient Value Set with Bipolar Disorder Value Set. – BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set and Bipolar Disorder Value Set. <p>(See corresponding Excel document for the above value sets)</p>	
Exclusions	No exclusions	Exclude patients with diabetes during the measurement year or the year prior to the measurement year.	None.

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		Exclude patients who had no antipsychotic medications dispensed during the measurement year.	
Exclusion Details	N/A	<p>Patients are excluded from the denominator if they have diabetes (during the measurement year or the year prior to the measurement year). There are two ways to identify patients with diabetes: 1) pharmacy data or 2) claim/encounter data. Both methods should be used to identify patients with diabetes, but a patient only needs to be identified by one method to be excluded from the measure.</p> <p>Pharmacy data: Patients who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to the measurement year on an ambulatory basis (Table CDC-A).</p> <p>Claim/encounter data: Patients who met at any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years).</p> <ul style="list-style-type: none"> - At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters. - At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis 	None.

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		<p>of diabetes (Diabetes Value Set).</p> <p>---</p> <p>Exclude patients who had no antipsychotic medications dispensed during the measurement year. There are two ways to identify dispensing events: by claim/encounter data and by pharmacy data. The organization must use both methods to identify dispensing events, but an event need only be identified by one method to be counted.</p> <p>– Claim/encounter data. An antipsychotic medication (Long-Acting Injections Value Set).</p> <p>– Pharmacy data. Dispensed an antipsychotic medication (Table SSD-D) on an ambulatory basis.</p> <p>Prescriptions to identify individuals with diabetes (CDC-A):</p> <p>Alpha-glucosidase inhibitors: acarbose, miglitol</p> <p>Amylin analogs: pramlinitide</p> <p>Antidiabetic combinations: Alogliptin-metformin, Alogliptin-pioglitazone, glimepiride-pioglitazone, glimepiride-rosiglitazone, glipizide-metformin, glyburide-metformin, Linagliptin-metformin, metformin-pioglitazone, Metformin-repaglinide, metformin-rosiglitazone, Metformin-saxagliptin, metformin-sitagliptin, Saxagliptin, Sitagliptin-simvastatin</p> <p>Insulin: insulin aspart, insulin aspart-insulin aspart protamine, insulin detemir, insulin</p>	

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		<p>glargine, insulin glulisine, insulin isophane human, insulin isophane-insulin regular, insulin lispro, insulin lispro-insulin lispro protamine, insulin regular human</p> <p>Meglitinides: nateglinide, repaglinide</p> <p>Glucagon-like peptide-1 (GLP1) agonists: Exenatide, Liraglutide, Albiglutide</p> <p>Sodium glucose cotransporter 2 (SGLT2) inhibitor: Canagliflozin, Dapagliflozin</p> <p>Sulfonylureas: chlorpropamide, glimepiride, glipizide, glyburide</p> <p>tolazamide, tolbutamide</p> <p>Thiazolidinediones: pioglitazone, rosiglitazone</p> <p>Dipeptidyl peptidase-4 (DDP-4) inhibitors: Alogliptin, Linagliptin, Saxagliptin, Sitagliptin</p> <p>ANTIPSYCHOTIC MEDICATIONS (Table SSD-D)</p> <p>Miscellaneous antipsychotic agents: Aripiprazole, Asenapine, Clozapine, Haloperidol, Iloperidone, Loxapine, Lurasidone, Molindone, Olanzapine, Paliperidone, Pimozide, Quetiapine, Quetiapine fumarate, Risperidone, Ziprasidone</p> <p>Phenothiazine antipsychotics: Chlorpromazine, Fluphenazine, Perphenazine, Perphenazine-amitriptyline, Prochlorperazine, Thioridazine, Trifluoperazine</p> <p>Psychotherapeutic combinations: Fluoxetine-olanzapine</p> <p>Thioxanthenes:</p>	

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		<p>Thiothixene</p> <p>Long-acting injections:</p> <p>Fluphenazine decanoate, Haloperidol decanoate, Olanzapine, Paliperidone palmitate, Risperidone</p> <p>See corresponding Excel document for the following value sets:</p> <ul style="list-style-type: none"> - Long-Acting Injections Value Set - Outpatient Value Set - Observation Value Set - Nonacute Inpatient Value Set - Diabetes Value Set - ED Value Set 	
Risk Adjustment	No risk adjustment or risk stratification N/A	No risk adjustment or risk stratification Not applicable.	No risk adjustment or risk stratification N/A
Stratification	Report three age stratifications and a total rate: 1–5 years. 6–11 years. 12–17 years. Total (sum of the age stratifications).	Not applicable.	None.
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = lower score
Algorithm	Step 1: Determine the eligible population, or the denominator, by identifying the number of patients in the specified age range who had at least two antipsychotic medication dispensing events (Table APM-A) of the same or different medications, on different dates of service during the	<p>1. Determine the eligible population. The eligible population is all individuals who satisfy all specified denominator criteria (S9-S11).</p> <p>2. Search administrative systems to identify numerator events for all individuals in the eligible population (S6).</p>	<p>Denominator Calculation:</p> <p>Step 1: Identify patients that are less than 5 years of age at any point during the measurement period.</p> <p>Step 2: Of those patients identified in Step 1, only include those patients that were enrolled in a health plan for one month or</p>

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	<p>measurement year.</p> <p>Step 2: Determine the numerator by identifying the number of patients in the eligible population who received at least one glucose and one cholesterol test during the measurement year.</p> <p>Step 3: Divide the numerator by the denominator to calculate the rate. No diagram provided</p>	<p>3. Calculate the rate.</p>	<p>longer during the measurement period.</p> <p>The number of patients identified in Step 2 is the denominator for the measure.</p> <p>Numerator Calculation:</p> <p>Step 3: Of those patients identified in Step 2, count the number of patients with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.</p> <p>Step 4: Of those patients identified in Step 3, include only those patients for whom a prescription claim for an antipsychotic medication was generated when the patient was under the age of 5.</p> <p>The number of patients identified by completing Step 4 represents the numerator for this measure.</p> <p>Step 5: Divide the numerator by the denominator and then multiply by 100 to obtain the rate (as a percentage) for the measure.</p> <p>Antipsychotic Medications for this measure include: aripiprazole, asenapine, chlorpromazine, clozapine, fluphenazine, haloperidol, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, perphenazine, pimozide, quetiapine, risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone.</p> <p>(Note: Includes combination products that contain any of the above-listed medications. The active ingredients are limited to oral, sublingual, injectable, and intramuscular formulations only.) No</p>

	2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics	1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)	2337: Antipsychotic Use in Children Under 5 Years Old
			diagram provided
Submission items	<p>5.1 Identified measures: 1932 : Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)</p> <p>2337 : Antipsychotic Use in Children Under 5 Years Old</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: This new measure assesses metabolic monitoring during the measurement year among children and adolescents who are prescribed antipsychotics. Below we detail how this measure is related to measures 2337 and 1932 but how it addresses a different target population and measure focus. Measure 2337 assesses whether children under 5 are prescribed an antipsychotic at some point during the measurement year. Similar to the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure, this measure is specified for the health plan level and uses administrative claims as the data source. Measure 2337 focuses on all children under 5 years of age; our measure focuses on a broader range of children (up to age 18) who have been prescribed antipsychotics in order to assess whether they are receiving recommended testing. Measure 1932 assesses whether adults with schizophrenia or bipolar disorder who were prescribed antipsychotics are</p>	<p>5.1 Identified measures: 0003 : Bipolar Disorder: Assessment for diabetes</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The denominator for this measure includes bipolar disorder and schizophrenia while the NQF-endorsed measure only includes bipolar disorder. The NQF-endorsed measure has a higher data collection burden as that measure is collected by claims and chart data while this measure is collected through claims only. The NQF-endorsed measure includes only atypical antipsychotics, while this measure includes both typical and atypical medications. Evidence suggests that both types of medications may increase the risk of diabetes (Gianfrancesco et al., 2002). Gianfrancesco, F.D., Grogg, A.L., Mahmoud, R.A., et al. (2002). Differential effects of risperidone, olanzapine, clozapine, and conventional antipsychotics on type 2 diabetes: findings from a large health plan database. J Clin Psychiatry, 63, 920-30.</p> <p>5b.1 If competing, why superior or rationale for additive value: The denominator for this measure includes bipolar disorder and schizophrenia while the NQF-endorsed measure only includes bipolar disorder. The NQF-endorsed measure may have a higher data collection burden as that measure is collected by</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: N/A - there are no related or competing NQF-endorsed measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: N/A. There are no related or competing NQF-endorsed measures.</p>

	2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics	1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)	2337: Antipsychotic Use in Children Under 5 Years Old
	<p>screened for diabetes. Similar to the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure, this measure is specified for the health plan level and uses administrative claims as the data source. The measures have different target populations but a similar measure focus. Measure 1932 focuses on adults 18 to 64 years of age who have schizophrenia or bipolar disorder and who are prescribed antipsychotics. The Metabolic Monitoring for Children and Adolescents on Antipsychotics measure includes all children and adolescents up to 18 years of age who are prescribed antipsychotics and does not focus on any specific conditions. Measure 1932 is focused on diabetes screening by receipt of a glucose test. While the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure also includes assessing whether a glucose test was received, it additionally assesses whether a cholesterol test was received since the focus is not just diabetes screening. The two measures are aligned in the way glucose testing is identified and measured.</p> <p>5b.1 If competing, why superior or rationale for additive value: N/A</p>	<p>claims and chart data, while this measure is collected through claims data only. The NQF-endorsed measure includes only atypical antipsychotics, while this measure includes both typical and atypical medications. Evidence suggests that both types of medications may increase the risk of diabetes (Gianfrancesco et al., 2002). Gianfrancesco, F.D., Grogg, A.L., Mahmoud, R.A., et al. (2002). Differential effects of risperidone, olanzapine, clozapine, and conventional antipsychotics on type 2 diabetes: findings from a large health plan database. J Clin Psychiatry, 63, 920-30.</p>	

Comparison of NQF #2801 and NQF #2337

	2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	2337: Antipsychotic Use in Children Under 5 Years Old
Steward	National Committee on Quality Assurance	Pharmacy Quality Alliance (PQA, Inc.)
Description	Percentage of children and adolescents 1–17 years of age with a new prescription for an antipsychotic, but no indication for antipsychotics, who had documentation of psychosocial care as first-line treatment.	The percentage of children under age 5 who were dispensed antipsychotic medications during the measurement period.
Type	Process	Process
Data Source	Administrative claims This measure is part of the Healthcare Effectiveness Data and Information Set (HEDIS). As part of HEDIS, the measure pulls from administrative claims collected in the course of providing care to health plan members. NCQA collects the HEDIS data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA’s online data submission system. The measure has also been tested at the state level and could be reported by states if added to a relevant program. No data collection instrument provided Attachment XXXX_APP_Value_Sets.xlsx	Administrative claims Health plan (e.g., Medicaid, other) enrollment data Health plan (e.g., Medicaid, other) prescription claims data No data collection instrument provided No data dictionary
Level	Health Plan, Integrated Delivery System, Population : State	Health Plan, Population : State
Setting	Ambulatory Care : Clinician Office/Clinic, Behavioral Health/Psychiatric : Inpatient, Behavioral Health/Psychiatric : Outpatient	Other Health plan
Numerator Statement	Children and adolescents from the denominator who had psychosocial care as first-line treatment prior to (or immediately following) a new prescription of an antipsychotic.	The number of patients under 5 years of age with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.
Numerator Details	Children and adolescents who had documentation of psychosocial care (Psychosocial Care Value Set) in the 121-day period from 90 days prior to the index prescription start date (IPSD) through 30 days after the IPSD during the measurement year (January 1 – December 31). See attachment for all value sets (S.2b). The Psychosocial Care Value Set contains claims codes for behavioral health acute inpatient and outpatient encounters,	Numerator Step 1: Of those included in the denominator, count the number of patients with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days. Step 2: Of those identified in Step 1, include only those patients for whom a prescription claim for an antipsychotic medication was generated when the patient was under the

	2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	2337: Antipsychotic Use in Children Under 5 Years Old
	<p>including psychotherapy for patients, families, and/or groups; psychophysiological therapy; hypnotherapy; activity therapy, such as music, dance, or art; training and educational services related to the care and treatment of mental health issues; community and rehabilitations programs; and crisis interventions. These services align with a recent Institute of Medicine (IOM) report*, which defined psychosocial interventions for mental health and substance use disorders as “interpersonal or informational activities, techniques, or strategies that target biological, behavioral, cognitive, emotional, interpersonal, social, or environmental factors with the aim of reducing symptoms of these disorders and improving functioning or well-being.” The IOM notes these interventions include psychotherapies, vocational rehabilitation and peer support services, and that they can utilize different formats, including individual, family, or group therapy.</p> <p>DEFINITIONS</p> <p>IPSD: The earliest prescription dispensing date for an antipsychotic medication where the date is in the Intake Period and there is a Negative Medication History.</p> <p>Negative Medication History: A period of 120 days (4 months) prior to the IPSD when the member had no antipsychotic medications dispensed for either new or refill prescriptions.</p> <p>*Intitute of Medicine. Committee on Developing Evidence-Based Standards for Psychosocial Interventions for Mental Disorders, Board on Health Sciences Policy. England MJ, Butler AS and Gonazlez ML, eds. Psychosocial Interventions for Mental and Substance Use Disorders: a Framework for Establishing Evidence-Based Standards. 2015. National Academies Press; Washington, DC (Prepublication copy).</p>	<p>age of 5.</p> <p>The number of patients remaining after completing Step 2 represents the numerator for this measure.</p> <p>Antipsychotic Medications for this measure include: aripiprazole, asenapine, chlorpromazine, clozapine, fluphenazine, haloperidol, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, perphenazine, pimozide, quetiapine, risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone.</p> <p>(Note: Includes combination products that contain any of the above-listed medications. The active ingredients are limited to oral, sublingual, injectable, and intramuscular formulations only.)</p>
Denominator Statement	Children and adolescents who had a new prescription of an antipsychotic medication for which they do not have a U.S Food and Drug Administration primary indication.	Children who are less than 5 years old at any point during the measurement period, and also enrolled in a health plan for one month or longer during the measurement period.
Denominator Details	Children and adolescents age 1-17 as of December 31 of the	The denominator includes all patients who were under 5 years

	2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	2337: Antipsychotic Use in Children Under 5 Years Old
	<p>measurement year (January 1 – December 31) who had a new prescription for an antipsychotic medication (Table APP-A) during the intake period (January 1 through December 1 of the measurement year).</p> <p>Table APP-A: Antipsychotic Medications</p> <p>First-generation antipsychotic medications: Chlorpromazine HCL; Fluphenazine HCL; Fluphenazine decanoate; Fluphenazine enanthate; Haloperidol; Haloperidol decanoate; Molindone HCL; Perphenazine; Pimozide; Haloperidol lactate; Loxapine HCL; Loxapine succinate; Promazine HCL; Thioridazine HCL; Thiothixene; Thiothixene HCL; Trifluoperazine HCL; Triflupromazine HCL</p> <p>Second-generation antipsychotic medications: Aripiprazole; Asenapine; Clozapine; Iloperidone; Lurasidone; Olanzapine; Olanzapine pamoate; Paliperidone; Paliperidone palmitate; Quetiapine fumarate; Risperidone; Risperidone microspheres; Ziprasidone HCL; Ziprasidone mesylate</p> <p>Combinations: Olanzapine-fluoxetine HCL (Symbyax); Perphenazine-amitriptyline HCL (Etrafon, Triavil [various])</p>	<p>of age at any time during the measurement period, and also enrolled in a health plan for one month or longer during the measurement period.</p> <p>Denominator Calculation:</p> <p>Step 1: Identify patients that are less than 5 years of age at any point during the measurement period.</p> <p>Step 2: Of those patients identified in Step 1, only include those patients that were enrolled in a health plan for one month or longer during the measurement period.</p> <p>The number of patients identified in Step 2 is the denominator for the measure.</p>
Exclusions	Exclude children and adolescents with a diagnosis of a condition for which antipsychotic medications have a U.S. Food and Drug Administration indication and are thus clinically appropriate: schizophrenia, bipolar disorder, psychotic disorder, autism, tic disorders.	None.
Exclusion Details	<p>Exclude children and adolescents for whom first-line antipsychotic medications may be clinically appropriate. Any of the following during the measurement year (January 1 – December 31) meet criteria:</p> <p>Children and adolescents who have at least one acute inpatient encounter with a diagnosis of schizophrenia, bipolar disorder or other psychotic disorder during the measurement year. Any of the following code combinations meet criteria:</p> <p>-BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.</p>	None.

	2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	2337: Antipsychotic Use in Children Under 5 Years Old
	<p>-BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set.</p> <p>-BH Stand Alone Acute Inpatient Value Set with Other Psychotic Disorders Value Set.</p> <p>-BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Schizophrenia Value Set.</p> <p>-BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Bipolar Disorder Value Set.</p> <p>-BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Other Psychotic Disorders Value Set.</p> <p>Children and adolescents who have at least two visits in an outpatient, intensive outpatient or partial hospitalization setting, on different dates of service, with a diagnosis of schizophrenia, bipolar disorder or other psychotic disorder during the measurement year. Any of the following code combinations meet criteria:</p> <p>-BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.</p> <p>-BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Schizophrenia Value Set.</p> <p>-BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set.</p> <p>-BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Bipolar Disorder Value Set.</p> <p>-BH Stand Alone Outpatient/PH/IOP Value Set with Other Psychotic Disorders Value Set.</p> <p>-BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Other Psychotic Disorders Value Set.</p> <p>See attachment for all value sets (S.2b).</p>	
Risk Adjustment	No risk adjustment or risk stratification N/A	No risk adjustment or risk stratification N/A
Stratification	Report three age stratifications and a total rate:	None.

	2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	2337: Antipsychotic Use in Children Under 5 Years Old
	1–5 years. 6–11 years. 12–17 years. Total (sum of the age stratifications).	
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = lower score
Algorithm	<p>Step 1: Determine the eligible population, or the denominator, by identifying the number of children and adolescents in the specified age range who were dispensed an antipsychotic medication (Table APP-A) during the intake period (January 1 – December 1).</p> <p>Step 2: Exclude those who did not have a negative medication history and who have a diagnosis for which antipsychotic medications are clinically appropriate (see S.10).</p> <p>Step 3: Determine the numerator by identifying the number of children and adolescents in the eligible population who had documentation of psychosocial care in the 121-day period from 90 days prior through 30 days after the new prescription of an antipsychotic.</p> <p>Step 4: Divide the numerator by the denominator to calculate the rate. No diagram provided</p>	<p>Denominator Calculation:</p> <p>Step 1: Identify patients that are less than 5 years of age at any point during the measurement period.</p> <p>Step 2: Of those patients identified in Step 1, only include those patients that were enrolled in a health plan for one month or longer during the measurement period.</p> <p>The number of patients identified in Step 2 is the denominator for the measure.</p> <p>Numerator Calculation:</p> <p>Step 3: Of those patients identified in Step 2, count the number of patients with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.</p> <p>Step 4: Of those patients identified in Step 3, include only those patients for whom a prescription claim for an antipsychotic medication was generated when the patient was under the age of 5.</p> <p>The number of patients identified by completing Step 4 represents the numerator for this measure.</p> <p>Step 5: Divide the numerator by the denominator and then multiply by 100 to obtain the rate (as a percentage) for the measure.</p> <p>Antipsychotic Medications for this measure include: aripiprazole, asenapine, chlorpromazine, clozapine, fluphenazine, haloperidol, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, perphenazine, pimozide, quetiapine, risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone.</p>

	2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	2337: Antipsychotic Use in Children Under 5 Years Old
		(Note: Includes combination products that contain any of the above-listed medications. The active ingredients are limited to oral, sublingual, injectable, and intramuscular formulations only.) No diagram provided
Submission items	<p>5.1 Identified measures: 2337 : Antipsychotic Use in Children Under 5 Years Old</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: This new measure assesses receipt of psychosocial care among children and adolescents who are prescribed antipsychotics without a primary indication. Both measures address use of antipsychotics. However, 2337 assesses if children under 5 are prescribed an antipsychotic. Our Psychosocial Care measure assesses children of a broader age range (up to age 18) who are currently on antipsychotics but do not have a primary indication. Our measure also addresses a different focus: whether these children received first-line psychosocial care.</p> <p>5b.1 If competing, why superior or rationale for additive value: N/A</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: N/A - there are no related or competing NQF-endorsed measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: N/A. There are no related or competing NQF-endorsed measures.</p>

Comparison of NQF #2803 and NQF #0028

	2803: Tobacco Use and Help with Quitting Among Adolescents	0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention
Steward	National Committee for Quality Assurance	AMA-convened Physician Consortium for Performance Improvement
Description	Percentage of adolescents 12 to 20 years of age during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user.	Percentage of patients aged 18 years and older who were screened for tobacco use at least once during the two-year measurement period AND who received cessation counseling intervention if identified as a tobacco user
Type	Process	Process
Data Source	Electronic Clinical Data This measure has been newly added to the Physician Quality Reporting System, which is a reporting program that uses a combination of incentive payments and payment adjustments to promote reporting of quality information by eligible professionals. No data collection instrument provided No data dictionary	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Electronic Clinical Data : Registry Not applicable. No data dictionary
Level	Clinician : Group/Practice	Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Setting	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic, Other, Behavioral Health/Psychiatric : Outpatient Occupational Therapy Evaluation, Ophthalmological Visits
Numerator Statement	Adolescents who are not smokers OR Adolescents who are smokers but are receiving cessation counseling.	Patients who were screened for tobacco use* at least once during the two-year measurement period AND who received tobacco cessation counseling intervention** if identified as a tobacco user *Includes use of any type of tobacco ** Cessation counseling intervention includes brief counseling (3 minutes or less), and/or pharmacotherapy
Numerator Details	Documentation that the adolescent is not a tobacco user OR Documentation that the adolescent is a tobacco user AND any of the following: -Advice given to quit smoking or tobacco use -Counseling on the benefits of quitting smoking or tobacco use	Definitions: Tobacco Use – Includes any type of tobacco Cessation Counseling Intervention – Includes brief counseling (3 minutes or less), and/or pharmacotherapy For EHR Specifications: See HQMF eMeasure attached. For Claims/Administrative Specifications:

	2803: Tobacco Use and Help with Quitting Among Adolescents	0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention
	<p>(e.g., “5-A” Framework)</p> <ul style="list-style-type: none"> -Assistance with or referral to external smoking or tobacco cessation support programs (e.g., telephone counseling ‘quit line’) -Current enrollment in smoking or tobacco use cessation program 	<p>CPT II 4004F: Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user</p> <p>OR</p> <p>CPT II 1036F: Current tobacco non-user</p> <p>OR</p> <p>CPT Category I code-Smoking and tobacco-use cessation counseling</p> <p>*The following codes are applicable if the patient screened positive for smoking/tobacco use and counseling was provided..</p> <p>99406: Smoking/tobacco counseling 3-10 minutes</p> <p>99407: Smoking/tobacco counseling greater than 10 minutes</p>
Denominator Statement	Adolescents who turn 12 through 20 years of age during the measurement year.	All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period
Denominator Details	Adolescents who turn 12 through 20 years of age during the measurement year and had documentation of a face-to-face visit with a primary care practice during the 12 months prior to the measurement year.	<p>For EHR Specifications:</p> <p>eMeasure developed— can be provided upon request.</p> <p>For Claims/Administrative Specifications:</p> <p>Patients aged 18 years or older</p> <p>AND</p> <p>EHR Specifications: HQMF eMeasure attached. Value Sets can be found at https://vsac.nlm.nih.gov</p> <p>For Claims/Administrative Specifications:</p> <p>CPT E/M Service code:</p> <p>Two visits during the two year measurement period</p> <p>99201, 99202, 99203, 99204, 99205</p> <p>99212, 99213, 99214, 99215</p> <p>97003, 97004</p> <p>92004, 92004, 92012, 92014</p> <p>90791, 90792</p>

	2803: Tobacco Use and Help with Quitting Among Adolescents	0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention
		90832, 90834, 90837 90845 96150, 96151, 96152 At least 1 visit during measurement period: 99385, 99386, 99387 99395, 99396, 99397 99401, 99402, 99403, 99404 99411, 99412 99420, 99429 G0438, G0439
Exclusions	N/A	Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy)
Exclusion Details	N/A	<p>The PCPI methodology uses three categories of reasons for which a patient may be excluded from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure 0028, exceptions may include medical reason(s) (eg, limited life expectancy) for not screening for tobacco use. Where examples of exceptions are included in the measure language, these examples are coded and included in the eSpecifications. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have</p>

	2803: Tobacco Use and Help with Quitting Among Adolescents	0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention
		<p>identified as meeting the criteria for exception. Additional details by data source are as follows:</p> <p>EHR Specifications: HQMF eMeasure attached.</p> <p>For Claims/Administrative Specifications:</p> <p>CPT II 4004F-1P: Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reason)</p>
Risk Adjustment	No risk adjustment or risk stratification N/A	No risk adjustment or risk stratification Not Applicable
Stratification	N/A	We encourage the results of this measure to be stratified by race, ethnicity, payer, and administrative sex, and have included these variables as recommended data elements to be collected.
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	<p>Step 1: Identify the eligible population (denominator).</p> <p>Step 1a: Identify adolescents who turn 12 through 20 years of age during the measurement period.</p> <p>Step 1b: Identify adolescents in Step 1a who had a face-to-face visit.</p> <p>Step 2: Identify tobacco users (numerator).</p> <p>Step 2a: From the denominator, identify adolescents documented as non-tobacco users.</p> <p>Step 2b: From the remaining adolescents in the denominator, identify adolescents documented as tobacco users who received help with quitting.</p> <p>Step 3: Sum adolescents identified in Steps 2a and 2b.</p> <p>Step 4: Divide the total in Step 3 by the denominator to get the rate. No diagram provided</p>	<p>To calculate performance rates:</p> <ol style="list-style-type: none"> 1) Find the patients who meet the initial patient population (ie, the general group of patients that the performance measure is designed to address). 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical. 3) From the patients within the denominator, find the patients who qualify for the Numerator (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator 4) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator exception when exceptions have been specified [for this measure: medical

	2803: Tobacco Use and Help with Quitting Among Adolescents	0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention
		<p>reason(s) (eg, limited life expectancy)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation.</p> <p>--Although the exception cases are removed from the denominator population for the performance calculation, the number of patients with valid exceptions should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.</p> <p>If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure. Calculation algorithm is included in data dictionary/code table attachment 2a1.30.</p>
Submission items	<p>5.1 Identified measures: 0028 : Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: NQF 0028 measures tobacco use in adults aged 18 and older. The proposed measure will assess tobacco use in adolescents who are between the ages of 12 and 20.</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: Our measure focuses on routine tobacco screening for all adults and tobacco cessation interventions for those who use tobacco products. Measure 0026 includes infants, children and adolescents and therefore appropriately also assesses for exposure to tobacco smoke. Also, the cessation intervention required by our measure includes brief counseling and/or pharmacotherapy in light of the strong support for these interventions in the guidelines and the feasibility of implementing these practices as part of routine care. Measure 0027 is a patient survey measure and includes one additional component of the cessation intervention beyond our measure (ie, discussion of methods or strategies other than medication).</p> <p>5b.1 If competing, why superior or rationale for additive value: No competing measures.</p>

Comparison of NQF #2842, NQF #0718, and NQF #0719

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Steward	Seattle Children's Research Institute	The Child and Adolescent Health Measurement Initiative	The Child and Adolescent Health Measurement Initiative
Description	<p>The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.</p> <p>The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 1, described below. The short descriptions of each quality measure follows; full details of FECC-1 are provided in the Detailed Measure Specifications (see S.2b):</p> <p>FECC-1: Has care coordinator</p>	<p>The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.</p>	<p>This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).</p>

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>FECC-3: Care coordinator helped to obtain community services</p> <p>FECC-5: Care coordinator asked about concerns and health changes</p> <p>FECC-7: Care coordinator assisted with specialist service referrals</p> <p>FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs</p> <p>FECC-9: Appropriate written visit summary content</p> <p>FECC-14: Health care provider communicated with school staff about child's condition</p> <p>FECC-15: Caregiver has access to medical interpreter when needed</p> <p>FECC-16: Child has shared care plan</p> <p>FECC-17: Child has emergency care plan</p> <p>Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.</p>		
Type	Process	Outcome	Outcome
Data Source	Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator	2007 National Survey of Children's Health URL	Patient Reported Data/Survey 2011/12 National Survey of Children's Health URL

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.</p> <p>Available in attached appendix at A.1 Attachment</p> <p>NQF_detailed_specs_FECC_PMCA_120715_FECC_1.xlsx</p>		
Level	Health Plan, Population : State	Population : State, Population: National, Population: Regional	Population : National, Population : Regional, Population : State
Setting	Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici	Other Survey was conducted over a telephone	Other Survey was conducted over a telephone
Numerator Statement	The numerator for FECC-1 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-1 follows: FECC-1: Caregivers of CMC should report that their child has a designated care coordinator.	Children who need referrals and have no problems obtaining them	Children who used at least two health services and who received all needed care coordination
Numerator Details	The numerators for each of the care coordination quality measures included within the FECC measure set are specified in the Detailed Measure Specifications (S.2b).	The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals	<p>For a child to be included in the numerator of receiving needed care coordination:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
			<p>or services (K5Q21)</p> <p>-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)</p> <p>--Parent reports satisfaction with communication among doctors or other providers (when needed)</p>
Denominator Statement	<p>The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Parents or legal guardians of children 0-17 years of age 2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014) 3. Child had at least 4 visits to a healthcare provider over the previous year <p>While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood</p>	Children age 0-17 years	Children age 0-17 years who used two or more health services in the past 12 months

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.		
Denominator Details	<p>The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at: http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/</p> <p>The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.</p>	The denominator includes all children age 0-17 years	Children age 0-17 years who needed care coordination in the past 12 months "Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.
Exclusions	<p>Denominator exclusions:</p> <ol style="list-style-type: none"> 1. Child had died 2. Caregiver spoke a language other than English or Spanish 	Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service	Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.
Exclusion Details	Please see S2.b.	If child did not need a referral, then they are excluded from the denominator	<p>If child is older than 17 years of age, excluded from denominator.</p> <p>If parent does not report the child using two or more healthcare services.</p>
Risk Adjustment	<p>Other case mix adjustment</p> <p>Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and</p>	No risk adjustment or risk stratification	No risk adjustment or risk stratification

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.</p> <p>Recommended Case-Mix Adjustors</p> <p>Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).</p> <p>Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be</p>		

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.</p> <p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less 2=Some high school, but did not graduate 3=High school graduate or GED 4=Some college or 2-year degree 5=4-year college graduate 6=More than 4-year college degree</p> <p>If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.</p> <p>Provided in response box S.15a</p>		
Stratification	Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.	No stratification is required.	No stratification is required.
Type Score	Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous	Rate/proportion	Weighted score/composite/scale

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score		
Algorithm	<p>To produce scores for the FECC quality measure set, the following steps were taken, in order:</p> <ol style="list-style-type: none"> 1. Identify children 0-17 years of age 2. Include only those with parent or legal guardian contact information 3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease 4. Retain children with at least 4 health care provider visits in the past year 5. Exclude caregivers who speak only a language other than English or Spanish 6. Exclude caregivers if child had died 7. Administer FECC Survey to remaining sample, over the telephone or via mail 8. Score each measure according to detailed measure specifications in S.2b 9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided 	To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.	<p>To receive numerator of child receiving care coordination when needed:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3) <p>Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)</p> <p>Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)</p>
Submission items	5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of	5.1 Identified measures:	5.1 Identified measures:

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>Healthcare Services When Needed</p> <p>0718 : Children Who Had Problems Obtaining Referrals When Needed</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been</p>	<p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with</p>		

	2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.</p>		

Comparison of NQF #2843, NQF #0718, and NQF #0719

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Steward	Seattle Children's Research Institute	The Child and Adolescent Health Measurement Initiative	The Child and Adolescent Health Measurement Initiative
Description	<p>The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.</p> <p>The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 3, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):</p> <p>FECC-1: Has care coordinator</p>	<p>The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.</p>	<p>This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).</p>

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>FECC-3: Care coordinator helped to obtain community services</p> <p>FECC-5: Care coordinator asked about concerns and health changes</p> <p>FECC-7: Care coordinator assisted with specialist service referrals</p> <p>FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs</p> <p>FECC-9: Appropriate written visit summary content</p> <p>FECC-14: Health care provider communicated with school staff about child's condition</p> <p>FECC-15: Caregiver has access to medical interpreter when needed</p> <p>FECC-16: Child has shared care plan</p> <p>FECC-17: Child has emergency care plan</p> <p>Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.</p>		
Type	Process	Outcome	Outcome
Data Source	Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator	2007 National Survey of Children's Health URL	Patient Reported Data/Survey 2011/12 National Survey of Children's Health URL

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.</p> <p>Available in attached appendix at A.1 Attachment NQF_detailed_specs_FECC_PMCA_120715_F ECC_3-635851074631328247.xlsx</p>		
Level	Health Plan, Population : State	Population : State, Population: National, Population: Regional	Population : National, Population : Regional, Population : State
Setting	Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici	Other Survey was conducted over a telephone	Other Survey was conducted over a telephone
Numerator Statement	<p>The numerators for each of the 10 FECC quality measures included within the FECC measures set are specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC 3 follows:</p> <p>FECC-3: Caregivers of CMC who report having a designated care coordinator and who require community services should also report that their care coordinator helped their child to obtain needed community services in the last year.</p>	Children who need referrals and have no problems obtaining them	Children who used at least two health services and who received all needed care coordination
Numerator Details	The numerator for FECC 3 is specified in the Detailed Measure Specifications (S.2b).	The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals	<p>For a child to be included in the numerator of receiving needed care coordination:</p> <p>-Parent reports someone helping to</p>

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
			<p>arrange or coordinate child's care among the different doctors and services (K5Q20)</p> <p>-Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)</p> <p>-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)</p> <p>--Parent reports satisfaction with communication among doctors or other providers (when needed)</p>
Denominator Statement	<p>The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Parents or legal guardians of children 0-17 years of age 2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014) 3. Child had at least 4 visits to a healthcare provider over the previous year <p>While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers</p>	Children age 0-17 years	Children age 0-17 years who used two or more health services in the past 12 months

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.		
Denominator Details	<p>The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at: http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/</p> <p>The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.</p>	The denominator includes all children age 0-17 years	Children age 0-17 years who needed care coordination in the past 12 months "Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.
Exclusions	<p>Denominator exclusions:</p> <ol style="list-style-type: none"> 1. Child had died 2. Caregiver spoke a language other than English or Spanish 	Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service	Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.
Exclusion Details	Please see S2.b.	If child did not need a referral, then they are excluded from the denominator	If child is older than 17 years of age, excluded from denominator. If parent does not report the child using

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
			two or more healthcare services.
Risk Adjustment	<p>Other case mix adjustment</p> <p>Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.</p> <p>Recommended Case-Mix Adjustors</p> <p>Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).</p> <p>Education is coded as a series of six indicators for the six response categories to</p>	No risk adjustment or risk stratification	No risk adjustment or risk stratification

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.</p> <p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less 2=Some high school, but did not graduate 3=High school graduate or GED 4=Some college or 2-year degree 5=4-year college graduate 6=More than 4-year college degree</p> <p>If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.</p> <p>Provided in response box S.15a</p>		
Stratification	Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we	No stratification is required.	No stratification is required.

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	recommend adjustment for). The specifications for those models are also included in S.2b.		
Type Score	Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score	Rate/proportion	Weighted score/composite/scale
Algorithm	<p>To produce scores for the FECC quality measure set, the following steps were taken, in order:</p> <ol style="list-style-type: none"> 1. Identify children 0-17 years of age 2. Include only those with parent or legal guardian contact information 3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease 4. Retain children with at least 4 health care provider visits in the past year 5. Exclude caregivers who speak only a language other than English or Spanish 6. Exclude caregivers if child had died 7. Administer FECC Survey to remaining sample, over the telephone or via mail 8. Score each measure according to detailed measure specifications in S.2b 9. For comparisons between health plans, states, or by demographic groups, 	To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.	<p>To receive numerator of child receiving care coordination when needed:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3) <p>Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)</p>

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided		Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)
Submission items	<p>5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed</p> <p>0718 : Children Who Had Problems Obtaining Referrals When Needed</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing</p>		

	2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.</p>		

Comparison of NQF #2844, NQF #0718, and NQF #0719

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Steward	Seattle Children's Research Institute	The Child and Adolescent Health Measurement Initiative	The Child and Adolescent Health Measurement Initiative
Description	<p>The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.</p> <p>The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 5, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):</p> <p>FECC-1: Has care coordinator</p>	<p>The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.</p>	<p>This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).</p>

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>FECC-3: Care coordinator helped to obtain community services</p> <p>FECC-5: Care coordinator asked about concerns and health changes</p> <p>FECC-7: Care coordinator assisted with specialist service referrals</p> <p>FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs</p> <p>FECC-9: Appropriate written visit summary content</p> <p>FECC-14: Health care provider communicated with school staff about child's condition</p> <p>FECC-15: Caregiver has access to medical interpreter when needed</p> <p>FECC-16: Child has shared care plan</p> <p>FECC-17: Child has emergency care plan</p> <p>Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.</p>		
Type	Process	Outcome	Outcome
Data Source	Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator	2007 National Survey of Children's Health URL	Patient Reported Data/Survey 2011/12 National Survey of Children's Health URL

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.</p> <p>Available in attached appendix at A.1 Attachment</p> <p>NQF_detailed_specs_FECC_PMCA_FECC_5.xlsx</p>		
Level	Health Plan, Population : State	Population : State, Population: National, Population: Regional	Population : National, Population : Regional, Population : State
Setting	Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici	Other Survey was conducted over a telephone	Other Survey was conducted over a telephone
Numerator Statement	<p>The numerator for FECC-5 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description follows:</p> <p>FECC-5:Caregivers of CMC who report having a care coordinator and who report that their care coordinator has contacted them in the last 3 months should also report that their care coordinator asked them about the following:</p> <ul style="list-style-type: none"> • Caregiver concerns • Health changes of the child 	Children who need referrals and have no problems obtaining them	Children who used at least two health services and who received all needed care coordination
Numerator Details	The numerators for each of the care coordination quality measures included within the FECC measure set are specified in	The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining	For a child to be included in the numerator of receiving needed care coordination: -Parent reports someone helping to

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	the Detailed Measure Specifications (S.2b).	those referrals	<p>arrange or coordinate child's care among the different doctors and services (K5Q20)</p> <p>-Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)</p> <p>-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)</p> <p>--Parent reports satisfaction with communication among doctors or other providers (when needed)</p>
Denominator Statement	<p>The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Parents or legal guardians of children 0-17 years of age 2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014) 3. Child had at least 4 visits to a healthcare provider over the previous year <p>While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers</p>	Children age 0-17 years	Children age 0-17 years who used two or more health services in the past 12 months

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.		
Denominator Details	<p>The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at: http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/</p> <p>The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.</p>	The denominator includes all children age 0-17 years	Children age 0-17 years who needed care coordination in the past 12 months "Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.
Exclusions	<p>Denominator exclusions:</p> <ol style="list-style-type: none"> 1. Child had died 2. Caregiver spoke a language other than English or Spanish 	Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service	Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.
Exclusion Details	Please see S2.b.	If child did not need a referral, then they are excluded from the denominator	If child is older than 17 years of age, excluded from denominator. If parent does not report the child using

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
			two or more healthcare services.
Risk Adjustment	<p>Other case mix adjustment</p> <p>Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.</p> <p>Recommended Case-Mix Adjustors</p> <p>Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).</p> <p>Education is coded as a series of six indicators for the six response categories to</p>	No risk adjustment or risk stratification	No risk adjustment or risk stratification

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.</p> <p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less 2=Some high school, but did not graduate 3=High school graduate or GED 4=Some college or 2-year degree 5=4-year college graduate 6=More than 4-year college degree</p> <p>If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.</p> <p>Provided in response box S.15a</p>		
Stratification	Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we	No stratification is required.	No stratification is required.

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	recommend adjustment for). The specifications for those models are also included in S.2b.		
Type Score	Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score	Rate/proportion	Weighted score/composite/scale
Algorithm	<p>To produce scores for the FECC quality measure set, the following steps were taken, in order:</p> <ol style="list-style-type: none"> 1. Identify children 0-17 years of age 2. Include only those with parent or legal guardian contact information 3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease 4. Retain children with at least 4 health care provider visits in the past year 5. Exclude caregivers who speak only a language other than English or Spanish 6. Exclude caregivers if child had died 7. Administer FECC Survey to remaining sample, over the telephone or via mail 8. Score each measure according to detailed measure specifications in S.2b 9. For comparisons between health plans, states, or by demographic groups, 	To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.	<p>To receive numerator of child receiving care coordination when needed:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3) Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided		Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)
Submission items	<p>5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed</p> <p>0718 : Children Who Had Problems Obtaining Referrals When Needed</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing</p>		

	2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.</p>		

Comparison of NQF #2845, NQF #0718, and NQF #0719

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Steward	Seattle Children's Research Institute	The Child and Adolescent Health Measurement Initiative	The Child and Adolescent Health Measurement Initiative
Description	<p>The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.</p> <p>The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 7, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):</p> <p>FECC-1: Has care coordinator</p>	<p>The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.</p>	<p>This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).</p>

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>FECC-3: Care coordinator helped to obtain community services</p> <p>FECC-5: Care coordinator asked about concerns and health changes</p> <p>FECC-7: Care coordinator assisted with specialist service referrals</p> <p>FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs</p> <p>FECC-9: Appropriate written visit summary content</p> <p>FECC-14: Health care provider communicated with school staff about child's condition</p> <p>FECC-15: Caregiver has access to medical interpreter when needed</p> <p>FECC-16: Child has shared care plan</p> <p>FECC-17: Child has emergency care plan</p> <p>Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.</p>		
Type	Process	Outcome	Outcome
Data Source	Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator	2007 National Survey of Children's Health URL	Patient Reported Data/Survey 2011/12 National Survey of Children's Health URL

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.</p> <p>Available in attached appendix at A.1 Attachment</p> <p>NQF_detailed_specs_FECC_PMCA_FECC_7.xlsx</p>		
Level	Health Plan, Population : State	Population : State, Population: National, Population: Regional	Population : National, Population : Regional, Population : State
Setting	Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici	Other Survey was conducted over a telephone	Other Survey was conducted over a telephone
Numerator Statement	<p>The numerator for FECC-7 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-7 follows:</p> <p>FECC-7: Caregivers of CMC who report having a care coordinator for their child should also report that the care coordinator assists them with specialty service referrals by ensuring that the appointment with the specialty service provider occurs</p>	Children who need referrals and have no problems obtaining them	Children who used at least two health services and who received all needed care coordination
Numerator Details	The numerators for each of the care coordination quality measures included within the FECC measure set are specified in the Detailed Measure Specifications (S.2b).	The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals	<p>For a child to be included in the numerator of receiving needed care coordination:</p> <p>-Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)</p>

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
			<p>-Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)</p> <p>-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)</p> <p>--Parent reports satisfaction with communication among doctors or other providers (when needed)</p>
Denominator Statement	<p>The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Parents or legal guardians of children 0-17 years of age 2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014) 3. Child had at least 4 visits to a healthcare provider over the previous year <p>While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only</p>	Children age 0-17 years	Children age 0-17 years who used two or more health services in the past 12 months

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.		
Denominator Details	<p>The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at: http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/</p> <p>The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.</p>	The denominator includes all children age 0-17 years	<p>Children age 0-17 years who needed care coordination in the past 12 months</p> <p>"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.</p>
Exclusions	<p>Denominator exclusions:</p> <ol style="list-style-type: none"> 1. Child had died 2. Caregiver spoke a language other than English or Spanish 	Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service	Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.
Exclusion Details	Please see S2.b.	If child did not need a referral, then they are excluded from the denominator	<p>If child is older than 17 years of age, excluded from denominator.</p> <p>If parent does not report the child using two or more healthcare services.</p>

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Risk Adjustment	<p>Other case mix adjustment</p> <p>Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.</p> <p>Recommended Case-Mix Adjustors</p> <p>Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).</p> <p>Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one</p>	No risk adjustment or risk stratification	No risk adjustment or risk stratification

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.</p> <p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less 2=Some high school, but did not graduate 3=High school graduate or GED 4=Some college or 2-year degree 5=4-year college graduate 6=More than 4-year college degree</p> <p>If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.</p> <p>Provided in response box S.15a</p>		
Stratification	Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The	No stratification is required.	No stratification is required.

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	specifications for those models are also included in S.2b.		
Type Score	Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score	Rate/proportion	Weighted score/composite/scale
Algorithm	<p>To produce scores for the FECC quality measure set, the following steps were taken, in order:</p> <ol style="list-style-type: none"> 1. Identify children 0-17 years of age 2. Include only those with parent or legal guardian contact information 3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease 4. Retain children with at least 4 health care provider visits in the past year 5. Exclude caregivers who speak only a language other than English or Spanish 6. Exclude caregivers if child had died 7. Administer FECC Survey to remaining sample, over the telephone or via mail 8. Score each measure according to detailed measure specifications in S.2b 9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level 	To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.	<p>To receive numerator of child receiving care coordination when needed:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3) <p>Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)</p> <p>Parent report satisfaction with</p>

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	(and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided		communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)
Submission items	<p>5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed</p> <p>0718 : Children Who Had Problems Obtaining Referrals When Needed</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set</p>		

	2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.</p>		

Comparison of NQF #2846, NQF #0718, and NQF #0719

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Steward	Seattle Children's Research Institute	The Child and Adolescent Health Measurement Initiative	The Child and Adolescent Health Measurement Initiative
Description	<p>The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.</p> <p>The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 8, described below. The short descriptions of each quality measure follows; full details for FECC-8 are provided in the Detailed Measure Specifications (see S.2b):</p>	The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.	This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>FECC-1: Has care coordinator</p> <p>FECC-3: Care coordinator helped to obtain community services</p> <p>FECC-5: Care coordinator asked about concerns and health changes</p> <p>FECC-7: Care coordinator assisted with specialist service referrals</p> <p>FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs</p> <p>FECC-9: Appropriate written visit summary content</p> <p>FECC-14: Health care provider communicated with school staff about child's condition</p> <p>FECC-15: Caregiver has access to medical interpreter when needed</p> <p>FECC-16: Child has shared care plan</p> <p>FECC-17: Child has emergency care plan</p> <p>Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.</p>		
Type	Process	Outcome	Outcome
Data Source	Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes	2007 National Survey of Children's Health URL	Patient Reported Data/Survey 2011/12 National Survey of Children's Health

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish. Available in attached appendix at A.1 Attachment NQF_detailed_specs_FECC_PMCA_FECC_8.xlsx		URL
Level	Health Plan, Population : State	Population : State, Population: National, Population: Regional	Population : National, Population : Regional, Population : State
Setting	Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici	Other Survey was conducted over a telephone	Other Survey was conducted over a telephone
Numerator Statement	The numerator for FECC-8 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-8 follows: FECC-8: Caregivers of CMC who report having a care coordinator should also report that their care coordinator: <ul style="list-style-type: none"> • Was knowledgeable about their child's health • Supported the caregiver • Advocated for the needs of the child 	Children who need referrals and have no problems obtaining them	Children who used at least two health services and who received all needed care coordination
Numerator	The numerator for FECC-8 is specified in the	The numerator describes the number of	For a child to be included in the numerator

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Details	Detailed Measure Specifications (S.2b).	children who needed a referral to see other doctors or services had problems obtaining those referrals	<p>of receiving needed care coordination:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22) --Parent reports satisfaction with communication among doctors or other providers (when needed)
Denominator Statement	<p>The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Parents or legal guardians of children 0-17 years of age 2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014) 3. Child had at least 4 visits to a healthcare provider over the previous year <p>While some of the FECC measures only apply to a subset of the overall eligible population</p>	Children age 0-17 years	Children age 0-17 years who used two or more health services in the past 12 months

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.		
Denominator Details	<p>The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at: http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/</p> <p>The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.</p>	The denominator includes all children age 0-17 years	Children age 0-17 years who needed care coordination in the past 12 months "Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.
Exclusions	<p>Denominator exclusions:</p> <ol style="list-style-type: none"> 1. Child had died 2. Caregiver spoke a language other than English or Spanish 	Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service	Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
			coordinating.
Exclusion Details	Please see S2.b.	If child did not need a referral, then they are excluded from the denominator	If child is older than 17 years of age, excluded from denominator. If parent does not report the child using two or more healthcare services.
Risk Adjustment	<p>Other case mix adjustment</p> <p>Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.</p> <p>Recommended Case-Mix Adjustors</p> <p>Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by</p>	No risk adjustment or risk stratification	No risk adjustment or risk stratification

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>phone but the participant was randomized to mixed-mode, the survey mode indicator would be "mixed-mode").</p> <p>Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.</p> <p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less 2=Some high school, but did not graduate 3=High school graduate or GED 4=Some college or 2-year degree 5=4-year college graduate 6=More than 4-year college degree</p> <p>If a "clinically-adjusted" model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.</p>		

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	Provided in response box S.15a		
Stratification	Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.	No stratification is required.	No stratification is required.
Type Score	Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score	Rate/proportion	Weighted score/composite/scale
Algorithm	<p>To produce scores for the FECC quality measure set, the following steps were taken, in order:</p> <ol style="list-style-type: none"> 1. Identify children 0-17 years of age 2. Include only those with parent or legal guardian contact information 3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease 4. Retain children with at least 4 health care provider visits in the past year 5. Exclude caregivers who speak only a language other than English or Spanish 6. Exclude caregivers if child had died 7. Administer FECC Survey to 	To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.	<p>To receive numerator of child receiving care coordination when needed:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1) AND Parent reports that they

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>remaining sample, over the telephone or via mail</p> <p>8. Score each measure according to detailed measure specifications in S.2b</p> <p>9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided</p>		<p>got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)</p> <p>Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)</p> <p>Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)</p>
Submission items	<p>5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed</p> <p>0718 : Children Who Had Problems Obtaining Referrals When Needed</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that</p>		

	2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.</p>		

Comparison of NQF #2847, NQF #0718, and NQF #0719

	2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Steward	Seattle Children's Research Institute	The Child and Adolescent Health Measurement Initiative	The Child and Adolescent Health Measurement Initiative
Description	<p>The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.</p> <p>The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 9, described below. The short descriptions of each quality measure follows; full details for FECC-9 are provided in the Detailed Measure Specifications (see S.2b):</p> <p>FECC-1: Has care coordinator</p>	The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.	This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

	2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>FECC-3: Care coordinator helped to obtain community services</p> <p>FECC-5: Care coordinator asked about concerns and health changes</p> <p>FECC-7: Care coordinator assisted with specialist service referrals</p> <p>FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs</p> <p>FECC-9: Appropriate written visit summary content</p> <p>FECC-14: Health care provider communicated with school staff about child's condition</p> <p>FECC-15: Caregiver has access to medical interpreter when needed</p> <p>FECC-16: Child has shared care plan</p> <p>FECC-17: Child has emergency care plan</p> <p>Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.</p>		
Type	Process	Outcome	Outcome
Data Source	Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator	2007 National Survey of Children's Health URL	Patient Reported Data/Survey 2011/12 National Survey of Children's Health URL

	2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.</p> <p>Available in attached appendix at A.1 Attachment</p> <p>NQF_detailed_specs_FECC_PMCA_FECC_9.xlsx</p>		
Level	Health Plan, Population : State	Population : State, Population: National, Population: Regional	Population : National, Population : Regional, Population : State
Setting	Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici	Other Survey was conducted over a telephone	Other Survey was conducted over a telephone
Numerator Statement	<p>The numerator for FECC-9 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-9 follows:</p> <p>FECC-9: Caregivers of CMC who report receiving a written visit summary during the last 12 months from their child's main provider's office should report that it contained the following elements:</p> <ul style="list-style-type: none"> • Current problem list • Current medication list • Drug allergies • Specialists involved in the child's care • Planned follow-up 	Children who need referrals and have no problems obtaining them	Children who used at least two health services and who received all needed care coordination

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	<ul style="list-style-type: none"> What to do for problems related to outpatient visit 		
Numerator Details	The numerator for FECC 9 is specified in the Detailed Measure Specifications (S.2b).	The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals	<p>For a child to be included in the numerator of receiving needed care coordination:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22) --Parent reports satisfaction with communication among doctors or other providers (when needed)
Denominator Statement	<p>The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Parents or legal guardians of children 0-17 years of age 2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014) 3. Child had at least 4 visits to a healthcare 	Children age 0-17 years	Children age 0-17 years who used two or more health services in the past 12 months

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	<p>provider over the previous year</p> <p>While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.</p>		
Denominator Details	<p>The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at: http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/</p> <p>The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.</p>	The denominator includes all children age 0-17 years	<p>Children age 0-17 years who needed care coordination in the past 12 months</p> <p>"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.</p>
Exclusions	<p>Denominator exclusions:</p> <ol style="list-style-type: none"> Child had died 	Excluded from denominator if child does not fall in target population age range of 0-17	Excluded from denominator if child does not fall in target population age range of 0-

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	2. Caregiver spoke a language other than English or Spanish	years and who did not need a referral to any doctor or service	17 years and/or does not receive two or more services which might require coordinating.
Exclusion Details	Please see S2.b.	If child did not need a referral, then they are excluded from the denominator	If child is older than 17 years of age, excluded from denominator. If parent does not report the child using two or more healthcare services.
Risk Adjustment	<p>Other case mix adjustment</p> <p>Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.</p> <p>Recommended Case-Mix Adjustors</p> <p>Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for</p>	No risk adjustment or risk stratification	No risk adjustment or risk stratification

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	<p>example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).</p> <p>Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes.</p> <p>Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.</p> <p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less 2=Some high school, but did not graduate 3=High school graduate or GED 4=Some college or 2-year degree 5=4-year college graduate 6=More than 4-year college degree</p> <p>If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.</p>		

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	Provided in response box S.15a		
Stratification	Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.	No stratification is required.	No stratification is required.
Type Score	Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score	Rate/proportion	Weighted score/composite/scale
Algorithm	<p>To produce scores for the FECC quality measure set, the following steps were taken, in order:</p> <ol style="list-style-type: none"> 1. Identify children 0-17 years of age 2. Include only those with parent or legal guardian contact information 3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease 4. Retain children with at least 4 health care provider visits in the past year 5. Exclude caregivers who speak only a language other than English or Spanish 6. Exclude caregivers if child had died 7. Administer FECC Survey to remaining sample, over the telephone or via 	To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.	<p>To receive numerator of child receiving care coordination when needed:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1) AND Parent reports that they got as much help as they wanted with

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	<p>mail</p> <p>8. Score each measure according to detailed measure specifications in S.2b</p> <p>9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided</p>		<p>arranging or coordinating child's care usually (K5Q22=3)</p> <p>Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)</p> <p>Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)</p>
Submission items	<p>5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed</p> <p>0718 : Children Who Had Problems Obtaining Referrals When Needed</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

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	<p>endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation</p>		

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	<p>why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.</p>		

Comparison of NQF #2849, NQF #0718, and NQF #0719

	2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Steward	Seattle Children's Research Institute	The Child and Adolescent Health Measurement Initiative	The Child and Adolescent Health Measurement Initiative
Description	<p>The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.</p> <p>The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 15, described below. The short descriptions of each quality measure follows; full details for FECC-15 are provided in the Detailed Measure Specifications (see S.2b):</p> <p>FECC-1: Has care coordinator</p> <p>FECC-3: Care coordinator helped to obtain</p>	<p>The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.</p>	<p>This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).</p>

	2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>community services</p> <p>FECC-5: Care coordinator asked about concerns and health changes</p> <p>FECC-7: Care coordinator assisted with specialist service referrals</p> <p>FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs</p> <p>FECC-9: Appropriate written visit summary content</p> <p>FECC-14: Health care provider communicated with school staff about child's condition</p> <p>FECC-15: Caregiver has access to medical interpreter when needed</p> <p>FECC-16: Child has shared care plan</p> <p>FECC-17: Child has emergency care plan</p> <p>Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.</p>		
Type	Process	Outcome	Outcome
Data Source	Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in	2007 National Survey of Children's Health URL	Patient Reported Data/Survey 2011/12 National Survey of Children's Health URL

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	English and Spanish. Available in attached appendix at A.1 Attachment NQF_detailed_specs_FECC_PMCA_FECC_15.xlsx		
Level	Health Plan, Population : State	Population : State, Population: National, Population: Regional	Population : National, Population : Regional, Population : State
Setting	Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici	Other Survey was conducted over a telephone	Other Survey was conducted over a telephone
Numerator Statement	The numerator for FECC-15 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-15 follows: FECC-15: Caregivers of CMC who self-identify as having a preference for conducting medical visits in a language other than English should have access to a professional medical interpreter (live or telephonic) at all visits for which an interpreter is needed.	Children who need referrals and have no problems obtaining them	Children who used at least two health services and who received all needed care coordination
Numerator Details	The numerator for FECC-15 is specified in the Detailed Measure Specifications (S.2b).	The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals	For a child to be included in the numerator of receiving needed care coordination: -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among

	2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
			<p>the different health care providers or services (K5Q21)</p> <p>-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)</p> <p>--Parent reports satisfaction with communication among doctors or other providers (when needed)</p>
Denominator Statement	<p>The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Parents or legal guardians of children 0-17 years of age 2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014) 3. Child had at least 4 visits to a healthcare provider over the previous year <p>While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory</p>	Children age 0-17 years	Children age 0-17 years who used two or more health services in the past 12 months

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	testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.		
Denominator Details	<p>The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at: http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/</p> <p>The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.</p>	The denominator includes all children age 0-17 years	Children age 0-17 years who needed care coordination in the past 12 months "Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.
Exclusions	<p>Denominator exclusions:</p> <ol style="list-style-type: none"> 1. Child had died 2. Caregiver spoke a language other than English or Spanish 	Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service	Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.
Exclusion Details	Please see S2.b.	If child did not need a referral, then they are excluded from the denominator	If child is older than 17 years of age, excluded from denominator. If parent does not report the child using two or more healthcare services.
Risk Adjustment	<p>Other case mix adjustment</p> <p>Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if</p>	No risk adjustment or risk stratification	No risk adjustment or risk stratification

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	<p>applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.</p> <p>Recommended Case-Mix Adjustors</p> <p>Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).</p> <p>Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to</p>		

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	<p>include five education category indicators in a given model.</p> <p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less</p> <p>2=Some high school, but did not graduate</p> <p>3=High school graduate or GED</p> <p>4=Some college or 2-year degree</p> <p>5=4-year college graduate</p> <p>6=More than 4-year college degree</p> <p>If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category. Provided in response box S.15a</p>		
Stratification	Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.	No stratification is required.	No stratification is required.
Type Score	Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for	Rate/proportion	Weighted score/composite/scale

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	additional measure-specific scoring information. better quality = higher score		
Algorithm	<p>To produce scores for the FECC quality measure set, the following steps were taken, in order:</p> <ol style="list-style-type: none"> 1. Identify children 0-17 years of age 2. Include only those with parent or legal guardian contact information 3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease 4. Retain children with at least 4 health care provider visits in the past year 5. Exclude caregivers who speak only a language other than English or Spanish 6. Exclude caregivers if child had died 7. Administer FECC Survey to remaining sample, over the telephone or via mail 8. Score each measure according to detailed measure specifications in S.2b 9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided 	<p>To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.</p>	<p>To receive numerator of child receiving care coordination when needed:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3) <p>Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)</p> <p>Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)</p>
Submission items	<p>5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed</p> <p>0718 : Children Who Had Problems Obtaining Referrals When Needed</p> <p>5a.1 Are specs completely harmonized? No</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

	2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped</p>		

	2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.</p> <p>5b.1 If competing, why superior or rationale</p>		

	2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.		

Comparison of NQF #2850, NQF #0718, and NQF #0719

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Steward	Seattle Children's Research Institute	The Child and Adolescent Health Measurement Initiative	The Child and Adolescent Health Measurement Initiative
Description	<p>The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.</p> <p>The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 16, described below. The short descriptions of each quality measure follows; full details for FECC-16 are provided in the Detailed Measure Specifications (see S.2b):</p> <p>FECC-1: Has care coordinator</p> <p>FECC-3: Care coordinator helped to obtain</p>	The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.	This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>community services</p> <p>FECC-5: Care coordinator asked about concerns and health changes</p> <p>FECC-7: Care coordinator assisted with specialist service referrals</p> <p>FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs</p> <p>FECC-9: Appropriate written visit summary content</p> <p>FECC-14: Health care provider communicated with school staff about child's condition</p> <p>FECC-15: Caregiver has access to medical interpreter when needed</p> <p>FECC-16: Child has shared care plan</p> <p>FECC-17: Child has emergency care plan</p> <p>Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.</p>		
Type	Process	Outcome	Outcome
Data Source	Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in	2007 National Survey of Children's Health URL	Patient Reported Data/Survey 2011/12 National Survey of Children's Health URL

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	English and Spanish. Available in attached appendix at A.1 Attachment NQF_detailed_specs_FECC_PMCA_FECC_16.xlsx		
Level	Health Plan, Population : State	Population : State, Population: National, Population: Regional	Population : National, Population : Regional, Population : State
Setting	Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici	Other Survey was conducted over a telephone	Other Survey was conducted over a telephone
Numerator Statement	The numerator for FECC-16 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-16 follows: FECC-16: Caregivers of CMC should report that their child's primary care provider created a shared care plan for their child.	Children who need referrals and have no problems obtaining them	Children who used at least two health services and who received all needed care coordination
Numerator Details	The numerator for FECC-16 is specified in the Detailed Measure Specifications (S.2b).	The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals	For a child to be included in the numerator of receiving needed care coordination: -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) -Or parent reports that they have felt that

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
			<p>they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)</p> <p>--Parent reports satisfaction with communication among doctors or other providers (when needed)</p>
Denominator Statement	<p>The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:</p> <ol style="list-style-type: none"> 1. Parents or legal guardians of children 0-17 years of age 2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014) 3. Child had at least 4 visits to a healthcare provider over the previous year <p>While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.</p>	Children age 0-17 years	Children age 0-17 years who used two or more health services in the past 12 months

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Denominator Details	<p>The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at: http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/</p> <p>The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.</p>	The denominator includes all children age 0-17 years	<p>Children age 0-17 years who needed care coordination in the past 12 months</p> <p>"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.</p>
Exclusions	<p>Denominator exclusions:</p> <ol style="list-style-type: none"> 1. Child had died 2. Caregiver spoke a language other than English or Spanish 	Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service	Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.
Exclusion Details	Please see S2.b.	If child did not need a referral, then they are excluded from the denominator	<p>If child is older than 17 years of age, excluded from denominator.</p> <p>If parent does not report the child using two or more healthcare services.</p>
Risk Adjustment	<p>Other case mix adjustment</p> <p>Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent</p>	No risk adjustment or risk stratification	No risk adjustment or risk stratification

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.</p> <p>Recommended Case-Mix Adjustors</p> <p>Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).</p> <p>Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes.</p> <p>Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.</p>		

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>What is the highest grade or level of school that you have completed?</p> <p>1=8th grade or less</p> <p>2=Some high school, but did not graduate</p> <p>3=High school graduate or GED</p> <p>4=Some college or 2-year degree</p> <p>5=4-year college graduate</p> <p>6=More than 4-year college degree</p> <p>If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category. Provided in response box S.15a</p>		
Stratification	Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.	No stratification is required.	No stratification is required.
Type Score	Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score	Rate/proportion	Weighted score/composite/scale

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
Algorithm	<p>To produce scores for the FECC quality measure set, the following steps were taken, in order:</p> <ol style="list-style-type: none"> 1. Identify children 0-17 years of age 2. Include only those with parent or legal guardian contact information 3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease 4. Retain children with at least 4 health care provider visits in the past year 5. Exclude caregivers who speak only a language other than English or Spanish 6. Exclude caregivers if child had died 7. Administer FECC Survey to remaining sample, over the telephone or via mail 8. Score each measure according to detailed measure specifications in S.2b 9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided 	<p>To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.</p>	<p>To receive numerator of child receiving care coordination when needed:</p> <ul style="list-style-type: none"> -Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1) -Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0) -Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3) <p>Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)</p> <p>Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)</p>
Submission items	<p>5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed</p> <p>0718 : Children Who Had Problems Obtaining Referrals When Needed</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: The currently</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are</p>		

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	<p>predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.</p> <p>5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC</p>		

	2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan	0718: Children Who Had Problems Obtaining Referrals When Needed	0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed
	measures complement, focus, and extend the information provided by the currently-endorsed measures.		

Appendix F2: Related and Competing Measures (narrative format)

Several of the measures in this project were potentially related or competing with other NQF-endorsed measures that were not reviewed in this project. Because the measures were not in the same review cycle, the Committee did not discuss the related and competing measures as they were only directed to discuss measures within the current cycle. NQF encourages harmonization to the extent possible and will review related and competing issues in future work.

Comparison of NQF #2789 and NQF #0005

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

Steward

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

Center of Excellence for Pediatric Quality Measurement

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

Agency for Healthcare Research and Quality

Description

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

The Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care measures the quality of preparation for transition from pediatric-focused to adult-focused health care as reported in a survey completed by youth ages 16-17 years old with a chronic health condition. The ADAPT survey generates measures for each of the 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning.

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

The Consumer Assessment of Healthcare Providers and Systems Clinician & Group Survey (CG-CAHPS) is a standardized survey instrument that asks patients to report on their experiences with primary or specialty care received from providers and their staff in ambulatory care settings over the preceding 12 months.

The survey includes standardized questionnaires for adults and children. All questionnaires can be used in both primary care and specialty care settings. The adult survey is administered to patients aged 18 and over. The child survey is administered to the parents or guardians of pediatric patients under the age of 18. Patients who have had at least one visit during the past 12-months are eligible to be surveyed.

CG-CAHPS Survey Version 1.0 was endorsed by NQF in July 2007 (NQF #0005). The development of the survey is through the CAHPS consortium and sponsored by the Agency for Healthcare Research and Quality. The survey is part of the CAHPS family of patient experience surveys and is available in the public domain at <https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html>.

The Adult CG-CAHPS Survey includes one global rating item and 39 items in which 13 items can be organized into three composite measures and one global item for the following categories of care or services provided in the medical office:

1. Getting Timely Appointments, Care, and Information (5 items)
2. How Well Providers Communicate With Patients (6 items)
3. Helpful, Courteous, and Respectful Office Staff (2 items)
4. Overall Rating of Provider (1 item)

The Child CG-CAHPS Survey includes one global rating item and 54 items in which 24 items can be organized into five composite measures and one global item for the following categories of care or services provided in the medical office,:

1. Getting Timely Appointments, Care, and Information (5 items)
2. How Well Providers Communicate With Patients (6 items)
3. Helpful, Courteous, and Respectful Office Staff (2 items)
4. Overall Rating of Provider (1 item)
5. Provider's Attention to Child's Growth and Development (6 items)
6. Provider's Advice on Keeping Your Child Safe and Healthy (5 items)

Type

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

PRO

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

PRO

Data Source

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

Patient Reported Data/Survey Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care Survey.

The ADAPT survey is available in English and Spanish. The recommended mode of administration is by mail. For a detailed explanation of survey administration modes, see S.21 – Survey/Patient Reported Data.

Available in attached appendix at A.1 Attachment ADAPT_Data_Dictionary.xlsx

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

Patient Reported Data/Survey CAHPS Clinician & Group, Adult Survey 2.0
CAHPS Clinician & Group, Child Survey 2.0

Available in English and Spanish at <https://cahps.ahrq.gov/surveys-guidance/cg/instructions/surveysummary.html>

Available at measure-specific web page URL identified in S.1 Attachment
CG_CAHPS_Main_Supplementary_Tables_5-05-14.xlsx

Level

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

Facility, Clinician : Group/Practice, Health Plan

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

Clinician : Group/Practice, Clinician : Individual

Setting

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

Ambulatory Care : Clinician Office/Clinic

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

Ambulatory Care : Clinician Office/Clinic

Numerator Statement

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

The ADAPT survey consists of 26 questions assessing the quality of health care transition preparation for youth with chronic health conditions, based on youth report of whether specific recommended processes of care were received. The ADAPT survey generates measures for each of 3 domains: 1) Counseling on Transition Self-Management, 2) Counseling on Prescription Medication, and 3) Transfer Planning. ADAPT measure scores are calculated using the sum of the proportions of positive responses to between 3 and 5 individual items. Complete instructions for measure score calculations are provided in the Detailed Measure Specifications (Appendix A).

1) Counseling on Transition Self-Management:

The numerator is the sum of the proportions of positive responses to the five questions about counseling on transition self-management, among respondents with valid responses to all questions.

2) Counseling on prescription medication:

The numerator is the sum of the proportions of positive responses to the three questions about counseling on prescription medication, among respondents who indicate that they take prescription medication every day and with valid responses to all questions.

3) Transfer planning:

The numerator is the sum of the proportions of positive responses to the four questions about transfer planning, among respondents who report being treated by a pediatric provider and with valid responses to all questions.

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they “always” received the desired care or service for a given measure.

The top box numerator for the Overall Rating of Provider is the number of respondents who answered 9 or 10 for the item, with 10 indicating “Best provider possible”.

For more information on the calculation of reporting measures, see How to Report Results of the CAHPS Clinician & Group Survey, available at <https://cahps.ahrq.gov/surveys-guidance/cg/cgkit/HowtoReportResultsofCGCAHPS080610FINAL.pdf>.

Numerator Details

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

ADAPT measure scores are calculated using the sum of the proportions of positive responses to between 3 and 5 individual items. Complete instructions for measure score calculations are provided in the Detailed Measure Specifications (Appendix A).

MEASURE 1. Counseling on Transition Self-Management:

For any individual respondent, the numerator is the number of positive responses to the five questions about counseling on transition self-management divided by five. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents with valid responses to all questions.

This measure is produced by combining responses to questions 4-8:

- Q4: In the last 12 months, did you talk with this provider without your parent or guardian in the room?
- Q5: In the last 12 months, did you and this provider talk about your being more in charge of your health?
- Q6: In the last 12 months, did you and this provider talk about your scheduling your own appointments with this provider instead of your parent or guardian?
- Q7: In the last 12 months, how often did you schedule your own appointments with this provider?
- Q8: In the last 12 months, did you and this provider talk about how your health insurance might change as you get older?

MEASURE 2. Counseling on prescription medication:

For any individual respondent, the numerator is the number of positive responses to the three questions about counseling on prescription medication divided by three. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents who indicate that they take prescription medication every day and with valid responses to all questions.

The measure is produced by combining responses to questions 10, 12, and 13:

- Q10: In the last 12 months, how often did you and this provider talk about all of your prescription medicines at each visit?
- Q12: In the last 12 months, did you and this provider talk about remembering to take your medicines?
- Q13: In the last 12 months, did you and this provider talk about you refilling your own prescriptions instead of your parent or guardian?

MEASURE 3. Transfer planning:

For any individual respondent, the numerator is the number of positive responses to the four questions about transfer planning divided by four. For the group of respondents, the numerator is the sum of these proportions divided by the number of respondents who report being treated by a pediatric provider and with valid responses to all questions.

The measure is produced by combining responses to questions 15, 16, 17, and 18:

- Q15: In the last 12 months, did you and this provider talk about whether you may need to change to a new provider who treats mostly adults?
- Q16: In the last 12 months, did this provider ask if you had any questions or concerns about changing to a new provider who treats mostly adults?
- Q17: In the last 12 months, did you and this provider talk about a specific plan for changing to a new provider who treats mostly adults?
- Q18: Did this provider give you this plan in writing?

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

For each individual item, the top box numerator is the number of respondents who answered “Always” (the most positive response) for the item.

There are two basic steps to calculating a composite score for a practice site:

1. Calculate the proportion of patient responses in the top box or most positive response category for each item in a composite.
2. Calculate the mean top-box proportions across all items in a composite to determine the composite’s top box score.

Step 1 – Calculate the proportion of cases in the top box or most positive response for each item in a composite

Example: Applying the Proportional Scoring Method to the composite “Helpful, Courteous, and Respectful Office Staff”:

Step 1 – Calculate the proportion of cases in the top box or most positive response for each item in a composite

Example: Items in “Helpful, Courteous, and Respectful Office Staff ” (2 items) have four response options: Never, Sometimes, Usually, Always. The top box percentage for each item in the composite is the proportion of respondents who answered “Always.”

Item #1 “Clerks and receptionists at this provider’s office were as helpful as you thought they should be.” = Proportion of respondents who answered “Always” = 80%

Item #2 “Clerks and receptionists at the provider’s office treat you with courtesy and respect.” = Proportion of respondents who answered “Always” = 90%

Step 2 – Average the top box item scores to form the overall composite top box score

Calculate the average top box score across the items in the composite. In the above example, the calculation would be as follows:

Top box score for “Helpful, Courteous, and Respectful Office Staff” = $(\text{Item1} * \text{Item2}) / 2 = (80\% + 90\%) / 2 = 85\%$

Denominator Statement

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

The target population of the survey is 16- or 17-year-old adolescents with a chronic health condition who are either (a) receiving health care services in a clinical program or (b) enrolled in a health plan or similar defined population.

The denominator for each measure is the number of respondents with valid responses for all of the questions in the measure.

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.

For more information on the calculation of reporting measures, see How to Report Results of the CAHPS Clinician & Group Survey, available at <https://cahps.ahrq.gov/surveys-guidance/cg/cgkit/HowtoReportResultsofCGCAHPS080610FINAL.pdf>.

Denominator Details

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

SURVEY

The denominator for the survey is youth who meet the following criteria:

1. Either (a) receiving health care services in a particular clinical program or (b) enrolled in a health plan or similar defined population
2. Age 16 to 17 years old at the time of survey completion
3. At least 1 chronic health condition. In the case of a defined population (e.g., a health plan), tools such as the Pediatric Medical Complexity Algorithm (PMCA) can be used to identify eligible patients by chronic condition status.[1] The PMCA is a publicly available algorithm that uses International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9) diagnosis codes in health plan claims to identify children with either complex chronic disease (C-CD) or noncomplex chronic disease (NC-CD).
4. At least 1 outpatient visit with a health care provider in the preceding 12 months
5. For health plan sampling, current enrollment at the time of the survey and enrollment over the preceding 12 months (allowing <45 day gaps during that period, if present)

MEASURE SCORES

A valid response for each question is that entered by the respondent or assigned according to the decision rules outlined in Appendix L.

For Measure 1, the denominator is the number of respondents with valid responses to all of the questions within the measure (Questions 4-8).

For Measure 2, the denominator is the number of respondents with responses of "Yes" to Question 11 and valid responses to all of the questions within the measure (Question 10, 12, 13).

For Measure 3, the denominator is the number of respondents with responses of "Yes," "Don't know," or left blank to Question 14 and valid responses to all of the questions within the measure (Question 15-18).

References:

1. Simon TD, Cawthon ML, Stanford S, Popalisky J, Lyons D, Woodcox P, Hood M, Chen AY, Mangione-Smith R, Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN) Medical Complexity Working Group. Pediatric medical complexity algorithm: a new method to stratify children by medical complexity. *Pediatrics*. 2014;133(6):e1647-1654. doi:10.1542/peds.2013-3875.

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

For each item in a composite and the provider rating item, the top box denominator is the number of respondents who answered the item per aggregate-level entity (e.g., a physician or practice site). For each composite score, the denominator is the number of respondents who answer at least one item within the composite. Composite scores are the average proportion of respondents who gave the highest rating across the items in the composite (as discussed in S.6).

Exclusions

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

SURVEY SAMPLE

Exclude patients in the following categories from the ADAPT survey sample frame:

1. “No-publicity” patients (i.e., those who requested that they not be contacted)
2. Court/law enforcement patients
3. Patients with a foreign home address
4. Patients who cannot be surveyed because of local, state, or federal regulations

SURVEY RESPONSE

Exclude survey respondents based on the following clinical and non-clinical criteria:

1. Undeliverable survey, i.e., the survey is returned by US Mail as undeliverable. “Undeliverable” should not be assumed merely because of non-response.
2. The survey is returned with clear indication that the patient does not meet eligibility criteria (e.g., ineligible age or lack of a chronic health condition).
3. Patient unable to complete survey independently: This must be indicated by the appropriate checkbox in the cover letter or equivalent clear indication by the parent/guardian that the patient is unable to complete the survey independently (e.g., due to cognitive limitation).
4. Exclude all respondents who answered “None” to ADAPT question 3 (“In the last 12 months, how many times did you visit this provider?”).

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

The following are excluded when constructing the sampling frame:

- Patients that had another member of their household already sampled.
- Patients who are institutionalized (put in the care of a specialized institution) or deceased.

Exclusion Details

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

Court/law enforcement patients (i.e., prisoners) are excluded from the sample frame because of the logistical difficulties of administering the survey in a timely manner and regulations governing surveys of this population.

Patients with a foreign home address are excluded because of the logistical difficulty and added expense of calling or mailing outside of the United States. (The US territories—

American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands—are not considered foreign addresses and are not excluded.)

Some state regulations place further restrictions on which patients may be contacted for surveys. It is the responsibility of the health plan, clinical program, or survey vendor to identify any applicable laws or regulations and to exclude those patients as required in the state in which the entity operates.

Note: Include patients in the sample frame unless there is positive evidence that they are ineligible or fall within an excluded category. If information is missing on any variable that affects survey eligibility when the sample frame is constructed, do not exclude the patient from the sample frame because of that variable.

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

The following should be excluded from the denominator:

- 1) Survey users and vendors should exclude surveys where the respondent reports he or she has not visited the sampled entity (e.g., a physician or practice site). This might be indicated by a “no” response to Question 1 (e.g., “Our records show that you got care from the provider named below in the last 12 months. Is that right?”).
- 2) Individuals from a household that has already been sampled.
- 3) Respondents who did NOT answer at least one item of the measure are NOT included in the denominator.

Some users also exclude a survey from scoring and analysis if someone else answered the questions (as a proxy) for the respondent. (Question #34 on Adult survey.)

Survey code specifications --- including how to code an appropriately skipped item, multiple marks or blank items --- can be found in the Instructions for Analyzing Data available at https://cahps.ahrq.gov/surveys-guidance/docs/2015_instructions_for_analyzing_data.pdf.

Risk Adjustment

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

Statistical risk model

Case-mix adjustment:

One of the methodological issues associated with making comparisons across populations is the need to adjust appropriately for case-mix differences. Case-mix refers to patient characteristics, such as demographic characteristics and health status, which may affect measures of outcomes or processes. Systematic effects of this sort create the potential for a population’s scores to be higher or lower because of its characteristics, rather than because of the quality of care provided, making comparisons of unadjusted scores misleading. The basic goal of adjusting for case-mix is to estimate how different clinical programs or health plans would be rated if they all provided care to comparable groups of patients.

Case-mix adjustment using linear regression is used to adjust clinical program/health plan-level ADAPT measure scores based on patient characteristics, thus facilitating comparisons among clinical programs/health plans. We recommend adjusting for respondent age and self-reported health status.

The case-mix data are obtained from questions in the “About You” section of the survey: 1) Respondent age: ADAPT Q19, and 2) Self-reported health status: ADAPT Q21

Detailed instructions regarding how to use the case-mix adjustment model can be found in Case-Mix Adjustment Methodology (Appendix B).

Provided in response box S.15a

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

Statistical risk model

Case-mix adjustment is done via linear regression. The CAHPS consortium recommends self-reported overall health, age, and education as adjusters. CG-CAHPS Version 2.0 has introduced a new measure, self-reported overall mental and emotional health that can be used for case-mix adjustment. These items are printed in the “About You” section of the survey.

Items Recommended for Case-Mix Adjustment

In general, how would you rate your overall health?

1=Excellent

2=Very good

3=Good

4=Fair

5=Poor

What is your age?

1=18 to 24 years

2=25 to 34 years

3=35 to 44 years

4=45 to 54 years

5=55 to 64 years

6=65 to 74 years

7=75 years or older

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

The case-mix adjustment uses a regression methodology, also called covariance adjustment. If data are missing for an adjuster variable, the program either (at the option of the user) deletes the case or imputes the entity mean for that variable. The latter procedure avoids losing observations because of missing data; it is acceptable in this setting because, typically, both the size of the adjustment and the amount of missing data on adjusters are small.

Available in attached Excel or csv file at S.2b

Stratification

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

Stratification is not required. However, users of the survey may choose to stratify scores. In a defined population (e.g., a health plan), potential variables for stratification could include type of chronic health condition or diagnosis.

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

If survey users want to combine data for reporting from different sampling strata, they will need to create a text file that identifies the strata and indicates which ones are being combined and the identifier of the entity obtained by combining them.

See pages 18-19 of the Instructions for Analyzing Data available at https://cahps.ahrq.gov/surveys-guidance/docs/2015_instructions_for_analyzing_data.pdf.

Type Score

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

Rate/proportion better quality = higher score

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Other (specify): 1.) Top-box score; 2) case-mix adjusted score better quality = higher score

Algorithm

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

There are 3 domain-level measures included in the ADAPT survey. The calculation of measure scores is described below.

1) Counseling on Transition Self-Management:

This measure is produced by combining responses to 5 questions:

- Q4: In the last 12 months, did you talk with this provider without your parent or guardian in the room?
- Q5: In the last 12 months, did you and this provider talk about your being more in charge of your health?
- Q6: In the last 12 months, did you and this provider talk about your scheduling your own appointments with this provider instead of your parent or guardian?
- Q7: In the last 12 months, how often did you schedule your own appointments with this provider?
- Q8: In the last 12 months, did you and this provider talk about how your health insurance might change as you get older?

The 5 questions are scored as indicated in Figure 1 in Appendix A.

Response options for questions 4-6 and 8 are “Yes” or “No”:

- Assign a score of 0 for No
- Assign a score of 1 for Yes

Response options for question 7 are “Never,” “Sometimes,” “Usually,” or “Always”:

- Assign a score of 0 for Never
- Assign a score of 1 for Sometimes, Usually, or Always

Questions 6 and 7 are evaluated together as if they were a single question (Q67), the score of which is calculated as follows:

- Assign a score of 0 if Q6 = 0 AND Q7 = 0
- Assign a score of 1 if Q6 = 1 AND/OR Q7 = 1

The basic steps to calculate the measure score for a population are as follows:

- For each question, identify responses with non-missing values for that question
- For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure
- Calculate the numerator and denominator of the measure:
 - Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents
 - Denominator = the number of respondents with valid responses (i.e., non-missing values)

For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:

$$P = (Q4 + Q5 + Q67 + Q8)/4$$

$$\text{Measure score} = (\text{summation of values of P for N respondents}/N) * 100$$

Where N = the number of respondents with valid responses for P4, P5, P6, P7, and P8.

2) Counseling on prescription medication:

The measure is produced by combining responses to questions 10, 12, and 13:

- Q10: In the last 12 months, how often did you and this provider talk about all of your prescription medicines at each visit?
- Q12: In the last 12 months, did you and this provider talk about remembering to take your medicines?
- Q13: In the last 12 months, did you and this provider talk about you refilling your own prescriptions instead of your parent or guardian?

The 3 questions are scored as indicated in Figure 2 in Appendix A.

This measure score is calculated only for respondents who indicate on questions 9 (“in the last 12 months, did you take any prescription medicine?”) and 11 (“in the last 12 months, were you prescribed any medicine to take every day for at least a month?”) that they take prescription medication every day.

For each question, identify cases with non-missing values and for which the response for both question 9 and question 11 is “Yes”:

- Respondents who do not report taking prescription medicine every day (responses of “No” to either questions 9 or 11) are not included in the population for which this measure is calculated

Response options for question 10 are “Never,” “Sometimes,” “Usually,” or “Always”

- Assign a score of 0 for Never
- Assign a score of 1 for Sometimes, Usually, or Always

Response options for questions 12 and 13 are “Yes” or “No”

- Assign a score of 0 for No

- Assign a score of 1 for Yes

The basic steps to calculate the measure score for a population are as follows:

- For each question, identify responses with non-missing values for that question
- For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure
- Calculate the numerator and denominator of the measure:
 - Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents
 - Denominator = the number of respondents with valid responses (i.e., non-missing values)

For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:

$$P = (Q10 + Q12 + Q13)/3$$

$$\text{Measure score} = (\text{summation of values of P for N respondents}/N) * 100$$

Where N = the number of respondents with valid responses for P10, P12, and P13.

3) Transfer planning:

The measure is produced by combining responses to questions 15, 16, 17, and 18:

- Q15: In the last 12 months, did you and this provider talk about whether you may need to change to a new provider who treats mostly adults?
- Q16: In the last 12 months, did this provider ask if you had any questions or concerns about changing to a new provider who treats mostly adults?
- Q17: In the last 12 months, did you and this provider talk about a specific plan for changing to a new provider who treats mostly adults?
- Q18: Did this provider give you this plan in writing?

Only respondents who answer “Yes” or “Don’t Know” to question 14 (“Does this provider treat mostly children and teens?”) are included in the population for which this measure is calculated.

The 4 questions are scored as indicated in Figure 3 in Appendix A.

For each question, identify cases with non-missing values and for which the response for question 14 is “Yes,” “Don’t know,” or left blank:

- Respondents who indicate the provider does not mostly treat children and teens (response of “No” to question 14) are not included in the population for which this measure is calculated

Response options for Questions 15-18 are “Yes” or “No.” Valid responses for questions 16, 17, and 18 are provided by the respondent or assigned according to the decisions rules outlined in Appendix L.

- Assign a score of 0 for No
- Assign a score of 1 for Yes

The basic steps to calculate the measure score for a population are as follows:

- For each question, identify responses with non-missing values for that question
- For each respondent, calculate the proportion of responses with a score of 1 among all of the questions in the measure
- Calculate the numerator and denominator of the measure:

- Numerator = the sum of the proportions of positive responses among the questions in the measure for all respondents

- Denominator = the number of respondents with valid responses (i.e. non-missing response OR assigned responses [see decision rules outlined in Appendix L])

For each respondent, the proportion (P) of positive responses for the questions (Q) within the measure can be defined as follows:

$$P = (Q15 + Q16 + Q17 + Q18)/4$$

$$\text{Measure score} = (\text{summation of values of P for N respondents}/N) * 100$$

Where N = the number of respondents with valid responses for P15, P16, P17, and P18.

Available in attached appendix at A.1

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

Top Box Score Calculation:

- 1) Target Population: Patients that had at least one visit during the past 12-months
- 2) Exclusions = Patients who did not answer at least one item of the composite measures or rating item.
- 3) Screener items. Example: Patients who answered “No” to the first item indicating that they did not receive care from the provider entity in the last 12 months
- 4) Top-box scores (percent with highest rating) are computed for each item
- 5) Top-box scores are averaged across the items within each composite, weighting each item equally.

Case-mix Adjusted Scores:

The steps for user-defined calculations of risk-adjusted scores can be found in Instructions for Analyzing Data from CAHPS® Surveys: Using the CAHPS Analysis Program Version 4.1 available at https://cahps.ahrq.gov/surveys-guidance/docs/2015_instructions_for_analyzing_data.pdf No diagram provided

Submission items

2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care

5.1 Identified measures: 0005 : CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: ADAPT was developed with similar principles to CG CAHPS. If administered following a health care visit for an adolescent, the CG CAHPS survey is intended to be completed by parents of an adolescent as opposed to the adolescents themselves. However, both surveys target the outpatient care setting experience. The ADAPT survey complements the CG CAHPS survey well and has the potential to be administered concurrently, with both surveys mailed to the patient residence so that parents can complete the CG CAHPS survey and adolescents can complete the ADAPT survey.

5b.1 If competing, why superior or rationale for additive value:

0005: CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact: Not applicable.
5b.1 If competing, why superior or rationale for additive value: Not Applicable.

Comparison of NQF #2800, NQF #1932, and NQF #2337

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

2337: Antipsychotic Use in Children Under 5 Years Old

Steward

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

National Committee on Quality Assurance

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

National Committee for Quality Assurance

2337: Antipsychotic Use in Children Under 5 Years Old

Pharmacy Quality Alliance (PQA, Inc.)

Description

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

The percentage of children and adolescents 1–17 years of age who had two or more antipsychotic prescriptions and had metabolic testing.

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.

2337: Antipsychotic Use in Children Under 5 Years Old

The percentage of children under age 5 who were dispensed antipsychotic medications during the measurement period.

Type

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Process

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Process

2337: Antipsychotic Use in Children Under 5 Years Old

Process

Data Source

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Administrative claims This measure is part of the Healthcare Effectiveness Data and Information Set (HEDIS). As part of HEDIS, this measure pulls from administrative claims collected in the course of providing care to health plan members. NCQA collects the HEDIS

data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system.

This measure has also been tested at the state level and could be reported by states if added to a relevant program.

No data collection instrument provided Attachment XXXX_APM_Value_Sets.xlsx

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Pharmacy Not applicable.

Attachment

2337: Antipsychotic Use in Children Under 5 Years Old

Administrative claims Health plan (e.g., Medicaid, other) enrollment data

Health plan (e.g., Medicaid, other) prescription claims data

No data collection instrument provided No data dictionary

Level

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Health Plan, Integrated Delivery System, Population : State

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Health Plan, Integrated Delivery System, Population : State

2337: Antipsychotic Use in Children Under 5 Years Old

Health Plan, Population : State

Setting

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Ambulatory Care : Clinician Office/Clinic, Laboratory, Behavioral Health/Psychiatric : Outpatient

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Ambulatory Care : Clinician Office/Clinic, Other Any outpatient setting represented with Medicaid claims data

2337: Antipsychotic Use in Children Under 5 Years Old

Other Health plan

Numerator Statement

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Children and adolescents who received glucose and cholesterol tests during the measurement year.

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

One or more glucose or HbA1c tests performed during the measurement year.

2337: Antipsychotic Use in Children Under 5 Years Old

The number of patients under 5 years of age with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.

Numerator Details

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Children and adolescents who received at least one test for blood glucose (Glucose Tests Value Set) or HbA1c (HbA1c Tests Value Set) and at least one test for LDL-C (LDL-C Tests Value Set) or cholesterol (Cholesterol Tests Other Than LDL Value Set) during the measurement year (January 1 – December 31). See attachment for all value sets (S.2b).

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

A glucose test (Glucose Tests Value Set) or an HbA1c test (HbA1c Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data.

See corresponding Excel document for the Glucose Tests Value Set and the HbA1c Tests Value Set.

2337: Antipsychotic Use in Children Under 5 Years Old

Numerator

Step 1: Of those included in the denominator, count the number of patients with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.

Step 2: Of those identified in Step 1, include only those patients for whom a prescription claim for an antipsychotic medication was generated when the patient was under the age of 5.

The number of patients remaining after completing Step 2 represents the numerator for this measure.

Antipsychotic Medications for this measure include: aripiprazole, asenapine, chlorpromazine, clozapine, fluphenazine, haloperidol, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, perphenazine, pimozide, quetiapine, risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone.

(Note: Includes combination products that contain any of the above-listed medications. The active ingredients are limited to oral, sublingual, injectable, and intramuscular formulations only.)

Denominator Statement

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Children and adolescents who had ongoing use of antipsychotic medication (at least two prescriptions).

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Patients ages 18 to 64 years of age as of the end of the measurement year (e.g., December 31) with a schizophrenia or bipolar disorder diagnosis and who were prescribed an antipsychotic medication.

2337: Antipsychotic Use in Children Under 5 Years Old

Children who are less than 5 years old at any point during the measurement period, and also enrolled in a health plan for one month or longer during the measurement period.

Denominator Details

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Children and adolescents age 1-17 as of December 31 of the measurement year (January 1 – December 31) who had at least two antipsychotic medication dispensing events (Table APM-A) of the same or different medications, on different dates of service during the measurement year.

Table APM-A: Antipsychotic Medications

First-generation antipsychotic medications: Chlorpromazine HCL; Fluphenazine HCL; Fluphenazine decanoate; Fluphenazine enanthate; Haloperidol; Haloperidol decanoate; Haloperidol lactate; Loxapine HCL; Loxapine succinate; Molindone HCL; Perphenazine; Pimozide; Promazine HCL; Thioridazine HCL; Thiothixene; Thiothixene HCL; Trifluoperazine HCL; Triflupromazine HCL

Second-generation antipsychotic medications: Aripiprazole; Asenapine; Clozapine; Iloperidone; Lurasidone; Olanzapine; Olanzapine pamoate; Paliperidone; Paliperidone palmitate; Quetiapine fumarate; Risperidone; Risperidone microspheres; Ziprasidone HCL; Ziprasidone mesylate

Combinations: Olanzapine-fluoxetine HCL (Symbyax); Perphenazine-amitriptyline HCL (Etrafon, Triavil [various])

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Follow the steps below to identify the eligible population.

Step 1: Identify patients with schizophrenia or bipolar disorder as those who met at least one of the following criteria during the measurement year:

At least one acute inpatient encounter, with any diagnosis of schizophrenia or bipolar disorder. Any of the following code combinations meet criteria:

- BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
- BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set.
- BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Schizophrenia Value Set.
- BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Bipolar Disorder Value Set.

At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:

- BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
- BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Schizophrenia Value Set.
- ED Value Set with Schizophrenia Value Set.
- BH ED Value Set with BH ED POS Value Set and Schizophrenia Value Set.
- BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set.
- BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set and Schizophrenia Value Set.

At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of bipolar disorder. Any two of the following code combinations meet criteria:

- BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set.
- BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Bipolar Disorder Value Set.
- ED Value Set with Bipolar Disorder Value Set.
- BH ED Value Set with BH ED POS Value Set and Bipolar Disorder Value Set.
- BH Stand Alone Nonacute Inpatient Value Set with Bipolar Disorder Value Set.
- BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set and Bipolar Disorder Value Set.

(See corresponding Excel document for the above value sets)

2337: Antipsychotic Use in Children Under 5 Years Old

The denominator includes all patients who were under 5 years of age at any time during the measurement period, and also enrolled in a health plan for one month or longer during the measurement period.

Denominator Calculation:

Step 1: Identify patients that are less than 5 years of age at any point during the measurement period.

Step 2: Of those patients identified in Step 1, only include those patients that were enrolled in a health plan for one month or longer during the measurement period.

The number of patients identified in Step 2 is the denominator for the measure.

Exclusions

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

No exclusions

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Exclude patients with diabetes during the measurement year or the year prior to the measurement year.

Exclude patients who had no antipsychotic medications dispensed during the measurement year.

2337: Antipsychotic Use in Children Under 5 Years Old

None.

Exclusion Details

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

N/A

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Patients are excluded from the denominator if they have diabetes (during the measurement year or the year prior to the measurement year). There are two ways to identify patients with diabetes: 1) pharmacy data or 2) claim/encounter data. Both methods should be used to identify patients with diabetes, but a patient only needs to be identified by one method to be excluded from the measure.

Pharmacy data: Patients who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to the measurement year on an ambulatory basis (Table CDC-A).

Claim/encounter data: Patients who met at any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years).

- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters.
- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

Exclude patients who had no antipsychotic medications dispensed during the measurement year. There are two ways to identify dispensing events: by claim/encounter data and by pharmacy data. The organization must use both methods to identify dispensing events, but an event need only be identified by one method to be counted.

- Claim/encounter data. An antipsychotic medication (Long-Acting Injections Value Set).
- Pharmacy data. Dispensed an antipsychotic medication (Table SSD-D) on an ambulatory basis.

Prescriptions to identify individuals with diabetes (CDC-A):

Alpha-glucosidase inhibitors: acarbose, miglitol

Amylin analogs: pramlinitide

Antidiabetic combinations: Alogliptin-metformin, Alogliptin-pioglitazone, glimepiride-pioglitazone, glimepiride-rosiglitazone, glipizide-metformin, glyburide-metformin, Linagliptin-metformin, metformin-pioglitazone, Metformin-repaglinide, metformin-rosiglitazone, Metformin-saxagliptin, metformin-sitagliptin, Saxagliptin, Sitagliptin-simvastatin

Insulin: insulin aspart, insulin aspart-insulin aspart protamine, insulin detemir, insulin glargine, insulin glulisine, insulin isophane human, insulin isophane-insulin regular, insulin lispro, insulin lispro-insulin lispro protamine, insulin regular human

Meglitinides: nateglinide, repaglinide

Glucagon-like peptide-1 (GLP1) agonists: Exenatide, Liraglutide, Albiglutide

Sodium glucose cotransporter 2 (SGLT2) inhibitor: Canagliflozin, Dapagliflozin

Sulfonylureas: chlorpropamide, glimepiride, glipizide, glyburide

tolazamide, tolbutamide

Thiazolidinediones: pioglitazone, rosiglitazone

Dipeptidyl peptidase-4 (DDP-4) inhibitors: Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

ANTIPSYCHOTIC MEDICATIONS (Table SSD-D)

Miscellaneous antipsychotic agents:

Aripiprazole, Asenapine, Clozapine, Haloperidol, Iloperidone, Loxapine, Lurasidone, Molindone, Olanzapine, Paliperidone, Pimozide, Quetiapine, Quetiapine fumarate, Risperidone, Ziprasidone

Phenothiazine antipsychotics:

Chlorpromazine, Fluphenazine, Perphenazine, Perphenazine-amitriptyline, Prochlorperazine, Thioridazine, Trifluoperazine

Psychotherapeutic combinations:

Fluoxetine-olanzapine

Thioxanthenes:

Thiothixene

Long-acting injections:

Fluphenazine decanoate, Haloperidol decanoate, Olanzapine, Paliperidone palmitate, Risperidone

See corresponding Excel document for the following value sets:

- Long-Acting Injections Value Set
- Outpatient Value Set
- Observation Value Set
- Nonacute Inpatient Value Set
- Diabetes Value Set
- ED Value Set

2337: Antipsychotic Use in Children Under 5 Years Old

None.

Risk Adjustment

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

No risk adjustment or risk stratification

N/A

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

No risk adjustment or risk stratification

Not applicable.

2337: Antipsychotic Use in Children Under 5 Years Old

No risk adjustment or risk stratification

N/A

Stratification

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Report three age stratifications and a total rate:

1–5 years.

6–11 years.

12–17 years.

Total (sum of the age stratifications).

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Not applicable.

2337: Antipsychotic Use in Children Under 5 Years Old

None.

Type Score

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Rate/proportion better quality = higher score

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Rate/proportion better quality = higher score

2337: Antipsychotic Use in Children Under 5 Years Old

Rate/proportion better quality = lower score

Algorithm

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

Step 1: Determine the eligible population, or the denominator, by identifying the number of patients in the specified age range who had at least two antipsychotic medication dispensing events (Table APM-A) of the same or different medications, on different dates of service during the measurement year.

Step 2: Determine the numerator by identifying the number of patients in the eligible population who received at least one glucose and one cholesterol test during the measurement year.

Step 3: Divide the numerator by the denominator to calculate the rate. No diagram provided

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

1. Determine the eligible population. The eligible population is all individuals who satisfy all specified denominator criteria (S9-S11).
2. Search administrative systems to identify numerator events for all individuals in the eligible population (S6).
3. Calculate the rate.

2337: Antipsychotic Use in Children Under 5 Years Old

Denominator Calculation:

Step 1: Identify patients that are less than 5 years of age at any point during the measurement period.

Step 2: Of those patients identified in Step 1, only include those patients that were enrolled in a health plan for one month or longer during the measurement period.

The number of patients identified in Step 2 is the denominator for the measure.

Numerator Calculation:

Step 3: Of those patients identified in Step 2, count the number of patients with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.

Step 4: Of those patients identified in Step 3, include only those patients for whom a prescription claim for an antipsychotic medication was generated when the patient was under the age of 5.

The number of patients identified by completing Step 4 represents the numerator for this measure.

Step 5: Divide the numerator by the denominator and then multiply by 100 to obtain the rate (as a percentage) for the measure.

Antipsychotic Medications for this measure include: aripiprazole, asenapine, chlorpromazine, clozapine, fluphenazine, haloperidol, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, perphenazine, pimozide, quetiapine, risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone.

(Note: Includes combination products that contain any of the above-listed medications. The active ingredients are limited to oral, sublingual, injectable, and intramuscular formulations only.) No diagram provided

Submission items

2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics

5.1 Identified measures: 1932 : Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

2337 : Antipsychotic Use in Children Under 5 Years Old

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: This new measure assesses metabolic monitoring during the measurement year among children and adolescents who are prescribed antipsychotics. Below we detail how this measure is related to measures 2337 and 1932 but how it addresses a different target population and

measure focus. Measure 2337 assesses whether children under 5 are prescribed an antipsychotic at some point during the measurement year. Similar to the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure, this measure is specified for the health plan level and uses administrative claims as the data source. Measure 2337 focuses on all children under 5 years of age; our measure focuses on a broader range of children (up to age 18) who have been prescribed antipsychotics in order to assess whether they are receiving recommended testing. Measure 1932 assesses whether adults with schizophrenia or bipolar disorder who were prescribed antipsychotics are screened for diabetes. Similar to the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure, this measure is specified for the health plan level and uses administrative claims as the data source. The measures have different target populations but a similar measure focus. Measure 1932 focuses on adults 18 to 64 years of age who have schizophrenia or bipolar disorder and who are prescribed antipsychotics. The Metabolic Monitoring for Children and Adolescents on Antipsychotics measure includes all children and adolescents up to 18 years of age who are prescribed antipsychotics and does not focus on any specific conditions. Measure 1932 is focused on diabetes screening by receipt of a glucose test. While the Metabolic Monitoring for Children and Adolescents on Antipsychotics measure also includes assessing whether a glucose test was received, it additionally assesses whether a cholesterol test was received since the focus is not just diabetes screening. The two measures are aligned in the way glucose testing is identified and measured.

5b.1 If competing, why superior or rationale for additive value: N/A

1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

5.1 Identified measures: 0003 : Bipolar Disorder: Assessment for diabetes

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The denominator for this measure includes bipolar disorder and schizophrenia while the NQF-endorsed measure only includes bipolar disorder. The NQF-endorsed measure has a higher data collection burden as that measure is collected by claims and chart data while this measure is collected through claims only. The NQF-endorsed measure includes only atypical antipsychotics, while this measure includes both typical and atypical medications. Evidence suggests that both types of medications may increase the risk of diabetes (Gianfrancesco et al., 2002). Gianfrancesco, F.D., Grogg, A.L., Mahmoud, R.A., et al. (2002). Differential effects of risperidone, olanzapine, clozapine, and conventional antipsychotics on type 2 diabetes: findings from a large health plan database. *J Clin Psychiatry*, 63, 920-30.

5b.1 If competing, why superior or rationale for additive value: The denominator for this measure includes bipolar disorder and schizophrenia while the NQF-endorsed measure only includes bipolar disorder. The NQF-endorsed measure may have a higher data collection burden as that measure is collected by claims and chart data, while this measure is collected through claims data only. The NQF-endorsed measure includes only atypical antipsychotics, while this measure includes both typical and atypical medications. Evidence suggests that both types of medications may increase the risk of diabetes (Gianfrancesco et al., 2002).

Gianfrancesco, F.D., Grogg, A.L., Mahmoud, R.A., et al. (2002). Differential effects of risperidone, olanzapine, clozapine, and conventional antipsychotics on type 2 diabetes: findings from a large health plan database. J Clin Psychiatry, 63, 920-30.

2337: Antipsychotic Use in Children Under 5 Years Old

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact: N/A - there are no related or competing NQF-endorsed measures.

5b.1 If competing, why superior or rationale for additive value: N/A. There are no related or competing NQF-endorsed measures.

Comparison of NQF #2801 and NQF #2337

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

2337: Antipsychotic Use in Children Under 5 Years Old

Steward

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

National Committee on Quality Assurance

2337: Antipsychotic Use in Children Under 5 Years Old

Pharmacy Quality Alliance (PQA, Inc.)

Description

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Percentage of children and adolescents 1–17 years of age with a new prescription for an antipsychotic, but no indication for antipsychotics, who had documentation of psychosocial care as first-line treatment.

2337: Antipsychotic Use in Children Under 5 Years Old

The percentage of children under age 5 who were dispensed antipsychotic medications during the measurement period.

Type

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Process

2337: Antipsychotic Use in Children Under 5 Years Old

Process

Data Source

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Administrative claims This measure is part of the Healthcare Effectiveness Data and Information Set (HEDIS). As part of HEDIS, the measure pulls from administrative claims collected in the course of providing care to health plan members. NCQA collects the HEDIS data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system.

The measure has also been tested at the state level and could be reported by states if added to a relevant program.

No data collection instrument provided Attachment XXXX_APP_Value_Sets.xlsx

2337: Antipsychotic Use in Children Under 5 Years Old

Administrative claims Health plan (e.g., Medicaid, other) enrollment data

Health plan (e.g., Medicaid, other) prescription claims data

No data collection instrument provided No data dictionary

Level

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Health Plan, Integrated Delivery System, Population : State

2337: Antipsychotic Use in Children Under 5 Years Old

Health Plan, Population : State

Setting

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Ambulatory Care : Clinician Office/Clinic, Behavioral Health/Psychiatric : Inpatient,
Behavioral Health/Psychiatric : Outpatient

2337: Antipsychotic Use in Children Under 5 Years Old

Other Health plan

Numerator Statement

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Children and adolescents from the denominator who had psychosocial care as first-line treatment prior to (or immediately following) a new prescription of an antipsychotic.

2337: Antipsychotic Use in Children Under 5 Years Old

The number of patients under 5 years of age with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.

Numerator Details

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Children and adolescents who had documentation of psychosocial care (Psychosocial Care Value Set) in the 121-day period from 90 days prior to the index prescription start date (IPSD) through 30 days after the IPSD during the measurement year (January 1 – December 31). See attachment for all value sets (S.2b).

The Psychosocial Care Value Set contains claims codes for behavioral health acute inpatient and outpatient encounters, including psychotherapy for patients, families, and/or groups; psychophysiological therapy; hypnotherapy; activity therapy, such as music, dance, or art; training and educational services related to the care and treatment of mental health issues; community and rehabilitations programs; and crisis interventions. These services align with a recent Institute of Medicine (IOM) report*, which defined psychosocial interventions for mental health and substance use disorders as “interpersonal or informational activities, techniques, or strategies that target biological, behavioral, cognitive, emotional, interpersonal, social, or environmental factors with the aim of reducing symptoms of these disorders and improving functioning or well-being.” The IOM notes these interventions include psychotherapies, vocational rehabilitation and peer support services, and that they can utilize different formats, including individual, family, or group therapy.

DEFINITIONS

IPSD: The earliest prescription dispensing date for an antipsychotic medication where the date is in the Intake Period and there is a Negative Medication History.

Negative Medication History: A period of 120 days (4 months) prior to the IPSP when the member had no antipsychotic medications dispensed for either new or refill prescriptions.

*Institute of Medicine. Committee on Developing Evidence-Based Standards for Psychosocial Interventions for Mental Disorders, Board on Health Sciences Policy. England MJ, Butler AS and Gonzalez ML, eds. Psychosocial Interventions for Mental and Substance Use Disorders: a Framework for Establishing Evidence-Based Standards. 2015. National Academies Press; Washington, DC (Prepublication copy).

2337: Antipsychotic Use in Children Under 5 Years Old

Numerator

Step 1: Of those included in the denominator, count the number of patients with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.

Step 2: Of those identified in Step 1, include only those patients for whom a prescription claim for an antipsychotic medication was generated when the patient was under the age of 5.

The number of patients remaining after completing Step 2 represents the numerator for this measure.

Antipsychotic Medications for this measure include: aripiprazole, asenapine, chlorpromazine, clozapine, fluphenazine, haloperidol, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, perphenazine, pimozide, quetiapine, risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone.

(Note: Includes combination products that contain any of the above-listed medications. The active ingredients are limited to oral, sublingual, injectable, and intramuscular formulations only.)

Denominator Statement

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Children and adolescents who had a new prescription of an antipsychotic medication for which they do not have a U.S Food and Drug Administration primary indication.

2337: Antipsychotic Use in Children Under 5 Years Old

Children who are less than 5 years old at any point during the measurement period, and also enrolled in a health plan for one month or longer during the measurement period.

Denominator Details

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Children and adolescents age 1-17 as of December 31 of the measurement year (January 1 – December 31) who had a new prescription for an antipsychotic medication (Table APP-A) during the intake period (January 1 through December 1 of the measurement year).

Table APP-A: Antipsychotic Medications

First-generation antipsychotic medications: Chlorpromazine HCL; Fluphenazine HCL; Fluphenazine decanoate; Fluphenazine enanthate; Haloperidol; Haloperidol decanoate; Molindone HCL; Perphenazine; Pimozide; Haloperidol lactate; Loxapine HCL; Loxapine succinate; Promazine HCL; Thioridazine HCL; Thiothixene; Thiothixene HCL; Trifluoperazine HCL; Trifluopromazine HCL

Second-generation antipsychotic medications: Aripiprazole; Asenapine; Clozapine; Iloperidone; Lurasidone; Olanzapine; Olanzapine pamoate; Paliperidone; Paliperidone palmitate; Quetiapine fumarate; Risperidone; Risperidone microspheres; Ziprasidone HCL; Ziprasidone mesylate

Combinations: Olanzapine-fluoxetine HCL (Symbyax); Perphenazine-amitriptyline HCL (Etrafon, Triavil [various])

2337: Antipsychotic Use in Children Under 5 Years Old

The denominator includes all patients who were under 5 years of age at any time during the measurement period, and also enrolled in a health plan for one month or longer during the measurement period.

Denominator Calculation:

Step 1: Identify patients that are less than 5 years of age at any point during the measurement period.

Step 2: Of those patients identified in Step 1, only include those patients that were enrolled in a health plan for one month or longer during the measurement period.

The number of patients identified in Step 2 is the denominator for the measure.

Exclusions

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Exclude children and adolescents with a diagnosis of a condition for which antipsychotic medications have a U.S. Food and Drug Administration indication and are thus clinically appropriate: schizophrenia, bipolar disorder, psychotic disorder, autism, tic disorders.

2337: Antipsychotic Use in Children Under 5 Years Old

None.

Exclusion Details

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Exclude children and adolescents for whom first-line antipsychotic medications may be clinically appropriate. Any of the following during the measurement year (January 1 – December 31) meet criteria:

Children and adolescents who have at least one acute inpatient encounter with a diagnosis of schizophrenia, bipolar disorder or other psychotic disorder during the measurement year. Any of the following code combinations meet criteria:

-BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.

-BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set.

-BH Stand Alone Acute Inpatient Value Set with Other Psychotic Disorders Value Set.

-BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Schizophrenia Value Set.

-BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Bipolar Disorder Value Set.

-BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and Other Psychotic Disorders Value Set.

Children and adolescents who have at least two visits in an outpatient, intensive outpatient or partial hospitalization setting, on different dates of service, with a diagnosis of schizophrenia, bipolar disorder or other psychotic disorder during the measurement year. Any of the following code combinations meet criteria:

- BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
- BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Schizophrenia Value Set.
- BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set.
- BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Bipolar Disorder Value Set.
- BH Stand Alone Outpatient/PH/IOP Value Set with Other Psychotic Disorders Value Set.
- BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and Other Psychotic Disorders Value Set.

See attachment for all value sets (S.2b).

2337: Antipsychotic Use in Children Under 5 Years Old

None.

Risk Adjustment

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

No risk adjustment or risk stratification

N/A

2337: Antipsychotic Use in Children Under 5 Years Old

No risk adjustment or risk stratification

N/A

Stratification

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Report three age stratifications and a total rate:

1–5 years.

6–11 years.

12–17 years.

Total (sum of the age stratifications).

2337: Antipsychotic Use in Children Under 5 Years Old

None.

Type Score

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Rate/proportion better quality = higher score

2337: Antipsychotic Use in Children Under 5 Years Old

Rate/proportion better quality = lower score

Algorithm

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

Step 1: Determine the eligible population, or the denominator, by identifying the number of children and adolescents in the specified age range who were dispensed an antipsychotic medication (Table APP-A) during the intake period (January 1 – December 1).

Step 2: Exclude those who did not have a negative medication history and who have a diagnosis for which antipsychotic medications are clinically appropriate (see S.10).

Step 3: Determine the numerator by identifying the number of children and adolescents in the eligible population who had documentation of psychosocial care in the 121-day period from 90 days prior through 30 days after the new prescription of an antipsychotic.

Step 4: Divide the numerator by the denominator to calculate the rate. No diagram provided

2337: Antipsychotic Use in Children Under 5 Years Old

Denominator Calculation:

Step 1: Identify patients that are less than 5 years of age at any point during the measurement period.

Step 2: Of those patients identified in Step 1, only include those patients that were enrolled in a health plan for one month or longer during the measurement period.

The number of patients identified in Step 2 is the denominator for the measure.

Numerator Calculation:

Step 3: Of those patients identified in Step 2, count the number of patients with one or more prescription claims for an antipsychotic medication with days supply that total greater than or equal to 30 days.

Step 4: Of those patients identified in Step 3, include only those patients for whom a prescription claim for an antipsychotic medication was generated when the patient was under the age of 5.

The number of patients identified by completing Step 4 represents the numerator for this measure.

Step 5: Divide the numerator by the denominator and then multiply by 100 to obtain the rate (as a percentage) for the measure.

Antipsychotic Medications for this measure include: aripiprazole, asenapine, chlorpromazine, clozapine, fluphenazine, haloperidol, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, perphenazine, pimozide, quetiapine, risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone.

(Note: Includes combination products that contain any of the above-listed medications. The active ingredients are limited to oral, sublingual, injectable, and intramuscular formulations only.) No diagram provided

Submission items

2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

5.1 Identified measures: 2337 : Antipsychotic Use in Children Under 5 Years Old

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: This new measure assesses receipt of psychosocial care among children and adolescents who are prescribed antipsychotics without a primary indication. Both measures address use of antipsychotics. However, 2337 assesses if children under 5 are prescribed an antipsychotic. Our Psychosocial Care measure assesses children of a broader age range (up to age 18) who are currently on antipsychotics but do not have a primary indication. Our measure also addresses a different focus: whether these children received first-line psychosocial care.

5b.1 If competing, why superior or rationale for additive value: N/A

2337: Antipsychotic Use in Children Under 5 Years Old

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact: N/A - there are no related or competing NQF-endorsed measures.

5b.1 If competing, why superior or rationale for additive value: N/A. There are no related or competing NQF-endorsed measures.

Comparison of NQF #2803 and NQF #0028

2803: Tobacco Use and Help with Quitting Among Adolescents

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Steward

2803: Tobacco Use and Help with Quitting Among Adolescents

National Committee for Quality Assurance

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

AMA-convened Physician Consortium for Performance Improvement

Description

2803: Tobacco Use and Help with Quitting Among Adolescents

Percentage of adolescents 12 to 20 years of age during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user.

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Percentage of patients aged 18 years and older who were screened for tobacco use at least once during the two-year measurement period AND who received cessation counseling intervention if identified as a tobacco user

Type

2803: Tobacco Use and Help with Quitting Among Adolescents

Process

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Process

Data Source

2803: Tobacco Use and Help with Quitting Among Adolescents

Electronic Clinical Data This measure has been newly added to the Physician Quality Reporting System, which is a reporting program that uses a combination of incentive payments and payment adjustments to promote reporting of quality information by eligible professionals.

No data collection instrument provided No data dictionary

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Electronic Clinical Data : Registry Not applicable.

No data dictionary

Level

2803: Tobacco Use and Help with Quitting Among Adolescents

Clinician : Group/Practice

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Clinician : Group/Practice, Clinician : Individual, Clinician : Team

Setting

2803: Tobacco Use and Help with Quitting Among Adolescents

Ambulatory Care : Clinician Office/Clinic

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Ambulatory Care : Clinician Office/Clinic, Other, Behavioral Health/Psychiatric : Outpatient
Occupational Therapy Evaluation, Ophthalmological Visits

Numerator Statement

2803: Tobacco Use and Help with Quitting Among Adolescents

Adolescents who are not smokers OR Adolescents who are smokers but are receiving cessation counseling.

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Patients who were screened for tobacco use* at least once during the two-year measurement period AND who received tobacco cessation counseling intervention** if identified as a tobacco user

*Includes use of any type of tobacco

** Cessation counseling intervention includes brief counseling (3 minutes or less), and/or pharmacotherapy

Numerator Details

2803: Tobacco Use and Help with Quitting Among Adolescents

Documentation that the adolescent is not a tobacco user

OR

Documentation that the adolescent is a tobacco user AND any of the following:

- Advice given to quit smoking or tobacco use
- Counseling on the benefits of quitting smoking or tobacco use (e.g., “5-A” Framework)
- Assistance with or referral to external smoking or tobacco cessation support programs (e.g., telephone counseling ‘quit line’)
- Current enrollment in smoking or tobacco use cessation program

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Definitions: Tobacco Use – Includes any type of tobacco

Cessation Counseling Intervention – Includes brief counseling (3 minutes or less), and/or pharmacotherapy

For EHR Specifications:

See HQMF eMeasure attached.

For Claims/Administrative Specifications:

CPT II 4004F: Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user

OR

CPT II 1036F: Current tobacco non-user

OR

CPT Category I code-Smoking and tobacco-use cessation counseling

*The following codes are applicable if the patient screened positive for smoking/tobacco use and counseling was provided..

99406: Smoking/tobacco counseling 3-10 minutes

99407: Smoking/tobacco counseling greater than 10 minutes

Denominator Statement

2803: Tobacco Use and Help with Quitting Among Adolescents

Adolescents who turn 12 through 20 years of age during the measurement year.

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period

Denominator Details

2803: Tobacco Use and Help with Quitting Among Adolescents

Adolescents who turn 12 through 20 years of age during the measurement year and had documentation of a face-to-face visit with a primary care practice during the 12 months prior to the measurement year.

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

For EHR Specifications:

eMeasure developed— can be provided upon request.

For Claims/Administrative Specifications:

Patients aged 18 years or older

AND

EHR Specifications: HQMF eMeasure attached. Value Sets can be found at <https://vsac.nlm.nih.gov>

For Claims/Administrative Specifications:

CPT E/M Service code:

Two visits during the two year measurement period

99201, 99202, 99203, 99204, 99205

99212, 99213, 99214, 99215

97003, 97004

92004, 92004, 92012, 92014

90791, 90792

90832, 90834, 90837

90845

96150, 96151, 96152

At least 1 visit during measurement period:

99385, 99386, 99387

99395, 99396, 99397
99401, 99402, 99403, 99404
99411, 99412
99420, 99429
G0438, G0439

Exclusions

2803: Tobacco Use and Help with Quitting Among Adolescents

N/A

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy)

Exclusion Details

2803: Tobacco Use and Help with Quitting Among Adolescents

N/A

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

The PCPI methodology uses three categories of reasons for which a patient may be excluded from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure 0028, exceptions may include medical reason(s) (eg, limited life expectancy) for not screening for tobacco use. Where examples of exceptions are included in the measure language, these examples are coded and included in the eSpecifications. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exception. Additional details by data source are as follows:

EHR Specifications: HQMF eMeasure attached.

For Claims/Administrative Specifications:

CPT II 4004F-1P: Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reason)

Risk Adjustment

2803: Tobacco Use and Help with Quitting Among Adolescents

No risk adjustment or risk stratification

N/A

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

No risk adjustment or risk stratification

Not Applicable

Stratification

2803: Tobacco Use and Help with Quitting Among Adolescents

N/A

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

We encourage the results of this measure to be stratified by race, ethnicity, payer, and administrative sex, and have included these variables as recommended data elements to be collected.

Type Score

2803: Tobacco Use and Help with Quitting Among Adolescents

Rate/proportion better quality = higher score

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

Rate/proportion better quality = higher score

Algorithm

2803: Tobacco Use and Help with Quitting Among Adolescents

Step 1: Identify the eligible population (denominator).

Step 1a: Identify adolescents who turn 12 through 20 years of age during the measurement period.

Step 1b: Identify adolescents in Step 1a who had a face-to-face visit.

Step 2: Identify tobacco users (numerator).

Step 2a: From the denominator, identify adolescents documented as non-tobacco users.

Step 2b: From the remaining adolescents in the denominator, identify adolescents documented as tobacco users who received help with quitting.

Step 3: Sum adolescents identified in Steps 2a and 2b.

Step 4: Divide the total in Step 3 by the denominator to get the rate. No diagram provided

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

To calculate performance rates:

1) Find the patients who meet the initial patient population (ie, the general group of patients that the performance measure is designed to address).

2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical.

3) From the patients within the denominator, find the patients who qualify for the Numerator (ie, the group of patients in the denominator for whom a process or outcome

of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator

4) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator exception when exceptions have been specified [for this measure: medical reason(s) (eg, limited life expectancy)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation.

--Although the exception cases are removed from the denominator population for the performance calculation, the number of patients with valid exceptions should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

Calculation algorithm is included in data dictionary/code table attachment 2a1.30.

Submission items

2803: Tobacco Use and Help with Quitting Among Adolescents

5.1 Identified measures: 0028 : Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: NQF 0028 measures tobacco use in adults aged 18 and older. The proposed measure will assess tobacco use in adolescents who are between the ages of 12 and 20.

5b.1 If competing, why superior or rationale for additive value:

0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention

5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Our measure focuses on routine tobacco screening for all adults and tobacco cessation interventions for those who use tobacco products. Measure 0026 includes infants, children and adolescents and therefore appropriately also assesses for exposure to tobacco smoke. Also, the cessation intervention required by our measure includes brief counseling and/or pharmacotherapy in light of the strong support for these interventions in the guidelines and the feasibility of implementing these practices as part of routine care. Measure 0027 is a patient survey measure and includes one additional component of the cessation intervention beyond our measure (ie, discussion of methods or strategies other than medication).

5b.1 If competing, why superior or rationale for additive value: No competing measures.

Comparison of NQF #2842, NQF #0718, and NQF #0719

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

0718: Children Who Had Problems Obtaining Referrals When Needed

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Steward

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Seattle Children's Research Institute

0718: Children Who Had Problems Obtaining Referrals When Needed

The Child and Adolescent Health Measurement Initiative

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

The Child and Adolescent Health Measurement Initiative

Description

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 1, described below. The short descriptions of each quality measure follows; full details of FECC-1 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the

recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

0718: Children Who Had Problems Obtaining Referrals When Needed

The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

Type

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Process

0718: Children Who Had Problems Obtaining Referrals When Needed

Outcome

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Outcome

Data Source

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_120715_FECC_1.xlsx

0718: Children Who Had Problems Obtaining Referrals When Needed

2007 National Survey of Children's Health

URL

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Patient Reported Data/Survey 2011/12 National Survey of Children's Health

URL

Level

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Health Plan, Population : State

0718: Children Who Had Problems Obtaining Referrals When Needed

Population : State, Population: National, Population: Regional

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Population : National, Population : Regional, Population : State

Setting

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici

0718: Children Who Had Problems Obtaining Referrals When Needed

Other Survey was conducted over a telephone

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Other Survey was conducted over a telephone

Numerator Statement

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

The numerator for FECC-1 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-1 follows:

FECC-1: Caregivers of CMC should report that their child has a designated care coordinator.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children who need referrals and have no problems obtaining them

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children who used at least two health services and who received all needed care coordination

Numerator Details

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

The numerators for each of the care coordination quality measures included within the FECC measure set are specified in the Detailed Measure Specifications (S.2b).

0718: Children Who Had Problems Obtaining Referrals When Needed

The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

For a child to be included in the numerator of receiving needed care coordination:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)

- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)

- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)

--Parent reports satisfaction with communication among doctors or other providers (when needed)

Denominator Statement

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who used two or more health services in the past 12 months

Denominator Details

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

0718: Children Who Had Problems Obtaining Referrals When Needed

The denominator includes all children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who needed care coordination in the past 12 months

"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.

Exclusions

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

0718: Children Who Had Problems Obtaining Referrals When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.

Exclusion Details

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Please see S2.b.

0718: Children Who Had Problems Obtaining Referrals When Needed

If child did not need a referral, then they are excluded from the denominator

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

If child is older than 17 years of age, excluded from denominator.

If parent does not report the child using two or more healthcare services.

Risk Adjustment

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect

results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

0718: Children Who Had Problems Obtaining Referrals When Needed

No risk adjustment or risk stratification

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No risk adjustment or risk stratification

Stratification

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

0718: Children Who Had Problems Obtaining Referrals When Needed

No stratification is required.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No stratification is required.

Type Score

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

0718: Children Who Had Problems Obtaining Referrals When Needed

Rate/proportion

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Weighted score/composite/scale

Algorithm

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

0718: Children Who Had Problems Obtaining Referrals When Needed

To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

To receive numerator of child receiving care coordination when needed:

-Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1)

-Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0)

-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1)

AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)

Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)

Submission items

2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718 : Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

0718: Children Who Had Problems Obtaining Referrals When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:
5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #2843, NQF #0718, and NQF #0719

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

0718: Children Who Had Problems Obtaining Referrals When Needed

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Steward

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

Seattle Children's Research Institute

0718: Children Who Had Problems Obtaining Referrals When Needed

The Child and Adolescent Health Measurement Initiative

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

The Child and Adolescent Health Measurement Initiative

Description

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 3, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

0718: Children Who Had Problems Obtaining Referrals When Needed

The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

Type

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

Process

0718: Children Who Had Problems Obtaining Referrals When Needed

Outcome

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Outcome

Data Source

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_120715_FECC_3-635851074631328247.xlsx

0718: Children Who Had Problems Obtaining Referrals When Needed

2007 National Survey of Children's Health

URL

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Patient Reported Data/Survey 2011/12 National Survey of Children's Health

URL

Level

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

Health Plan, Population : State

0718: Children Who Had Problems Obtaining Referrals When Needed

Population : State, Population: National, Population: Regional

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Population : National, Population : Regional, Population : State

Setting

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici

0718: Children Who Had Problems Obtaining Referrals When Needed

Other Survey was conducted over a telephone

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Other Survey was conducted over a telephone

Numerator Statement

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

The numerators for each of the 10 FECC quality measures included within the FECC measures set are specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC 3 follows:

FECC-3: Caregivers of CMC who report having a designated care coordinator and who require community services should also report that their care coordinator helped their child to obtain needed community services in the last year.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children who need referrals and have no problems obtaining them

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children who used at least two health services and who received all needed care coordination

Numerator Details

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

The numerator for FECC 3 is specified in the Detailed Measure Specifications (S.2b).

0718: Children Who Had Problems Obtaining Referrals When Needed

The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

For a child to be included in the numerator of receiving needed care coordination:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)
- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)
- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)
- Parent reports satisfaction with communication among doctors or other providers (when needed)

Denominator Statement

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who used two or more health services in the past 12 months

Denominator Details

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

0718: Children Who Had Problems Obtaining Referrals When Needed

The denominator includes all children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who needed care coordination in the past 12 months

"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.

*Exclusions***2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services**

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

0718: Children Who Had Problems Obtaining Referrals When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.

*Exclusion Details***2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services**

Please see S2.b.

0718: Children Who Had Problems Obtaining Referrals When Needed

If child did not need a referral, then they are excluded from the denominator

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

If child is older than 17 years of age, excluded from denominator.

If parent does not report the child using two or more healthcare services.

*Risk Adjustment***2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services**

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness,

missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

0718: Children Who Had Problems Obtaining Referrals When Needed

No risk adjustment or risk stratification

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No risk adjustment or risk stratification

Stratification

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

0718: Children Who Had Problems Obtaining Referrals When Needed

No stratification is required.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No stratification is required.

Type Score

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

0718: Children Who Had Problems Obtaining Referrals When Needed

Rate/proportion

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Weighted score/composite/scale

Algorithm

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

0718: Children Who Had Problems Obtaining Referrals When Needed

To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

To receive numerator of child receiving care coordination when needed:

-Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1)

-Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0)

-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1)
AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)

Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)

Submission items

2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718 : Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out

whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

0718: Children Who Had Problems Obtaining Referrals When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #2844, NQF #0718, and NQF #0719

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

0718: Children Who Had Problems Obtaining Referrals When Needed

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Steward

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Seattle Children's Research Institute

0718: Children Who Had Problems Obtaining Referrals When Needed

The Child and Adolescent Health Measurement Initiative

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

The Child and Adolescent Health Measurement Initiative

Description

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 5, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

0718: Children Who Had Problems Obtaining Referrals When Needed

The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

Type

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Process

0718: Children Who Had Problems Obtaining Referrals When Needed

Outcome

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Outcome

Data Source

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_FECC_5.xlsx

0718: Children Who Had Problems Obtaining Referrals When Needed

2007 National Survey of Children's Health

URL

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Patient Reported Data/Survey 2011/12 National Survey of Children's Health

URL

Level

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Health Plan, Population : State

0718: Children Who Had Problems Obtaining Referrals When Needed

Population : State, Population: National, Population: Regional

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Population : National, Population : Regional, Population : State

Setting

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinici

0718: Children Who Had Problems Obtaining Referrals When Needed

Other Survey was conducted over a telephone

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Other Survey was conducted over a telephone

Numerator Statement

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

The numerator for FECC-5 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description follows:

FECC-5: Caregivers of CMC who report having a care coordinator and who report that their care coordinator has contacted them in the last 3 months should also report that their care coordinator asked them about the following:

- Caregiver concerns
- Health changes of the child

0718: Children Who Had Problems Obtaining Referrals When Needed

Children who need referrals and have no problems obtaining them

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children who used at least two health services and who received all needed care coordination

Numerator Details

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

The numerators for each of the care coordination quality measures included within the FECC measure set are specified in the Detailed Measure Specifications (S.2b).

0718: Children Who Had Problems Obtaining Referrals When Needed

The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

For a child to be included in the numerator of receiving needed care coordination:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)
- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)
- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)
- AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)
- Parent reports satisfaction with communication among doctors or other providers (when needed)

Denominator Statement

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who used two or more health services in the past 12 months

Denominator Details

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

0718: Children Who Had Problems Obtaining Referrals When Needed

The denominator includes all children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who needed care coordination in the past 12 months

"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.

Exclusions

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

0718: Children Who Had Problems Obtaining Referrals When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.

Exclusion Details

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Please see S2.b.

0718: Children Who Had Problems Obtaining Referrals When Needed

If child did not need a referral, then they are excluded from the denominator

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

If child is older than 17 years of age, excluded from denominator.

If parent does not report the child using two or more healthcare services.

Risk Adjustment

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey

mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

0718: Children Who Had Problems Obtaining Referrals When Needed

No risk adjustment or risk stratification

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No risk adjustment or risk stratification

Stratification

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

0718: Children Who Had Problems Obtaining Referrals When Needed

No stratification is required.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No stratification is required.

Type Score

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

0718: Children Who Had Problems Obtaining Referrals When Needed

Rate/proportion

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Weighted score/composite/scale

Algorithm

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

0718: Children Who Had Problems Obtaining Referrals When Needed

To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

To receive numerator of child receiving care coordination when needed:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1)
- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0)
- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1)

AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)

Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)

Submission items

2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718 : Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help

with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

0718: Children Who Had Problems Obtaining Referrals When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #2845, NQF #0718, and NQF #0719

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

0718: Children Who Had Problems Obtaining Referrals When Needed

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Steward

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

Seattle Children's Research Institute

0718: Children Who Had Problems Obtaining Referrals When Needed

The Child and Adolescent Health Measurement Initiative

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

The Child and Adolescent Health Measurement Initiative

Description

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 7, described below. The short descriptions of each quality measure follows; full details are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

0718: Children Who Had Problems Obtaining Referrals When Needed

The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

Type

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

Process

0718: Children Who Had Problems Obtaining Referrals When Needed

Outcome

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Outcome

Data Source

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_FECC_7.xlsx

0718: Children Who Had Problems Obtaining Referrals When Needed

2007 National Survey of Children's Health

URL

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Patient Reported Data/Survey 2011/12 National Survey of Children's Health

URL

Level

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

Health Plan, Population : State

0718: Children Who Had Problems Obtaining Referrals When Needed

Population : State, Population: National, Population: Regional

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Population : National, Population : Regional, Population : State

Setting

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinics

0718: Children Who Had Problems Obtaining Referrals When Needed

Other Survey was conducted over a telephone

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Other Survey was conducted over a telephone

Numerator Statement

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

The numerator for FECC-7 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-7 follows:

FECC-7: Caregivers of CMC who report having a care coordinator for their child should also report that the care coordinator assists them with specialty service referrals by ensuring that the appointment with the specialty service provider occurs

0718: Children Who Had Problems Obtaining Referrals When Needed

Children who need referrals and have no problems obtaining them

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children who used at least two health services and who received all needed care coordination

Numerator Details

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

The numerators for each of the care coordination quality measures included within the FECC measure set are specified in the Detailed Measure Specifications (S.2b).

0718: Children Who Had Problems Obtaining Referrals When Needed

The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

For a child to be included in the numerator of receiving needed care coordination:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)
- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)
- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)
- Parent reports satisfaction with communication among doctors or other providers (when needed)

Denominator Statement

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who used two or more health services in the past 12 months

Denominator Details

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

0718: Children Who Had Problems Obtaining Referrals When Needed

The denominator includes all children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who needed care coordination in the past 12 months

"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.

*Exclusions***2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals**

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

0718: Children Who Had Problems Obtaining Referrals When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.

*Exclusion Details***2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals**

Please see S2.b.

0718: Children Who Had Problems Obtaining Referrals When Needed

If child did not need a referral, then they are excluded from the denominator

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

If child is older than 17 years of age, excluded from denominator.

If parent does not report the child using two or more healthcare services.

*Risk Adjustment***2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals**

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness,

missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

0718: Children Who Had Problems Obtaining Referrals When Needed

No risk adjustment or risk stratification

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No risk adjustment or risk stratification

Stratification

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

0718: Children Who Had Problems Obtaining Referrals When Needed

No stratification is required.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No stratification is required.

Type Score

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

0718: Children Who Had Problems Obtaining Referrals When Needed

Rate/proportion

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Weighted score/composite/scale

Algorithm

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

0718: Children Who Had Problems Obtaining Referrals When Needed

To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

To receive numerator of child receiving care coordination when needed:

-Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1)

-Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0)

-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1)
AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)

Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)

Submission items

2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718 : Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out

whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

0718: Children Who Had Problems Obtaining Referrals When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #2846, NQF #0718, and NQF #0719

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

0718: Children Who Had Problems Obtaining Referrals When Needed

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Steward

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Seattle Children's Research Institute

0718: Children Who Had Problems Obtaining Referrals When Needed

The Child and Adolescent Health Measurement Initiative

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

The Child and Adolescent Health Measurement Initiative

Description

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 8, described below. The short descriptions of each quality measure follows; full details for FECC-8 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

0718: Children Who Had Problems Obtaining Referrals When Needed

The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

Type

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Process

0718: Children Who Had Problems Obtaining Referrals When Needed

Outcome

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Outcome

Data Source

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_FECC_8.xlsx

0718: Children Who Had Problems Obtaining Referrals When Needed

2007 National Survey of Children's Health

URL

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Patient Reported Data/Survey 2011/12 National Survey of Children's Health

URL

Level

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Health Plan, Population : State

0718: Children Who Had Problems Obtaining Referrals When Needed

Population : State, Population: National, Population: Regional

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Population : National, Population : Regional, Population : State

Setting

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinic

0718: Children Who Had Problems Obtaining Referrals When Needed

Other Survey was conducted over a telephone

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Other Survey was conducted over a telephone

Numerator Statement

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

The numerator for FECC-8 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-8 follows:

FECC-8: Caregivers of CMC who report having a care coordinator should also report that their care coordinator:

- Was knowledgeable about their child's health
- Supported the caregiver
- Advocated for the needs of the child

0718: Children Who Had Problems Obtaining Referrals When Needed

Children who need referrals and have no problems obtaining them

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children who used at least two health services and who received all needed care coordination

Numerator Details

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

The numerator for FECC-8 is specified in the Detailed Measure Specifications (S.2b).

0718: Children Who Had Problems Obtaining Referrals When Needed

The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

For a child to be included in the numerator of receiving needed care coordination:

-Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)

-Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)

-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)

AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)

--Parent reports satisfaction with communication among doctors or other providers (when needed)

*Denominator Statement***2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs**

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who used two or more health services in the past 12 months

*Denominator Details***2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs**

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

0718: Children Who Had Problems Obtaining Referrals When Needed

The denominator includes all children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who needed care coordination in the past 12 months

"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.

Exclusions

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

0718: Children Who Had Problems Obtaining Referrals When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.

Exclusion Details

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Please see S2.b.

0718: Children Who Had Problems Obtaining Referrals When Needed

If child did not need a referral, then they are excluded from the denominator

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

If child is older than 17 years of age, excluded from denominator.

If parent does not report the child using two or more healthcare services.

Risk Adjustment

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

0718: Children Who Had Problems Obtaining Referrals When Needed

No risk adjustment or risk stratification

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No risk adjustment or risk stratification

Stratification

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

0718: Children Who Had Problems Obtaining Referrals When Needed

No stratification is required.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No stratification is required.

Type Score

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

0718: Children Who Had Problems Obtaining Referrals When Needed

Rate/proportion

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Weighted score/composite/scale

Algorithm

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

0718: Children Who Had Problems Obtaining Referrals When Needed

To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

To receive numerator of child receiving care coordination when needed:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1)

- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0)

- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1)

AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)

Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)

Submission items

2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718 : Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care

coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

0718: Children Who Had Problems Obtaining Referrals When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #2847, NQF #0718, and NQF #0719

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

0718: Children Who Had Problems Obtaining Referrals When Needed

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Steward

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Seattle Children's Research Institute

0718: Children Who Had Problems Obtaining Referrals When Needed

The Child and Adolescent Health Measurement Initiative

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

The Child and Adolescent Health Measurement Initiative

Description

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 9, described below. The short descriptions of each quality measure follows; full details for FECC-9 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

0718: Children Who Had Problems Obtaining Referrals When Needed

The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

Type

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Process

0718: Children Who Had Problems Obtaining Referrals When Needed

Outcome

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Outcome

Data Source

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_FECC_9.xlsx

0718: Children Who Had Problems Obtaining Referrals When Needed

2007 National Survey of Children's Health

URL

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Patient Reported Data/Survey 2011/12 National Survey of Children's Health

URL

Level

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Health Plan, Population : State

0718: Children Who Had Problems Obtaining Referrals When Needed

Population : State, Population: National, Population: Regional

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Population : National, Population : Regional, Population : State

Setting

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinics

0718: Children Who Had Problems Obtaining Referrals When Needed

Other Survey was conducted over a telephone

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Other Survey was conducted over a telephone

Numerator Statement

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

The numerator for FECC-9 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-9 follows:

FECC-9: Caregivers of CMC who report receiving a written visit summary during the last 12 months from their child's main provider's office should report that it contained the following elements:

- Current problem list
- Current medication list
- Drug allergies
- Specialists involved in the child's care
- Planned follow-up
- What to do for problems related to outpatient visit

0718: Children Who Had Problems Obtaining Referrals When Needed

Children who need referrals and have no problems obtaining them

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children who used at least two health services and who received all needed care coordination

Numerator Details

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

The numerator for FECC 9 is specified in the Detailed Measure Specifications (S.2b).

0718: Children Who Had Problems Obtaining Referrals When Needed

The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

For a child to be included in the numerator of receiving needed care coordination:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)
- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)
- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21) AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)
- Parent reports satisfaction with communication among doctors or other providers (when needed)

Denominator Statement

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who used two or more health services in the past 12 months

Denominator Details

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

0718: Children Who Had Problems Obtaining Referrals When Needed

The denominator includes all children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who needed care coordination in the past 12 months

"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.

Exclusions

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

0718: Children Who Had Problems Obtaining Referrals When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.

Exclusion Details

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Please see S2.b.

0718: Children Who Had Problems Obtaining Referrals When Needed

If child did not need a referral, then they are excluded from the denominator

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

If child is older than 17 years of age, excluded from denominator.

If parent does not report the child using two or more healthcare services.

Risk Adjustment

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

0718: Children Who Had Problems Obtaining Referrals When Needed

No risk adjustment or risk stratification

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No risk adjustment or risk stratification

Stratification

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

0718: Children Who Had Problems Obtaining Referrals When Needed

No stratification is required.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No stratification is required.

Type Score

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

0718: Children Who Had Problems Obtaining Referrals When Needed

Rate/proportion

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Weighted score/composite/scale

Algorithm

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

0718: Children Who Had Problems Obtaining Referrals When Needed

To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

To receive numerator of child receiving care coordination when needed:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1)

- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0)

- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1)

AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)

Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)

Submission items

2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718 : Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care

coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

0718: Children Who Had Problems Obtaining Referrals When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #2849, NQF #0718, and NQF #0719

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

0718: Children Who Had Problems Obtaining Referrals When Needed

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Steward

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Seattle Children's Research Institute

0718: Children Who Had Problems Obtaining Referrals When Needed

The Child and Adolescent Health Measurement Initiative

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

The Child and Adolescent Health Measurement Initiative

Description

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 15, described below. The short descriptions of each quality measure follows; full details for FECC-15 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

0718: Children Who Had Problems Obtaining Referrals When Needed

The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

Type

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Process

0718: Children Who Had Problems Obtaining Referrals When Needed

Outcome

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Outcome

Data Source

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_FECC_15.xlsx

0718: Children Who Had Problems Obtaining Referrals When Needed

2007 National Survey of Children's Health

URL

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Patient Reported Data/Survey 2011/12 National Survey of Children's Health

URL

Level

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Health Plan, Population : State

0718: Children Who Had Problems Obtaining Referrals When Needed

Population : State, Population: National, Population: Regional

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Population : National, Population : Regional, Population : State

Setting

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinics

0718: Children Who Had Problems Obtaining Referrals When Needed

Other Survey was conducted over a telephone

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Other Survey was conducted over a telephone

Numerator Statement

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

The numerator for FECC-15 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-15 follows:

FECC-15: Caregivers of CMC who self-identify as having a preference for conducting medical visits in a language other than English should have access to a professional medical interpreter (live or telephonic) at all visits for which an interpreter is needed.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children who need referrals and have no problems obtaining them

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children who used at least two health services and who received all needed care coordination

Numerator Details

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

The numerator for FECC-15 is specified in the Detailed Measure Specifications (S.2b).

0718: Children Who Had Problems Obtaining Referrals When Needed

The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

For a child to be included in the numerator of receiving needed care coordination:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)

- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)

- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)

AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)

- Parent reports satisfaction with communication among doctors or other providers (when needed)

*Denominator Statement***2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed**

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who used two or more health services in the past 12 months

*Denominator Details***2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed**

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

0718: Children Who Had Problems Obtaining Referrals When Needed

The denominator includes all children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who needed care coordination in the past 12 months

"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.

Exclusions

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

0718: Children Who Had Problems Obtaining Referrals When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.

Exclusion Details

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Please see S2.b.

0718: Children Who Had Problems Obtaining Referrals When Needed

If child did not need a referral, then they are excluded from the denominator

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

If child is older than 17 years of age, excluded from denominator.

If parent does not report the child using two or more healthcare services.

Risk Adjustment

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

0718: Children Who Had Problems Obtaining Referrals When Needed

No risk adjustment or risk stratification

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No risk adjustment or risk stratification

Stratification

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

0718: Children Who Had Problems Obtaining Referrals When Needed

No stratification is required.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No stratification is required.

Type Score

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

0718: Children Who Had Problems Obtaining Referrals When Needed

Rate/proportion

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Weighted score/composite/scale

Algorithm

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

0718: Children Who Had Problems Obtaining Referrals When Needed

To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

To receive numerator of child receiving care coordination when needed:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1)

- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0)

- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1)

AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)

Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)

Submission items

2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718 : Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care

coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

0718: Children Who Had Problems Obtaining Referrals When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #2850, NQF #0718, and NQF #0719

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

0718: Children Who Had Problems Obtaining Referrals When Needed

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Steward

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Seattle Children's Research Institute

0718: Children Who Had Problems Obtaining Referrals When Needed

The Child and Adolescent Health Measurement Initiative

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

The Child and Adolescent Health Measurement Initiative

Description

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

The Family Experiences with Coordination of Care (FECC) Survey was developed to gather information about the quality of care coordination being received by children with medical complexity (CMC) over the previous 12 months. The FECC Survey is completed by English- and Spanish-speaking caregivers of CMC aged 0-17 years with at least 4 medical visits in the previous year, and it includes all of the information needed to score 20 separate and independent quality measures, a sub-set of 10 of which are included in this submitted measure set. CMC are identified from administrative data using the Pediatric Medical Complexity Algorithm (PMCA)¹, which uses up to 3 years' worth of International Classification of Diseases—9th Revision (ICD-9) codes to classify a child's illness with regard to chronicity and complexity. CMC are children identified by the PMCA as having complex, chronic disease.

The full NQF submission includes a set of 10 of the FECC quality measures; this submission relates to FECC 16, described below. The short descriptions of each quality measure follows; full details for FECC-16 are provided in the Detailed Measure Specifications (see S.2b):

FECC-1: Has care coordinator

FECC-3: Care coordinator helped to obtain community services

FECC-5: Care coordinator asked about concerns and health changes

FECC-7: Care coordinator assisted with specialist service referrals

FECC-8: Care coordinator was knowledgeable, supportive and advocated for child's needs

FECC-9: Appropriate written visit summary content

FECC-14: Health care provider communicated with school staff about child's condition

FECC-15: Caregiver has access to medical interpreter when needed

FECC-16: Child has shared care plan

FECC-17: Child has emergency care plan

Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information.

0718: Children Who Had Problems Obtaining Referrals When Needed

The measure aims to ascertain the perceived difficulty in obtaining referrals for children when needed for optimum health.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

This is a composite measure used to assess the need and receipt of care coordination services for children who required care from at least two types of health care services which may require communication between health care providers, or with others involved in child's care (e.g. school).

Type

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Process

0718: Children Who Had Problems Obtaining Referrals When Needed

Outcome

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Outcome

Data Source

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Administrative claims, Patient Reported Data/Survey The overall FECC-eligible population is identified using ICD-9 codes and administrative data. Data for the measure numerators and some denominator elements come from caregiver responses to the FECC Survey (attached). The survey was administered via mail and telephone, in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF_detailed_specs_FECC_PMCA_FECC_16.xlsx

0718: Children Who Had Problems Obtaining Referrals When Needed

2007 National Survey of Children's Health

URL

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Patient Reported Data/Survey 2011/12 National Survey of Children's Health

URL

Level

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Health Plan, Population : State

0718: Children Who Had Problems Obtaining Referrals When Needed

Population : State, Population: National, Population: Regional

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Population : National, Population : Regional, Population : State

Setting

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Other The FECC quality measures concern care coordination that occurs across the spectrum of health care settings, from inpatient to outpatient to home health. However, the majority of care coordination services assessed were provided by the outpatient clinic

0718: Children Who Had Problems Obtaining Referrals When Needed

Other Survey was conducted over a telephone

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Other Survey was conducted over a telephone

Numerator Statement

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

The numerator for FECC-16 is specified in the Detailed Measure Specifications (see S.2b). A brief description of each numerator is laid out in Table 1 in section De.3, and a more detailed description of FECC-16 follows:

FECC-16: Caregivers of CMC should report that their child's primary care provider created a shared care plan for their child.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children who need referrals and have no problems obtaining them

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children who used at least two health services and who received all needed care coordination

Numerator Details

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

The numerator for FECC-16 is specified in the Detailed Measure Specifications (S.2b).

0718: Children Who Had Problems Obtaining Referrals When Needed

The numerator describes the number of children who needed a referral to see other doctors or services had problems obtaining those referrals

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

For a child to be included in the numerator of receiving needed care coordination:

- Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20)

- Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)

- Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21)

AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22)

--Parent reports satisfaction with communication among doctors or other providers (when needed)

Denominator Statement

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

The eligible population of caregivers for the FECC Survey overall is composed of those who meet the following criteria:

1. Parents or legal guardians of children 0-17 years of age
2. Child classified as having a complex, chronic condition using the Pediatric Medical Complexity Algorithm (PMCA) (see Simon TD, Cawthon ML et al. 2014)
3. Child had at least 4 visits to a healthcare provider over the previous year

While some of the FECC measures only apply to a subset of the overall eligible population for the survey (e.g., measures related to the quality of care coordination services provided are only scored for those caregivers who endorse having a care coordinator), eligibility for these quality measures can only be gleaned from responses to the FECC Survey itself. This is analogous to the situation with many H-CAHPS measures, where, for example, measures about blood draws and laboratory testing are scored only for those who had the relevant service performed during the time frame or hospitalization in question.

0718: Children Who Had Problems Obtaining Referrals When Needed

Children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who used two or more health services in the past 12 months

Denominator Details

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

The details for denominator identification are provided in S.2b, including the ICD-9 codes used for determining the PMCA. The PMCA SAS programming code is available at:

<http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/>

The process of converting the ICD-9 codes to ICD-10 codes for calculating the PMCA is underway, and should be complete and available within 6-9 months. However, because the PMCA uses up to 3 years' worth of retrospective administrative data, the ICD-10 code version is not expected to be needed for widespread use immediately.

0718: Children Who Had Problems Obtaining Referrals When Needed

The denominator includes all children age 0-17 years

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Children age 0-17 years who needed care coordination in the past 12 months

"Needed care coordination" is defined as needing two or more of the following services: a personal doctor or nurse, a mental health professional, a specialist, or the child's doctor felt that the child needed to see a specialist.

Exclusions

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Denominator exclusions:

1. Child had died
2. Caregiver spoke a language other than English or Spanish

0718: Children Who Had Problems Obtaining Referrals When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and who did not need a referral to any doctor or service

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Excluded from denominator if child does not fall in target population age range of 0-17 years and/or does not receive two or more services which might require coordinating.

Exclusion Details

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Please see S2.b.

0718: Children Who Had Problems Obtaining Referrals When Needed

If child did not need a referral, then they are excluded from the denominator

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

If child is older than 17 years of age, excluded from denominator.

If parent does not report the child using two or more healthcare services.

Risk Adjustment

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Other case mix adjustment

Case-mix adjustment is completed via linear regression for continuous measures and logistic regression for binary measures and uses the method of covariance adjustment. We recommend adjusting for survey mode (if applicable) and respondent education. Survey mode is an administrative variable created during survey fielding and respondent education is a self-reported item collected with the FECC survey. Because education was rarely missing among survey respondents (2.2%), cases with missing data were excluded from the case-mix adjustment model. In data with higher rates of item missingness, missing values could be imputed with the mean within the relevant unit of analysis, such as practice. This method avoids losing large numbers of cases due to item missingness.

Recommended Case-Mix Adjustors

Survey mode is coded with an indicator for whether the respondent was randomized to the phone-only study arm as opposed to the mixed-mode study arm (mail survey with phone follow-up), irrespective of the mode in which the survey was actually completed (for example, if the survey was completed by phone but the participant was randomized to mixed-mode, the survey mode indicator would be “mixed-mode”).

Education is coded as a series of six indicators for the six response categories to the education item from the survey, with one indicator left out of the regression model as the reference category. The choice of reference category is arbitrary and does not affect

results. Categories with very small numbers of respondents may need to be combined for modeling purposes. Alternatively, the ordinal education variable could be used (1 df) if it is not feasible to include five education category indicators in a given model.

What is the highest grade or level of school that you have completed?

1=8th grade or less

2=Some high school, but did not graduate

3=High school graduate or GED

4=Some college or 2-year degree

5=4-year college graduate

6=More than 4-year college degree

If a “clinically-adjusted” model that does not include sociodemographic variables (i.e., education) is desired, education may be omitted from the model and survey mode may be retained. To stratify clinically-adjusted scores by education, the case-mix model with survey mode as a covariate could be fit separately within each education category.

Provided in response box S.15a

0718: Children Who Had Problems Obtaining Referrals When Needed

No risk adjustment or risk stratification

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No risk adjustment or risk stratification

Stratification

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Please see the response to S.14, below, for details about producing a clinically-adjusted model that could be stratified by caregiver education (the sociodemographic factor we recommend adjustment for). The specifications for those models are also included in S.2b.

0718: Children Who Had Problems Obtaining Referrals When Needed

No stratification is required.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

No stratification is required.

Type Score

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

Other (specify): Each of the quality measures is scored on a 0-100 scale, with higher scores indicating better care. For dichotomous measures, a score of 100 indicates the child received the recommended care; a score of 0 indicates that they did not. Please see Detailed Measure Specifications (see S.2b) for additional measure-specific scoring information. better quality = higher score

0718: Children Who Had Problems Obtaining Referrals When Needed

Rate/proportion

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

Weighted score/composite/scale

Algorithm

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

To produce scores for the FECC quality measure set, the following steps were taken, in order:

1. Identify children 0-17 years of age
2. Include only those with parent or legal guardian contact information
3. Run the PMCA algorithm, and retain only those children classified as having complex chronic disease
4. Retain children with at least 4 health care provider visits in the past year
5. Exclude caregivers who speak only a language other than English or Spanish
6. Exclude caregivers if child had died
7. Administer FECC Survey to remaining sample, over the telephone or via mail
8. Score each measure according to detailed measure specifications in S.2b
9. For comparisons between health plans, states, or by demographic groups, adjust scores for caregiver education level (and assigned survey mode, if applicable) using linear or logistic regression. No diagram provided

0718: Children Who Had Problems Obtaining Referrals When Needed

To receive the numerator of children needed referrals and did not have a problem getting them, K5Q11=3.

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

To receive numerator of child receiving care coordination when needed:

-Parent reports someone helping to arrange or coordinate child's care among the different doctors and services (K5Q20=1)

-Either parent reports that they have not felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=0)

-Or parent reports that they have felt that they could have used extra help arranging or coordinating child's care among the different health care providers or services (K5Q21=1)
AND Parent reports that they got as much help as they wanted with arranging or coordinating child's care usually (K5Q22=3)

Parent reports satisfaction with communication among doctors when needed (K5Q30=satisfied)

Parent report satisfaction with communication between doctors and others involved (e.g. school) when needed (K5Q31=yes and K5Q32=satisfied)

Submission items

2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

5.1 Identified measures: 0719 : Children Who Receive Effective Care Coordination of Healthcare Services When Needed

0718 : Children Who Had Problems Obtaining Referrals When Needed

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The currently available NQF-endorsed measures related to care coordination and care for children with chronic conditions are related to, but fundamentally different from, the quality measures addressed in the FECC measure set. To begin with, the measures differ with regard to target population. The currently-endorsed measures address children who have received a referral to specialty services (0718), and children who received care from at least 2 types of health care services (0719), while the FECC measures address children with medical complexity. While the other measures likely apply to CMC (in addition to many other children), the FECC measures are specific to CMC. In addition, the FECC measure set differs from currently-endorsed measures with regard to focus. The currently-available measures mostly focus on whether families who needed specialized services for their child found it easy or difficult to obtain them and whether anyone in their health plan or child's doctor's office/clinic helped them to get that service. In contrast, the FECC measure set focuses more on the quality of services provided by a family's self-identified care coordinator, delving into the specific care coordination attributes and processes that have been associated with better outcomes in the literature. While there is some overlap between those types of measures and some of the measures within the FECC measure set (for example, FECC 3: care coordinator helped to obtain needed community services), those questions within the FECC measure set are predicated upon having a designated care coordinator (a care structure we found to be important for CMC based on the literature), and are assessing the functioning of that care coordinator, rather than just whether a service was provided to the family. The remaining measures within the FECC measure set are similarly focused on specific actions and attributes of the care coordinator and/or main medical provider, and would be expected to provide clearly actionable items for quality improvement intervention. For example, identifying that families are not receiving help with accessing recommended community services is important, but leaves open to interpretation why that may be; using the FECC measure set would help to separate out whether the problem was due to not having a care coordinator, or whether it was due to having a care coordinator not adequately doing their job. In addition, the FECC measure set addresses other aspects of care coordination beyond the quality of services provided by the care coordinator, as they also assess quality of written communication between providers and families, and between providers and the child's school, along with the quality of care planning with the family. Therefore, the FECC measure set should be seen as complementary to, and enhancing the currently available measures.

5b.1 If competing, why superior or rationale for additive value: Please see discussion above (5a.2) for a description of how the FECC measures complement, focus, and extend the information provided by the currently-endorsed measures.

0718: Children Who Had Problems Obtaining Referrals When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0719: Children Who Receive Effective Care Coordination of Healthcare Services When Needed

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Appendix G: Pre-Evaluation Comments

The Pediatric measures did not receive any public comments during the pre-evaluation public comment period from November 6, 2015, to November 20, 2015.

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