NATIONAL QUALITY FORUM

National Voluntary Consensus Standards for Ambulatory Care Part 1

A CONSENSUS REPORT

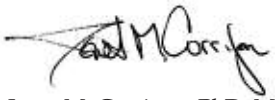
Foreword

Each year in this country more than a billion visits are made to physician offices and clinics, also known as ambulatory—or outpatient—settings. However, despite the fact that ambulatory settings are the primary locations where patients receive care in the United States, still lacking are agreed-upon quality measures for assessing the performance of outpatient care providers.

Previous National Quality Forum (NQF) reports have addressed performance measures in ambulatory care settings, including, among others, *National Voluntary Consensus Standards for Adult Diabetes Care: 2005 Update, Serious Reportable Events in Healthcare—2006 Update: A Consensus Report,* and *A National Framework for Healthcare Quality Measurement and Reporting: A Consensus Report.*

NQF's "Standardizing Ambulatory Care Performance Measures" project is a multiyear, multistage endeavor that examines ambulatory care settings in a broader context and seeks consensus on standardized measures of outpatient care for performance measurement and reporting. This report presents the work of the project in the following priority areas: asthma/respiratory illness; bone and joint conditions; diabetes; heart disease; hypertension; medication management; mental health and substance use disorders; obesity; prenatal care; prevention, immunization, and screening; and care coordination. It presents 101 NQF-endorsed™ consensus standards that constitute a broad set of performance measures for ambulatory care.

We thank the Standardizing Ambulatory Care Performance Measures Review Committee and its Technical Advisory Panels, as well as NQF Members, for their work with this project and for their collective commitment to improving the quality of ambulatory care.



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NATIONAL QUALITY FORUM

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Executive Summary

Ambulatory care settings such as physician offices and hospital emergency departments play a critical role in the U.S. healthcare system. With more than a billion visits to physician offices and hospital outpatient and emergency departments taking place each year, ambulatory (outpatient) care embraces a wide range of health conditions, services, and settings—and is the primary site in the United States where patients receive care. However, there is still a lack of agreed-upon quality measures aimed at assessing the performance of outpatient care providers. The National Quality Forum's (NQF's) "Standardizing Ambulatory Care Performance Measures" project is a multistage endeavor that seeks consensus on standardized measures of outpatient care performance measures and reporting.

Phase 1 of NQF's ambulatory care project began in May 2004 and resulted in the identification of 10 priority areas for ambulatory care quality measurement and reporting—heart disease, diabetes, hypertension, obesity, asthma, prevention, depression, medication management, patient experience with care, and coordination of care.

During Phase 2 of the project, NQF addressed an urgent need for physician-focused ambulatory care measures by endorsing a set of consensus standards for ambulatory care that includes 42 consensus measures in 7 priority areas: asthma/respiratory illness, bone conditions, heart disease, hypertension, depression/behavioral health, prenatal care, and prevention (including immunization and screening). The set was included in NQF's report entitled *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set,* published in late 2005.

Phase 3 of the ambulatory project involves seeking consensus on a broad set of performance measures for ambulatory care in many priority areas. This report presents 101 consensus standards in the following 10 areas: asthma/respiratory illness; bone and joint conditions; diabetes; heart disease; hypertension; medication management; mental health and substance use disorders; obesity; prenatal care; and prevention, immunization, and screening. Categories included in the area of prevention are tobacco cessation, general prevention, screening, and immunization. The report also presents research recommendations for each of these areas.

The project Steering Committee initially identified care coordination as a priority area for measurement. However, the Care Coordination Technical Advisory Panel (TAP) did not recommend any existing measures, because they were either not well developed or did not capture the appropriate characteristics of care coordination. To address this issue and to assist measure developers, the TAP recommended and the Steering Committee accepted a definition and measurement framework for measuring care coordination.

The measure set was developed to improve the quality of ambulatory care through accountability and public reporting and by standardizing quality measurement that describes the practice-level performance in ambulatory care settings. The performance measures presented in the report are suitable for physician practice-level accountability; are derived from all data sources; are fully developed and precisely specified; and are fully open source.

National Voluntary Consensus Standards for Ambulatory Care—Part 1

PRIORITY AREA	MEASURE
Asthma/Respiratory Illness	■ Asthma assessment ■ Management plan for people with asthma ■ Use of appropriate medications for people with asthma ■ Asthma: pharmacologic therapy ■ Inappropriate antibiotic treatment for adults with acute bronchitis ■ Appropriate treatment for children with upper respiratory infection ■ Chronic obstructive pulmonary disease (COPD): assessment of oxygen saturation ■ COPD: spirometry evaluation ■ COPD: inhaled bronchodilator therapy ■ Appropriate testing for children with pharyngitis
Bone and Joint Conditions	■ Osteoarthritis: functional and pain assessment ■ Osteoarthritis: assessment for use of anti-inflammatory or analgesic over-the-counter medications ■ Low back pain (LBP): use of imaging studies ■ LBP: initial assessment ■ LBP: physical exam ■ LBP: mental health assessment ■ LBP: appropriate imaging for acute back pain ■ LBP: repeat imaging studies ■ LBP: advice for normal activities ■ LBP: advice against bed rest ■ LBP: recommendations for exercise ■ LBP: appropriate use of epidural steroid injections ■ LBP: surgical timing ■ LBP: patient reassessment ■ LBP: shared decisionmaking ■ LBP: patient education ■ LBP: postsurgical outcomes ■ LBP: evaluation of patient experience ■ Osteoporosis management in women who had a fracture ■ Arthritis: disease modifying antirheumatic drug therapy in rheumatoid arthritis
Diabetes	■ Eye exam ■ Foot exam ■ Hemoglobin A1c testing ■ Hemoglobin A1c management ■ Hemoglobin A1c test for pediatric patients ■ Blood pressure management ■ Urine protein screening ■ Lipid profile ■ Lipid management: low density lipoprotein cholesterol (LDL-C) <130 and lipid management: LDL-C <100 (measure pair)
Heart Disease	■ Coronary artery disease (CAD): symptom and activity assessment ■ CAD: angiotensin converting enzyme (ACE) inhibitor/angiotensin receptor blocker (ARB) therapy ■ CAD: antiplatelet therapy ■ Ischemic vascular disease (IVD): use of aspirin or another antithrombotic ■ CAD—beta blocker therapy: prior myocardial infarction ■ Acute myocardial infarction: persistence of beta blocker treatment after a heart attack ■ CAD: beta blocker treatment after a heart attack

(more)

National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

PRIORITY AREA	MEASURE
Heart Disease (continued)	■ IVD: blood pressure control ■ CAD: drug therapy for lowering LDL cholesterol ■ IVD: complete lipid profile and LDL control <100 ■ CAD: optimally managed modified risk factors ■ Heart failure (HF): assessment of activity level ■ HF: assessment of clinical symptoms of volume overload (excess) ■ HF: left ventricular function assessment ■ HF: ACEI/ARB therapy ■ HF: patient education ■ HF: beta blocker therapy ■ HF: warfarin therapy for patients with atrial fibrillation ■ HF: weight measurement
Hypertension	■ Blood pressure (BP) measurement ■ Plan of care ■ Controlling high BP
Medication Management	■ Documentation of medication list in the outpatient record ■ Documentation of allergies and adverse reactions in the outpatient record ■ Therapeutic monitoring: annual monitoring for patients on persistent medications ■ Drugs to be avoided in the elderly
Mental Health and Substance Use Disorders	■ Major depressive disorder: diagnostic evaluation ■ Major depressive disorder: suicide risk assessment ■ New episode of depression ■ Diagnosis of attention deficit hyperactivity disorder (ADHD) in primary care for school-age children and adolescents ■ Management of ADHD in primary care for school-age children and adolescents ■ ADHD: follow-up care for children prescribed ADHD medication ■ Bipolar disorder and major depression: assessment for manic or hypomanic behaviors ■ Bipolar disorder and major depression: appraisal for alcohol or chemical substance use ■ Bipolar disorder: appraisal for risk of suicide ■ Bipolar disorder: level-of-function evaluation ■ Bipolar disorder: assessment for diabetes ■ Initiation and engagement of alcohol and other drug dependence treatment
Obesity	■ Body mass index (BMI) in adults >18 years of age ■ BMI 2 through 18 years of age
Prenatal Care	■ Screening for Human Immunodeficiency Virus (HIV) ■ Anti-D immune globulin ■ Blood groups (ABO), D (Rh) type ■ Blood group antibody testing
Prevention, Immunization, and Screening: Tobacco Cessation	■ Tobacco use prevention for infants, children, and adolescents and tobacco use cessation for infants, children, and adolescents (measure pair) ■ Smoking cessation: medical assistance ■ Tobacco use assessment and tobacco cessation intervention (measure pair)

(more)

National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

PRIORITY AREA	MEASURE
Prevention, Immunization, and Screening: General Prevention	■ Physical activity in older adults ■ Urinary incontinence management in older adults
Prevention, Immunization, and Screening: Screening	■ Breast cancer screening ■ Cervical cancer screening ■ Chlamydia screening in women ■ Colorectal cancer screening ■ Fall risk management in older adults ■ Osteoporosis testing in older women
Prevention, Immunization, and Screening: Immunization	■ Childhood immunization status ■ Flu shots for adults ages 50 to 64 ■ Flu shots for older adults ■ Influenza immunization ■ Pneumococcal vaccine needed for all adults aged 65 years or older ■ Pneumonia vaccination status for older adults ■ Pneumonia vaccination

National Voluntary Consensus Standards for Ambulatory Care—Part 1

Introduction

Patients in the United States receive most of their healthcare in ambulatory (outpatient) settings, with more than a billion visits to physician offices and hospital outpatient and emergency departments each year.[1] Yet, despite the fact that this setting is the center of healthcare, few agreed-upon quality measures exist to specifically measure the performance of outpatient care providers.

Ambulatory care embraces a wide range of health conditions, services, and care settings. In May 2004, the National Quality Forum (NQF) conducted a workshop to identify priority areas for which standardized performance measures for ambulatory care should be endorsed. The 10 priority areas identified at the workshop were patient experience with care; coordination of care; asthma; prevention (primary and secondary, including immunization); medication management; heart disease; diabetes; hypertension; depression; and obesity.[2] These 10 priority areas are consistent with NQF's report, *National Priorities for Healthcare Quality Measurement and Reporting: A Consensus Report*.[3]

As public reporting of hospital, nursing home, and home health care quality has been implemented nationally,[4] it has become obvious that the lack of information about the quality of physician performance in

[1] Centers for Disease Control and Prevention, National Center for Health Statistics, *Health, United States, 2004 with Chartbook on Trends in the Health of Americans,* Hyattsville, MD; 2004.

[2] Available at www.qualityforum.org/pdf/ambulatory/txmeetingsummaryambulatory FINAL.color.pdf. Last accessed July 2006.

[3] National Quality Forum (NQF), *National Priorities for Healthcare Quality Measurement and Reporting: A Consensus Report,* Washington, DC: NQF; 2004.

[4] Available at www.medicare.gov. Last accessed July 2006.

the ambulatory care setting is a huge gap that must be remedied. In October 2005, NQF endorsed 42 physician-focused performance measures as national voluntary consensus standards. However, *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set,*[5] funded by the Centers for Medicare & Medicaid Services (CMS), addresses only 5 of the 10 priority areas identified by NQF Members in May of 2004. In 2005, the Robert Wood Johnson Foundation requested that NQF undertake a project with the goal of endorsing consensus standards in all ambulatory care priority areas.

National Voluntary Consensus Standards for Ambulatory Care—Part 1

This report presents a set of 101 national voluntary consensus standards for ambulatory care, including evidence-based performance measures in the following 10 areas:[6]

- asthma/respiratory illness;
- bone and joint conditions;
- diabetes;
- heart disease;
- hypertension;
- medication management;
- mental health and substance use disorders;
- obesity;
- prenatal care; and
- prevention, immunization, and screening.

[5] NQF, *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set – A Consensus Report,* Washington, DC: NQF; 2005.

[6] Additional work began in mid-2005 to address the remaining priority areas.

Relationship to Other NQF-Endorsed Consensus Standards

This report does not represent the entire scope of NQF work relevant to the quality of outpatient care. NQF has completed or is currently working on separate projects relevant to various healthcare settings, patient safety issues, and patient conditions. For example, *National Voluntary Consensus Standards for Adult Diabetes Care: 2005 Update*[7] includes nine measures for outpatient accountability and public reporting. In addition, this report expands upon consensus standards identified in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.*

A National Framework for Healthcare Quality Measurement and Reporting: A Consensus Report[8] provides a standardized framework for identifying voluntary healthcare quality consensus standards and articulates guiding principles and priorities for healthcare quality improvement. *National Priorities for Healthcare Quality Measurement and Reporting* identifies priorities applicable to ambulatory care, including those in the areas of healthcare disparities, care coordination, and communication; patient safety (including medication management); and healthcare conditions (asthma, depression, ischemic heart disease, hypertension, obesity, tobacco dependence and pregnancy, and childbirth and newborn care).

Serious Reportable Events in Healthcare[9] identifies 28 serious adverse events (e.g., surgery performed on the wrong patient, infant discharged to the wrong person) that NQF believes should be reported by all healthcare facilities. Some of these reportable events are consistent with ambulatory consensus standards, such as "serious death or disability associated with a medication error" and "patient death associated with a fall while being cared for in a healthcare facility." Similarly, *Safe Practices for Better Healthcare* describes 30 healthcare "safe practices"[10] that should be universally used to reduce the risk of harm resulting from processes, systems, or environments of care. Among the practices are several relevant to outpatient care, including "ensure that written documentation of the patient's preference for life-sustaining treatment is prominently displayed in his or her chart" and "standardize the methods for the labeling and packaging of medications." *National Voluntary Consensus Standards for Hospital Care: An Initial Performance Measure Set*[11] identifies several measures pertaining to the prescription of medications (aspirin, beta blockers, and angiotensin converting enzyme inhibitors or angiotensin receptor

[7] NQF, *National Voluntary Consensus Standards for Adult Diabetes Care: 2005 Update: A Consensus Report,* Washington, DC: NQF; 2005.

[8] NQF, *A National Framework for Healthcare Quality Measurement and Reporting: A Consensus Report,* Washington, DC: NQF; 2002.

[9] NQF, *Serious Reportable Events in Healthcare – 2006 Update: A Consensus Report,* Washington, DC: NQF; 2007.

[10] NQF, *Safe Practices for Better Healthcare – 2006 Update: A Consensus Report,* Washington, DC: NQF; 2007.

[11] NQF, *National Voluntary Consensus Standards for Hospital Care: An Initial Performance Measure Set – A Consensus Report,* NQF: Washington, DC; 2003.

blockers) at discharge for acute myocardial infarction (AMI) and other follow-up strategies, including smoking cessation counseling for patients with AMI, heart failure, and pneumonia. The effectiveness of these care processes in improving the outcomes for patients requires coordination of care and follow-through in the outpatient setting.

The full constellation of consensus standards, along with those endorsed in this report, provides a growing number of NQF-endorsed™ voluntary consensus standards that directly and indirectly reflect the importance of measuring and improving quality of care. Organizations that adopt these consensus standards will promote the development of safer and higher-quality care for patients throughout the nation.

Identifying the Set

An NQF Steering Committee (appendix C) established the initial approach to evaluating potential consensus standards. This approach included defining a specific purpose and scope for the performance measures and screening candidate consensus standards through the application of standardized measure evaluation criteria (box A). This report defines ambulatory care as all types of health services that do not require an overnight stay in a healthcare institution such as an acute care hospital, nursing facility, or rehabilitation facility.

Purpose

The purpose of this set of ambulatory care consensus standards is to improve the quality of ambulatory care—through accountability and public reporting—by standardizing quality measurement that describes practice-level performance in ambulatory care settings, including physician offices, clinics, emergency rooms, and health centers.

Scope

The NQF-endorsed national voluntary consensus standards for ambulatory care encompass those that are:

- suitable for physician practice-level accountability;
- include the performance of a multidisciplinary team of healthcare providers for which the physician ultimately is accountable;
- derived from all data sources;
- fully developed and precisely specified; and
- fully open source.[12]

Priority Areas for Measurement and Reporting

As noted earlier, NQF convened a workshop of its Members to identify 10 priority areas for ambulatory care quality measurement and reporting. Additionally, CMS requested that two more areas (bone

[12] On January 29, 2003, the NQF Board of Directors adopted a policy that NQF will endorse only fully open source measures. Open source is defined by NQF as being "fully disclosed" (i.e., data elements, measure algorithm, if applicable, and risk-adjustment methods/data elements/algorithms are fully described and disclosed; if calculation requires database-dependent coefficients that change frequently, the existence of such coefficients shall be disclosed and the general frequency with which they change shall be disclosed, but the precise numerical value need not be disclosed).

diseases and prenatal care) be included for consideration in the initial physician-focused set. The measures for this set do not include measures in all 12 previously identified priority areas; in the future, NQF will consider measures in patient experience with care, as well as specialty, subspecialty areas, and specialty settings of care—for example, ambulatory surgical centers and composite measures that can be created from the NQF-endorsed ambulatory care consensus standards.

Identification of Candidate Consensus Standards

Measures were evaluated based on the criteria derived from the work of the NQF Strategic Framework Board and endorsed by NQF (box A).[13,14,15,16] These criteria were applied to candidate consensus standards identified through several complementary strategies:

- Open solicitation of measures through NQF's "Call for Measures." From April 4, 2005, through June 18, 2005, the "Call" was distributed through the following avenues:
  - posted on NQF's web site;
  - e-mailed to NQF Members, all project Steering Committee and Technical Advisory Panel members, and more than 1,300 individuals who requested that they be kept apprised of NQF activities; and
  - mailed to more than 120 professional organizations and societies.
- Community-level measures from the Agency for Healthcare Research and Quality's (AHRQ's) Prevention Quality Indicators.
- Identification of proposed consensus standards and sources based on a commissioned paper for NQF, *Current State of Quality Measurement for Seventeen Priority Areas in Primary Care: A Background Paper for the National Quality Forum,*[17] by Patrick S. Romano, MD, MPH, et al., which identified 806 unique indicators from 29 sponsoring organizations.

[13] The Strategic Framework Board's design for a national quality measurement and reporting system, *Med Care,* 2003;41(Suppl 1):I-1—I-89.

[14] NQF, *A National Framework for Healthcare Quality Measurement and Reporting.*

[15] NQF, *A Comprehensive Framework for Hospital Care Performance Evaluation: A Consensus Report,* Washington, DC: NQF; 2003.

[16] NQF, *National Voluntary Consensus Standards for Nursing-Sensitive Care: An Initial Performance Measure Set – A Consensus Report,* Washington, DC: NQF; 2004.

[17] See www.qualityforum.org (2004).

Box A – Criteria for Evaluation and Selection

Proposed measures were evaluated for their suitability based on four sets of standardized criteria (e.g., importance, scientific acceptability, usability, and feasibility). Not all acceptable measures will be strong—or equally strong—among each of the four sets of criteria, or strong among each of their related criteria. Rather, a proposed consensus standard was assessed regarding the extent to which it meets any of the desired criteria within each set:

1. **Importance.** This set addresses the extent to which a measure reflects a variation in quality or low levels of overall performance, and the extent to which it captures key aspects of the flow of care.
   a. The measure addresses one or more key leverage points for improving quality.
   b. Considerable variation in the quality of care exists.
   c. Performance in the area (e.g., setting, procedure, condition) is suboptimal, suggesting that barriers to improvement or best practice may exist.
2. **Scientific acceptability.** A measure is scientifically sound if it produces consistent and credible results when implemented.
   a. The measure is well defined and precisely specified. Measures must be specified sufficiently to be distinguishable from other measures, and they must be implemented consistently across institutions. Measure specifications should provide detail about cohort definition, as well as the denominator and numerator for rate-based measures and categories for range-based measures.
   b. The measure is reliable, producing the same results a high proportion of the time when assessed in the same population.
   c. The measure is valid, accurately representing the concept being evaluated.
   d. The measure is precise, adequately discriminating between real differences in provider performance.
   e. The measure is adaptable to patient preferences and a variety of contexts of settings. Adaptability depends on the extent to which the measure and its specifications account for the variety of patient choices, including refusal of treatment and clinical exceptions.
   f. An adequate and specified risk-adjustment strategy exists, where applicable.
   g. Consistent evidence is available linking the structure and process measures to patient outcomes
3. **Usability.** Usability reflects the extent to which intended audiences (e.g., consumers, purchasers) can understand the results of the measure and are likely to find them useful for decisionmaking.
   a. The measure can be used by the stakeholder to make decisions.
   b. The differences in performance levels are statistically meaningful.
   c. The differences in performance are practically and clinically meaningful.
   d. Risk stratification, risk adjustment, and other forms of recommended analyses can be applied appropriately.
   e. Effective presentation and dissemination strategies exist (e.g., transparency, ability to draw conclusions, information available when needed to make decisions).

continued

Box A – Criteria for Evaluation and Selection (continued)

f. Information produced by the measure can/will be used by at least one healthcare stakeholder audience (e.g., public/consumers, purchasers, clinicians and providers, policymakers, accreditors/regulators) to make a decision or take an action.

g. Information about specific conditions for which the measure is appropriate has been given.

h. Methods for aggregating the measure with other, related measures (e.g., to create a composite measure) are defined, if those related measures are determined to be more understandable and more useful in decisionmaking. Risks of such aggregation, including misrepresentation, have been evaluated.

4. **Feasibility.** Feasibility is generally based on the way in which data can be obtained within the normal flow of clinical care and the extent to which an implementation plan can be achieved.
   a. The point of data collection is tied to care delivery, when feasible.
   b. The timing and frequency of measure collection are specified.
   c. The benefit of measurement is evaluated against the financial and administrative burden of implementation and maintenance of the measure set.
   d. An auditing strategy is designed and can be implemented.
   e. Confidentiality concerns are addressed.

- Review of NQF-endorsed measures and other related, ongoing NQF consensus work to identify ambulatory care measures within these other efforts.
- Active search of additional candidate consensus standards from:
  - AHRQ's National Quality Measures Clearinghouse; and
  - literature searches.
- Passive receipt of candidate consensus standards suggested by others (e.g., NQF Member organizations).
- Re-evaluation of measures that were considered during the consensus process for *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set*.

Criteria for Selection of Consensus Standards

The primary focus of ambulatory care quality and performance in this project is the physician or provider practice. Accordingly, the consensus standards in this set do not include measures that are exclusively plan level, community level, or population based. The consensus standards are intended for use at all levels of analysis, including individual practitioners and small and large groups. Implementing organizations should decide the rules of attribution, samples size requirements, and statistical significance based on the characteristics and goals of the measurement program.

The ambulatory care measures in each condition area have evolved quickly in response to multistakeholder feedback. Considerations of parsimony of measures within a condition area, fundamental implementation considerations, and a strong demand for more outcome measures guided the selection of the consensus standards in this report.

Additionally, the following important measure characteristics also were considered in the selection of potential consensus standards:

- measures addressing vulnerable populations;
- measures addressing all relevant populations;
- consideration of possible perverse incentives or unintended consequences;
- clarity and completeness of specifications;
- measures that have been pilot tested/already in use; and
- measures addressing high variation, including overuse and underuse.

The following principles also guided the selection of consensus standards:

- The focus of the measures is primarily accountability, as a driver of quality improvement.
- The focus should be on the unit of analysis, for example, physician practice level, rather than on the data source.
- Measures should be feasible and scientifically accurate, and they should reflect an aspect of care that is substantially influenced by the physician practice.

The NQF-Endorsed Consensus Standards for Ambulatory Care—Part 1

The NQF-endorsed consensus standards for ambulatory care, part 1, encompass 101 measures[18] that will facilitate efforts to improve the quality of care delivered in the outpatient setting in 10 priority areas: asthma/respiratory illness; bone and joint conditions; diabetes; heart disease; hypertension;

[18] Of note, the 101 consensus standards include "paired measures" (individual measures that theoretically could have been approved singly, but are endorsed only if both are used as a unit).

medication management; mental health and substance use disorders; obesity; prenatal care; and prevention, immunization, and screening. Forty-four of these measures previously were endorsed in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set*. These consensus standards are intended for physician practice-level accountability, including public reporting. Table 1 at the end of the report presents brief descriptions of each measure. Because consensus standards must be consistently specified to meet the goal of standardization, detailed specifications are provided in appendix A.[19]

Care Coordination

Sufficiently developed, existing measures of coordination of care could not be identified for endorsement. To encourage measure development in this important area, and because a standardized definition of care coordination and a framework for measuring care coordination will facilitate urgently needed development of measures for this priority area, a standardized definition and framework for measure development are endorsed.

Definition of Care Coordination

Care coordination is a function that helps ensure that the patient's needs and preferences for health services and information sharing across people, functions, and sites are met over time. Coordination maximizes the value of services delivered to patients by facilitating beneficial, efficient, safe, and high-quality patient experiences and improved healthcare outcomes.

Framework for Measuring Care Coordination

The framework encompasses five domains and four principles. The domains represent essential components and subcomponents for which performance measures should be developed if care coordination is to be comprehensively measured and improved; no single domain should be interpreted as being of greater emphasis. The four principles address overarching considerations in measuring care coordination.

Domains

1. **Healthcare "home"**[20] **—** a source of usual care selected by the patient (such as a large or small medical group, a single practitioner, a community health center, or a hospital outpatient clinic). The medical home should function as the central point for coordinating care around the patient's needs and preferences. The medical home should also coordinate between all of the various team members, which include the patient, family members, other caregivers, primary care providers, specialists, other healthcare services (public and private), and non-clinical services as needed and desired by the patient.

[19] The specifications for many of the previously endorsed standards have been updated.

[20] The "medical home" concept is used by the American Academy of Pediatrics, the American Academy of Family Physicians, and the American College of Physicians.

Important characteristics of the medical home include the following:

- **Enduring relationship.** A true relationship is not established simply by continuity, but by comprehensive knowledge of the patient, the patient's choice of provider,[21] and the patient's identification of the source of his or her care as his or her healthcare home.
- **Point of access.** The patient and family know to communicate with the healthcare home as the appropriate point of access when any healthcare need arises and should have no difficulty contacting or obtaining care in a timely manner.
- **Information about the patient and origins of interpretation of information from many sources.** The healthcare home serves as a clearinghouse for all information about a patient's health status, including all related activities, services, and results. The healthcare home is responsible for synthesizing, reconciling, and interpreting the most current information from many sources to inform and educate the patient, identify needs, and establish goals.
- **Routine, acute, and chronic care coordination.** The healthcare home should promote and guarantee a system that coordinates continuous, comprehensive care for preventive services, acute or episodic illnesses, and chronic, complex conditions.

2. **Proactive plan of care and follow-up—** an established and current care plan that anticipates routine needs and actively tracks up-to-date progress toward patient goals.
   - **Practice or organization has a system for developing a plan of care.** The practice or organization has effective systems, policies, procedures, and practices to create, refine, and execute such a plan of care for every patient.
   - **Goal setting with patients and joint management of the plan of care.** The plan of care is jointly created and managed by the patient/family and a team coordinated by the healthcare home. Both the patient's most current and longstanding needs are assessed, and the goals reflect those needs. Care coordination may be a challenge for some vulnerable populations, who cannot or will not participate in a jointly managed plan of care. The comprehensive management plan should be culturally appropriate and consistent with the abilities and desires of the patient.
   - **Assessment of progress toward goals.** Jointly with the patient/family, care coordination assesses progress toward goals and refines the plan of care as needed to accommodate new information or circumstances.
   - **Evidence-based referrals.** Referrals to specialists or services should be based on transparent and easily understood evidence that the selected specialist or service provides high-quality care and is appropriately matched to meet the patient's needs effectively and efficiently.
   - **Follow-up of tests, referrals, treatments, or other services.** A critically important part of care coordination is a systematic process of follow-up to tests, referrals, treatments, or services that includes interpretation of the

[21] Technical Advisory Panel members noted that some insurance plans limit choices, and patients may be stuck with an assigned provider. Patient preferences must be included in effective, integrated care delivery systems.

information for the patient and appropriate, timely response to the results. The responsibility for follow-up is shared by the provider ordering the test and the provider of the service.

- **Self-management support.** Patient education about his or her condition, treatments and medications, and patient self-management support and sufficient financial resources are necessary components of a joint plan of care.
- **Community services and resources.** The plan of care includes community and non-clinical services as well as traditional healthcare services that respond to a patient's needs and preferences and contribute to achieving the patient's goals.

3. **Communication—**available to all team members, including patients and family.

- **Shared plan of care.** All medical home team members work within the same plan of care and are measurably co-accountable for their contributions to the shared plan and achieving the patient's goals.
- **Tests and services.** All team members are aware of tests and services coordinated within the plan of care, and results are readily available at all times to all team members to avoid unnecessary duplication of services.
- **Patient safety/avoid errors in diagnosis and treatment.** Availability of patient information, such as consultation reports, progress notes, test results, and current medications to all team members caring for a patient reduces the chance of error.
- **Shared decisionmaking with patient and family.** Health Insurance Portability and Accountability Act (HIPAA) of 1996 privacy rule-compliant communications with patient and family are as important as communication with other providers and team members.
- **Not limited to office visits.** HIPAA-compliant communications with patients, family, and providers should occur as needed through various communications methodologies. Use of structured asynchronous communications such as e-mail or web-messaging, as well as traditional methods, should be encouraged and appropriately reimbursed.

- **Privacy and information access.** The patient's health information should be available to all medical home team members. Mechanisms in compliance with federal law should be in place to protect personal privacy, yet these mechanisms also should enable all who require secure access to necessary information to have such access, such as the patient, the family, the caregiver in the home, primary care providers, and specialty care providers.

4. **Information systems—**the use of standardized, integrated electronic information systems with functionalities essential to care coordination is available to all providers and patients. Important characteristics include seamless interoperability; an evidence-based plan of care management; efficient and effective integration of patient information, laboratory, imaging, referrals, medications, social and community services, and self-management support; patient registries and population-based data, especially those promoted by local, state, and federal public health agencies; support for quality improvement and safety; case/disease management; decision support tools; and provider alerts and patient reminders.
5. **Transitions or "hand-offs"—**transitions between settings of care are a special case because currently they are fraught with numerous mishaps that can make care uncoordinated, disconnected, and unsafe. Some care processes during transition deserve particular attention:
   - medication reconciliation;
   - follow-up tests and services;
   - changes in plan of care;
   - involvement of team during hospitalization, nursing home stay, etc.;
   - communications with persons who do not speak English well or at all;
   - communication between settings of care; and
   - transfer of current and past health information from old to new home (to be done in a timely manner when a patient moves to a new healthcare home, so that care coordination needs are not interrupted).

Principles

1. Care coordination is important for everyone. Everyone is at risk for, at a minimum, acute, episodic illness with at least temporary needs for care coordination.
2. Some populations are particularly vulnerable to fragmented, uncoordinated care on a chronic basis (not mutually exclusive):
   - children with special healthcare needs;
   - the frail elderly;
   - persons with cognitive impairments;
   - persons with complex medical conditions;
   - adults with disabilities;
   - people at the end of life;
   - low-income patients;
   - patients who move frequently, including retirees and those with unstable health insurance coverage; and
   - behavioral healthcare patients.
3. Many components of the care coordination framework are suitable for measurement at the individual physician level, and appropriate accountability lies with the individual provider. Some components, however, may be more suitable for measurement at the practice, group, or organizational level.
4. Patient and/or family surveys of their experience with the processes and outcomes of care coordination efforts are essential to measure the safety, effectiveness, efficiency, and timeliness of care coordination in an equitable fashion. Patient and/or family surveys should be administered within close proximity to the healthcare event.

Recommendations

The consensus standards presented in this report represent the most recent review and consideration of candidate consensus standards, and they supersede previously endorsed measures. Five measures previously endorsed in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set* in the area of heart disease were not recommended for continued endorsement.[22]

Research Recommendations

Many recommendations for further research and for the development of measures in several priority areas are identified to accompany the set of consensus standards.

General Recommendations

Several areas of great interest among stakeholders, not specific to any particular condition but cross-cutting for ambulatory care, were identified for further measure development. A review of existing candidates identified an urgent need for:

- measures of care coordination among providers, continuity, particularly across care settings and including the transition of care from one setting to another (e.g., hospital to outpatient care), and communication between patients and physicians and among physicians;

[22] The five measures no longer recommended are Coronary Artery Disease (CAD): Cholesterol Screen (NCQA); CAD: Lipid Profile (AMA PCPI/ACC/AHA); CAD: Cholesterol Control (NCQA); CAD: LDL Cholesterol Level (CMS); and CAD: Smoking Cessation and Intervention (AMA PCPI/ACC/AHA).

- measures that address gender differences in access to care and appropriate gender differences in the provision of care;
- measure specifications that capture the widest appropriate age ranges, including children; and
- composite measures, including their weighting and partial credit for components, and their process or outcome components.

Bone and Joint Condition Measures

For bone and joint disease, areas recommended for further research and measure development included the following:

- risk profiles for various disease modifying antirheumatic drugs (DMARD);
- ways in which the osteoarthritis (OA) measures could be applied to a broader population, for example, the OA medication management measures;
- appropriate utilization for low back pain and ways in which to reconcile appropriate care with patient expectations; and
- in the area of low back pain management, further consideration of manipulative treatments, oral steroid use, narcotic use, and functional status outcomes standardized for evaluation six weeks after the initial diagnosis.

Diabetes Measures

For diabetes, further research and measure development are needed in the following areas:

- approaches to dealing with barriers to performance measurement, such as standardizing risk adjustment methodology (statistical, stratification, exclusions), which is extremely important for outcome measures;
- the use of continuous versus dichotomous measures;
- measurement of patient-centered care;
- patient safety measures, including medication reconciliation;
- measurement plateaus and why they occur;
- approaches for testing/researching a good foot measure;
- prevention measures (e.g., percent of patients with risk factors for diabetes who are tested);
- an aspirin measure for the prevention of cardiovascular disease, including information regarding how to specify and obtain the needed data;
- patient education and self-management (patient activation measures);
- efficiency measures and ways in which to incorporate cost-benefit concepts in measures (e.g., patient on the least amount of medication possible);
- prepregnancy counseling measures;
- weight management in prediabetes;
- the impact of diabetes drugs used for other conditions on the identification of the denominator population when specified by use of diabetic medications;
- the effect on treatment and the impact on measures of cultural diversity considerations;
- gestational diabetes, including diagnosis, treatment, control, and testing after pregnancy to see what type of diabetes has been uncovered;
- comparability of results using CMS G-codes compared to record review;
- whether selection criteria should be more vigorous in some environments, such as pay for performance (as opposed to quality improvement only and public reporting); and

- the limits on improvement—for example, determining what levels of HbA1c can be achieved through strong quality improvement efforts—and, the human factors that are involved.

Heart Disease Measures

The need for additional areas for research and measure development was identified in the following areas:

- measures of overuse, especially in regards to cost;
- patient-reported outcome measures and survey assessment tools;
- appropriateness measures that examine heart disease procedures, for example, "percentage of patients receiving angioplasties who do not need them";
- additional piloting testing of heart disease measures in order to provide more useability and feasibility data;
- measures in the area of treatment for atrial fibrillation;
- additional composite measures for heart disease;
- measures of end-of-life care and how physicians discuss palliative care with newly diagnosed heart disease patients;
- additional community-level/surveillance measures for assessing heart disease care; and
- measures of medication adherence/persistence.

Hypertension Measures

Due to a notable absence of quality performance measures, development is recommended in the following areas of hypertension care:

- safe monitoring of patients on pharmacotherapy;
- measures of efficiency; and
- patient-centered measures that assess understanding of the plan of care and preferences with regard to medications, lifestyle changes, out-of-pocket expenses, and satisfaction with provider(s) (i.e., through surveys).

Additionally, because intrinsic sociodemographic variations between practices may jeopardize fair and meaningful physician comparisons, some allowance for adjustments to quality measurements must be given to providers with

disproportionately high numbers of complex or indigent patients, such as has been done traditionally for outcomes measures in order to "level the playing field" through multivariable risk adjustments or stratified comparisons of providers for process measures.

Medication Management Measures

Because of the central role medications play in healthcare, combined with the notable lack of measures for medication management, there are several areas that should be further investigated and for which measures should be developed. Needed are the following:

- measures that address all aspects of medication management, as defined by "medication-related assessment, guideline adherence, administration and compliance, monitoring of therapeutic outcomes and related side effects, review and documentation, patient education, coordination of treatment, and drug interactions and polypharmacy";[23]
- outcome measures;
- measures that address all of the NQF-endorsed quality aim areas—especially patient-centeredness, timeliness, efficiency, and equity;
- measures that are cross-cutting and that address all ambulatory care patients (e.g., pediatric patients) regardless of age, gender, race/ethnicity, and diagnosis;
- measures that address key priority areas for which medication management care quality has the greatest leverage:
  - drug interactions,
  - use of generics,
  - medication use and the elderly with a specific focus on dosing and medication withdrawal,

[23] This definition of medication management is derived from work conducted by 11 pharmacy-related organizations (the Academy of Managed Care Pharmacy, the American Association of Colleges of Pharmacy, the American College of Apothecaries, the American College of Clinical Pharmacy, the American Society of Consultant Pharmacists, the American Pharmacists Association, the American Society of Health-System Pharmacists, the National Association of Boards of Pharmacy, the National Association of Chain Drug Stores, the National Community Pharmacists Association, and the National Council of State Pharmacy Association Executives) to define "medication therapy management services." Available at www.aacp.org/Docs/MainNavigation/Resources/6308_MTMServicesDefinitionandProgramCriteria27-Jul-04.pdf. Last accessed July 2005.

  - transitions in care/care coordination,
  - therapy duplication (i.e., patients on multiple drugs for the same purpose),
  - pharmacological antagonists (i.e., patients on medications that have opposite effects), and
  - literacy, health literacy, counseling, and consumer/patient education;
- measures that address polypharmacy, recognizing that commonly identified measures that address the number of medications can result in negative consequences if they are used to limit access to needed therapy;
- measures that address over-the-counter medications, including herbal remedies and their consequences; and
- rigorous validation studies of candidate consensus standards in medication management, especially since these consensus standards will be used for pay for performance and other provider incentives.

Mental Health and Substance Use Disorders Measures

A number of issues warrant additional research in order to facilitate the development of stronger performance measurement in the areas of behavioral health and substance use disorders, including the following:

- screening for depression and alcohol misuse in primary care, to include what instruments are acceptable in terms of scientific properties and burden and whether annual screening in the general primary care population is the right frequency;
- the differences between psychiatric practices for pediatric patients and adults (i.e., those that impact on performance measurement), including information about the effect of measurement on access to care for children;
- whether measures of adverse effects associated with atypical antipsychotics can be applied across diagnostic conditions (current measures are limited to bipolar disorder);
- what crosswalk or mapping process could be developed by the Veteran's Health Administration (VHA) to facilitate translation of measures from VHA terminology for general population use; and
- the development of clear indicators for terms such as "remission" that would facilitate the measurement process.

Obesity Measures

Measures of clinical care for obesity should be developed to ensure that three critical components of care are addressed:

1. **Assessment.** To effectively improve the weight of overweight/obese patients, providers must first assess the patient with evidence-based tools (i.e., body mass index [BMI], BMI percentile for age and gender, weight, waist/hip ratio, waist circumference, or skin caliper).
2. **Management plan.** Once a patient has been assessed for obesity and an appropriate diagnosis has been made, an action plan may be created (i.e., inquiry and counseling about physical activity, diet, lifestyle).
3. **Implementation of the plan.** After the plan is developed, the provider may support the patient in implementing

the plan through one or more of the following: follow-up, behavioral intervention, counseling, and referral to other providers (e.g., nutrition advice, bariatric surgery).

Potentially fruitful areas for research and measure development include:

- assessing the impact of screening on behavioral changes and weight loss;
- screening obese patients for comorbidities (i.e., high blood pressure, heart disease, diabetes, sleep disturbances);
- screening children for parental obesity/family history, excessive weight gain, screen time (e.g., television viewing, video viewing and games, and leisure computer time), minutes of physical activity, intake of discretionary calories (i.e., sugar-sweetened beverages), and sleep duration at age three;
- documenting height and weight;
- documenting weight loss or maintenance of current weight;
- creating composite measures that assess physical activity, nutrition, and sedentary lifestyle in children and adults; and
- examining the impact of restaurants, food advertising, grocers, product labeling, schools, and employers on obesity and encouraging meaningful regulatory and community action by these entities that can reduce individual and aggregate rates of excessive BMI.

Prenatal Care Measures

Currently, there are no quality measures in some areas of prenatal care. In particular, performance monitoring in the areas of preconception care and genetic screening are profoundly underdeveloped.

Prevention, Immunization, and Screening Measures

To broaden the scope of screening measures, research on or development of measures in the following areas is recommended:

- a comprehensive pediatric lead screening measure that is consistent with guidelines and that does not rely solely on blood lead testing;
- for measures requiring a "look-back" period, research to increase consistency in look-back periods specified for vaccinations attributable to a provider; both administrative data and patient recall sources have strengths and weaknesses that should be compared and evaluated; and
- comprehensive child health measure(s) that address well-child visits, adolescent care visits, and early and periodic screening and diagnostic and treatment guidelines for underserved populations.

Care Coordination Measures

To address the current absence of measures in the area of care coordination:

- the framework for measuring care coordination should be used to develop measures in all domains;
- the evaluation of patient experiences with care survey instruments should include consideration of whether assessment of care coordination is captured;
- measures of care coordination should include broad populations, rather than limited populations;
- comprehensive measures of care coordination should not be limited to any specific level of analysis. Some care

coordination measures, such as follow-up of test results, are appropriate at the physician level. Other measures, such as having a systematic process for establishing a plan of care, may be more appropriate at a group, organization, or system level; and

- measures that address the degree of implementation of information technologies with the functional capabilities for seamless care coordination should be a priority.

Emergency Department Setting

Many patients are cared for as outpatients in emergency rooms. Additional research is needed regarding the use of ambulatory care performance measures in the emergency department setting.

Implementation Issues

To foster the use of physician practice-level ambulatory care consensus standards, additional research is needed around implementation issues such as rules of attribution, sample size requirements, and statistical significance for various types of measurement programs.

In addition, future research is needed in the following areas:

- ways in which the bundling of related measures affects provider compliance and health outcomes;
- ways in which the structure of plan design affects patient eligibility for practices being measured;
- how the lack of provider access to prenatal data at time of delivery, an increasingly prevalent problem, can seriously jeopardize patient care; and
- the potential for performance measures to result in unintended consequences.

Acknowledgments

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Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Asthma/Respiratory Illness		
Asthma assessment*	Percentage of patients who were evaluated during at least one office visit for the frequency (numeric) of daytime and nocturnal asthma symptoms	AMA PCPI
Management plan for people with asthma	Percentage of patients for whom there is documentation that a written asthma management plan was provided either to the patient or the patient's caregiver OR, at a minimum, specific written instructions on under what conditions the patient's doctor should be contacted or the patient should go to the emergency room	IPRO
Use of appropriate medications for people with asthma*	Percentage of patients who were identified as having persistent asthma during the measurement year and the year prior to the measurement year and who were dispensed a prescription for either an inhaled corticosteroid or acceptable alternative medication during the measurement year	NCQA
Asthma: pharmacologic therapy*	Percentage of all patients with mild, moderate, or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment	AMA PCPI
Inappropriate antibiotic treatment for adults with acute bronchitis	Percentage of patients who were diagnosed with bronchitis and were dispensed an antibiotic on or within three days after the episode date	NCQA
Appropriate treatment for children with upper respiratory infection (URI)*	Percentage of children who were given a diagnosis of URI and were not dispensed an antibiotic prescription on or three days after the episode date	NCQA
Chronic Obstructive Pulmonary Disease (COPD): assessment of oxygen saturation	Percentage of patients with COPD with oxygen saturation assessed at least annually	AMA PCPI
COPD: spirometry evaluation	Percentage of patients with COPD who had a spirometry evaluation documented	AMA PCPI
COPD: inhaled bronchodilator therapy	Percentage of symptomatic patients with COPD who were prescribed an inhaled bronchodilator	AMA PCPI
Appropriate testing for children with pharyngitis*	Percentage of patients who were diagnosed with pharyngitis, prescribed an antibiotic, and who received a group A streptococcus test for the episode	NCQA

(more)

[1] Intellectual Property (IP) owner. For the most current specifications and supporting information, please refer to the IP owner. For data sources and IP owners' notices of use and copyright/license notices and for other information about the measures, see appendix A of this report.

IP OWNERS

AAOS - American Academy of Orthopeadic Surgeons (www.aaos.org)
ACC/AHA - American College of Cardiology/American Heart Association
Alliance - National Diabetes Quality Improvement Alliance (www.nationaldiabetesalliance.org)
AMA PCPI - American Medical Association Physician Consortium for Performance Improvement (www.physicianconsortium.org)
CMS - Centers for Medicare & Medicaid Services (www.cms.gov)
CMS-SCRIPT - The SCRIPT measures were developed by the Coalition for Quality in Medication Use, funded by CMS, and are in the public domain. The project has concluded, and the coalition is no longer available to maintain the measures; however, NCQA has indicated that it will maintain them.
HealthPartners - (www.healthpartners.com)
ICSI - Institute for Clinical Systems Improvement (www.icsi.org)
IPRO - (www.ipro.org)
NCQA - National Committee for Quality Assurance (www.ncqa.org)
NCQA/WC - National Committee for Quality Assurance and Washington Circle (www.washingtoncircle.org)
NICHQ - National Initiative for Children's Healthcare Quality (www.nichq.org)
NYC-DHMH - New York City Department of Health and Mental Hygiene (www.nyc.gov/html/doh/html/ome/home.shtml)
RHI - Resolution Health, Inc. (www.resolutionhealth.com)
STABLE - STABLE Project is a physician-led quality improvement initiative to develop evidence-based clinical performance measures for bipolar disorder.

* Previously endorsed by the National Quality Forum in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.*

Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Bone and Joint Conditions		
Osteoarthritis: functional and pain assessment*	Percentage of patients with osteoarthritis who were assessed for function and pain	AMA PCPI AAOS
Osteoarthritis: assessment for use of anti-inflammatory or analgesic over-the-counter (OTC) medications*	Percentage of patient visits with assessment for use of anti-inflammatory or analgesic OTC medications	AMA PCPI
Low back pain (LBP): use of imaging studies	Percentage of patients with new low back pain who received an imaging study (plain x-ray, MRI, CT scan) conducted on the episode start date or in the 28 days following the episode start date	NCQA
LBP: initial assessment	Percentage of patients with a diagnosis of back pain who have medical record documentation of all of the following on the date of the initial visit to the physician: 1. pain assessment; 2. functional status; 3. patient history, including notation of presence or absence of "red flags"; 4. assessment of prior treatment and response; and 5. employment status	NCQA
LBP: physical exam	Percentage of patients with documentation of a physical examination on the date of the initial visit with the physician	NCQA
LBP: mental health assessment	Percentage of patients with a diagnosis of back pain for whom documentation of a mental health assessment is present in the medical record prior to intervention or when pain lasts more than six weeks	NCQA
LBP: appropriate imaging for acute back pain	Percentage of patients with a diagnosis of back pain for whom the physician ordered imaging studies during the six weeks after pain onset, in the absence of "red flags" (overuse measure, lower performance is better)	NCQA
LBP: repeat imaging studies	Percentage of patients who received inappropriate repeat imaging studies in the absence of red flags or progressive symptoms (overuse measure, lower performance is better)	NCQA
LBP: advice for normal activities	Percentage of patients with medical record documentation that a physician advised them to maintain or resume normal activities	NCQA
LBP: advice against bed rest	Percentage of patients with medical record documentation that a physician advised them against bed rest lasting four days or longer	NCQA
LBP: recommendations for exercise	Percentage of patients with back pain lasting more than 12 weeks, with documentation of physician advice for supervised exercise	NCQA
LBP: appropriate use of epidural steroid injections	Percentage of patients with back pain who have received an epidural steroid injection in the absence of radicular pain AND those patients with radicular pain who received an epidural steroid injection without image guidance (overuse measure, lower performance is better)	NCQA

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Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Bone and Joint Conditions (continued)		
LBP: surgical timing	Percentage of patients without documentation of red flags who had surgery within the first six weeks of back pain onset (overuse measure, lower performance is better) *Note: This measure is applicable only for physicians who perform surgery*	NCQA
LBP: patient reassessment	Percentage of patients with documentation that the physician conducted reassessment of both of the following: ■ Pain ■ Functional status	NCQA
LBP: shared decisionmaking	The percentage of patients with whom a physician or other clinician reviewed the range of treatment options, including alternatives to surgery prior to surgery. To demonstrate shared decisionmaking, there must be documentation in the patient record of a discussion between the physician and the patient that includes all of the following: ■ Treatment choices, including alternatives to surgery ■ Risks and benefits ■ Evidence of effectiveness *Note: This measure is applicable only for physicians who perform surgery*	NCQA
LBP: patient education	The physician provides patients with educational materials that review the natural history of the disease and treatment options, including alternatives to surgery, the risks and benefits, and the evidence *Note: This standard is assessed as a process that applies to all patients. Evaluation is not based on documentation in individual medical records*	NCQA
LBP: postsurgical outcomes	The physician has a system to examine postsurgical outcomes that includes the following: ■ Tracking specific complications of back surgery ■ Periodic analysis of surgical complications data and a plan for improving outcomes *Note: This standard is assessed as a process that applies to all patients. Evaluation is not based on documentation in individual medical records. This standard is applicable only for physicians who perform surgery*	NCQA
LBP: evaluation of patient experience	To demonstrate that the physician has mechanisms to evaluate patient experience there must be evidence of the following: ■ An ongoing system for obtaining feedback about patient experience with care ■ A process for analyzing the data and a plan for improving patient experience *Note: This standard is assessed as a process that applies to all patients. Evaluation is not based on documentation in individual medical records*	NCQA
Osteoporosis management in women who had a fracture	Percentage of women 65 years and older who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat or prevent osteoporosis in the six months after the date of fracture	NCQA
Arthritis: disease modifying antirheumatic drug (DMARD) therapy in rheumatoid arthritis	Assesses whether patients diagnosed with rheumatoid arthritis who have had at least one ambulatory prescription dispensed for a DMARD	NCQA

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Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Diabetes		
Eye exam*	Percentage of adult patients with diabetes aged 18-75 years who received a dilated eye exam or seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist or imaging validated to match diagnosis from these photos during the reporting year, or during the prior year, if patient is at low risk** for retinopathy **Patient is considered low risk if the following criterion is met: has no evidence of retinopathy in the prior year	Alliance/NCQA
Foot exam*	Percentage of adult patients with diabetes aged 18-75 years who received a foot exam (visual inspection, sensory exam with monofilament, or pulse exam)	Alliance/NCQA
Hemoglobin A1c testing*	Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year	Alliance/NCQA
Hemoglobin A1c management*	Percentage of adult patients with diabetes aged 18-75 years with most recent A1c level greater than 9.0% (poor control)	Alliance/NCQA
Hemoglobin A1c test for pediatric patients	Percentage of pediatric patients with diabetes with a HBA1c test in a 12-month measurement period	NCQA
Blood pressure management*	Percentage of adult patients with diabetes aged 18-75 years with most recent blood pressure <140/80 mm Hg	Alliance/NCQA
Urine protein screening*	Percentage of adult diabetes patients aged 18-75 years with at least one test for microalbumin during the measurement year or who had evidence of medical attention for existing nephropathy (diagnosis of nephropathy or documentation of microalbuminuria or albuminuria)	Alliance/NCQA
Lipid profile*	Percentage of adult patients with diabetes aged 18-75 years receiving at least one lipid profile (or ALL component tests)	Alliance/NCQA
Measure Pair		
A Lipid management: low density lipoprotein cholesterol (LDL-C) <130*	Percentage of adult patients with diabetes aged 18-75 years with most recent LDL-C <130 mg/dL	Alliance/NCQA
B Lipid management: LDL-C <100*	Percentage of patients 18-75 years of age with diabetes whose most recent LDL-C test result during the measurement year was <100 mg/dL	

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Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Heart Disease		
Coronary artery disease (CAD): symptom and activity assessment*	Percentage of patients with CAD who were evaluated for both level of activity and anginal symptoms during one or more office visits	AMA PCPI/ ACC/AHA
CAD: ACE inhibitor/angiotensin receptor blocker (ARB) therapy*	Percentage of patients with CAD who also have diabetes and/or left ventricular systolic dysfunction (LVSD) who were prescribed ACE inhibitor or ARB therapy	AMA PCPI/ ACC/AHA
CAD: antiplatelet therapy*	Percentage of patients with CAD who were prescribed antiplatelet therapy	AMA PCPI/ ACC/AHA
Ischemic vascular disease (IVD): use of aspirin or another antithrombotic	Percentage of IVD patients who have documentation of use of aspirin or another antithrombotic during the 12-month measurement period	NCQA
CAD—beta blocker therapy: prior myocardial infarction (MI)*	Percentage of patients with prior MI at any time who were prescribed beta blocker therapy	AMA PCPI/ ACC/AHA
Acute myocardial infarction (AMI): persistence of beta blocker treatment after a heart attack	Percentage of patients whose days, supply of beta blockers dispensed is >=135 days in the 180 days following discharge	NCQA
CAD: beta blocker treatment after a heart attack*	Percentage of IVD patients who have a claim indicating beta blocker therapy or who received an ambulatory prescription for beta blockers rendered within 7 days after discharge	NCQA
IVD: blood pressure control	Percentage of IVD patients who at their most recent blood pressure reading during the 12-month measurement period had a blood pressure result of <140/90 mm Hg	NCQA
CAD: drug therapy for lowering LDL cholesterol	Percentage of patients with CAD who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines)	AMA PCPI/ ACC/AHA
IVD: complete lipid profile and LDL control <100	Percentage of IVD patients with a full lipid profile completed during the 12-month measurement period with date of each component of the profile documented; LDL-C <100	NCQA
CAD: optimally managed modifiable risk factors	Percentage of members who have optimally managed modifiable risk factors (LDL, tobacco non-use, blood pressure control, aspirin usage)	HealthPartners
Heart failure (HF): assessment of activity level*	Percentage of patient visits or patients with HF with assessment of current activity level	AMA PCPI/ ACC/AHA
HF: assessment of clinical symptoms of volume overload (excess) *	Percentage of patient visits or patients with HF with assessment of clinical symptoms of volume overload (excess)	AMA PCPI/ ACC/AHA
HF: left ventricular function (LVF) assessment*	Percentage of patients with HF with quantitative or qualitative results of LVF assessment recorded	AMA PCPI/ ACC/AHA
HF: ACE inhibitor/ARB therapy*	Percentage of patients with HF who also have LVSD who were prescribed ACE inhibitor or ARB therapy	AMA PCPI/ ACC/AHA
HF: patient education	Percentage of patients who were provided with patient education on disease management and health behavior changes during one or more visit(s)	AMA PCPI/ ACC/AHA
HF: beta blocker therapy*	Percentage of patients with HF who also have LVSD who were prescribed beta blocker therapy	AMA PCPI/ ACC/AHA
HF: warfarin therapy for patients with atrial fibrillation*	Percentage of patients with HF who also have paroxysmal or chronic atrial fibrillation who were prescribed warfarin therapy	AMA PCPI/ ACC/AHA
HF: weight measurement*	Percentage of patient visits for patients with HF with weight measurement recorded	AMA PCPI/ ACC/AHA

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Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Hypertension		
Blood pressure measurement	Percentage of patient visits with blood pressure measurement recorded	AMA PCPI/ ACC/AHA
Plan of care*	Percentage of patient visits during which either systolic blood pressure >140 mm Hg or diastolic blood pressure >90 mm Hg with documented plan of care for hypertension	AMA PCPI ACC/AHA
Controlling high blood pressure*	Percentage of patients with last blood pressure <140/90 mm Hg	CMS/NCQA
Medication Management		
Documentation of medication list in the outpatient record	Percentage of patients having a medication list in the medical record	CMS/SCRIPT
Documentation of allergies and adverse reactions in the outpatient record	Percentage of patients having documentation of allergies and adverse reactions in the medical record	CMS/SCRIPT
Therapeutic monitoring: annual monitoring for patients on persistent medications	Percentage of patients 18 years and older who received at least a 180-days supply of medication therapy for the selected therapeutic agent and who received annual monitoring for the therapeutic agent	NCQA
A Annual monitoring for patients on ACE inhibitors/ARBs	Percentage of patients on ACE inhibitors or ARBs with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year	
B Annual monitoring for patients on digoxin	Percentage of patients on digoxin with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year	
C Annual monitoring for patients on diuretics	Percentage of patients on a diuretic with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year	
D Annual monitoring for patients on anticonvulsants	Percentage of patients on an anticonvulsant (phenytoin, phenobarbital, valproic acid, or carbAMA/zepine) with at least one drug serum concentration level monitoring test for the prescribed drug in the measurement year	
E Annual monitoring: combined rate	The sum of the four numerators divided by the sum of the four denominators	
Drugs to be avoided in the elderly		NCQA
A Patients who receive at least one drug to be avoided	Percentage of patients 65 years of age and older who received at least one drug to be avoided in the elderly in the measurement year	
B Patients who receive at least two different drugs to be avoided	Percentage of patients 65 years of age and older who received at least two different drugs to be avoided in the elderly in the measurement year	
Mental Health and Substance Use Disorders		
Major depressive disorder: diagnostic evaluation	Percentage of patients with a diagnosis of major depressive disorder who met the DSM–IV™ criteria during the visit in which the new diagnosis or recurrent episode was identified	AMA PCPI
Major depressive disorder: suicide risk assessment	Percentage of patients who had a suicide risk assessment completed at each visit	AMA PCPI

(more)

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Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Mental Health and Substance Use Disorders (contined)		
New episode of depression:		NCQA
A Optimal practitioner contacts for medication management*	Percentage of patients who were diagnosed with a new episode of depression and treated with antidepressant medication, and who had at least three follow-up contacts with a practitioner during the 84-day (12-week) acute treatment phase	
B Effective acute phase treatment*	Percentage of patients who were diagnosed with a new episode of depression, were treated with antidepressant medication, and remained on an antidepressant drug during the entire 84-day (12 week) acute treatment phase	
C Effective continuation phase treatment*	Percentage of patients who were diagnosed with a new episode of depression and treated with antidepressant medication and who remained on an antidepressant drug for at least 180 days (6 months)	
Diagnosis of attention deficit hyperactivity disorder (ADHD) in primary care for school-age children and adolescents	Percentage of patients newly diagnosed with ADHD whose medical record contains documentation of DSM–IV or Diagnostic and Statistical Manual for Primary Care (DSM-PC) criteria being addressed	ICSI
Management of ADHD in primary care for school-age children and adolescents	Percentage of patients diagnosed with ADHD and on first-line medication whose medical record contains documentation of a follow-up visit twice a year	ICSI
ADHD: follow-up care for children prescribed ADHD medication	**A** Initiation Phase: Percentage of children 6-12 years of age as of the index prescription episode start date with an ambulatory prescription dispensed for an ADHD medication and who had one follow-up visit with a practitioner with prescribing authority during the 30-day initiation phase **B** Continuation and Maintenance (C&M) Phase: Percentage of children 6-12 years of age as of the index prescription episode start date with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who in addition to the visit in the initiation phase had at least 2 additional follow-up visits with a practitioner within 270 days (9 months) after the initiation phase ended	NCQA
Bipolar disorder and major depression: assessment for manic or hypomanic behaviors	Percentage of patients treated for depression who were assessed, prior to treatment, for the presence of current and/or prior manic or hypomanic behaviors	STABLE
Bipolar disorder and major depression: appraisal for alcohol or chemical substance use	Percentage of patients with depression or bipolar disorder with evidence of an initial assessment that includes an appraisal for alcohol or chemical substance use	STABLE
Bipolar disorder: appraisal for risk of suicide	Percentage of patients with bipolar disorder with evidence of an initial assessment that includes an appraisal for risk of suicide	STABLE
Bipolar disorder: level-of-function evaluation	Percentage of patients treated for bipolar disorder with evidence of level-of-function evaluation at the time of the initial assessment and again within 12 weeks of initiating treatment	STABLE
Bipolar disorder: assessment for diabetes	Percentage of patients treated for bipolar disorder who are assessed for diabetes within 16 weeks after initiating treatment with an atypical antipsychotic agent	STABLE
Initiation and engagement of alcohol and other drug (AOD) dependence treatment		NCQA/WC
A Initiation	Percentage of adults aged 18 and over diagnosed with AOD abuse or dependence and receiving a related service who initiate treatment	
B Engagement	Assessment of the degree to which members engage in treatment with two additional AOD treatments within 30 days after initiating treatment	

(more)

* Previously endorsed by the National Quality Forum in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.*

Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Obesity		
Body mass index (BMI) in adults >18 years of age	Percentage of adults with BMI documentation in the past 24 months	NYC-DHMH
BMI 2 through 18 years of age	Percentage of children 2 through 18 years of age whose weight is classified based on BMI percentile for age and gender	NICHQ
Prenatal Care		
Screening for Human Immunodeficiency Virus (HIV)*	Percentage of patients who gave birth during a 12-month period who were screened for HIV infection during the first or second prenatal care visit	AMA PCPI
Anti-D immune globulin*	Percentage of D-negative, unsensitized patients who gave birth during a 12-month period who received anti-D immune globulin at 26-30 weeks gestation	AMA PCPI
Blood groups (ABO), D (Rh) type	Percentage of patients who gave birth during a 12-month period who had a determination of blood group (ABO) and D (Rh) type by the second prenatal care visit	AMA PCPI
Blood group antibody testing	Percentage of patients who gave birth during a 12-month period who were screened for blood group antibodies during the first or second prenatal care visit	AMA PCPI
Prevention, Immunization, and Screening - Tobacco Cessation		
Measure Pair		
A Tobacco use prevention for infants, children, and adolescents	Percentage of patients' charts showing either that there is no tobacco use/exposure or (if a user) that the current use was documented at the most recent clinic visit	ICSI
B Tobacco use cessation for infants, children, and adolescents	Percentage of patients with documented tobacco use or exposure at the latest visit who also have documentation that their cessation interest was assessed or that they received advice to quit	
Smoking cessation: medical assistance*		NCQA
A Advising smokers to quit	Percentage of patients who received advice to quit smoking	
B Discussing smoking cessation medications	Percentage of patients whose practitioner recommended or discussed smoking cessation medications	
C Discussing smoking cessation strategies	Percentage of patients whose practitioner recommended or discussed smoking cessation methods or strategies	
Measure Pair		
A Tobacco use assessment*	Percentage of patients who were queried about tobacco use one or more times during the two-year measurement period	AMA PCPI
B Tobacco cessation intervention*	Percentage of patients identified as tobacco users who received cessation intervention during the two-year measurement period	

(more)

* Previously endorsed by the National Quality Forum in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.*

Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Prevention, Immunization, and Screening - General Prevention		
Physical activity in older adults		NCQA
A Discussing physical activity	Percentage of patients 65 years of age and older who reported discussing their level of exercise or physical activity with a doctor or other health provider in the last 12 months	
B Advising physical activity	Percentage of patients 65 years of age and older who reported receiving advice to start, increase, or maintain their level of exercise or physical activity from a doctor or other health provider in the last 12 months	
Urinary incontinence management in older adults*		NCQA
A Discussing urinary incontinence	Percentage of patients 65 years of age and older who reported having a urine leakage problem in the last six months and who discussed their urinary leakage problem with their current practitioner	
B Receiving urinary incontinence treatment	Percentage of patients 65 years of age and older who reported having a urine leakage problem in the last six months and who received treatment for their current urine leakage problem	
Prevention, Immunization, and Screening - Screening		
Breast cancer screening*	Percentage of eligible women 50 to 69 years of age who receive a mammogram in a two-year period	CMS/NCQA
Cervical cancer screening*	Percentage of women 18 to 64 years of age who received one or more Pap tests during the measurement year or the two years prior to the measurement year	NCQA
Chlamydia screening in women	Percentage of eligible women who were identified as sexually active who had at least one test for chlamydia during the measurement year	NCQA
Colorectal cancer screening*	Percentage of adults 50 to 80 years of age who had appropriate screening for colorectal cancer (CRC), including fecal occult blood test during the measurement year, or flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year, or double contrast barium enema during the measurement year or the four years prior to the measurement year, or colonoscopy during the measurement year or the nine years prior to the measurement year	NCQA
Fall risk management in older adults		NCQA
A Discussing fall risk	Percentage of patients age 75 and older who reported that their doctor or other health provider talked with them about falling or problems with balance or walking	
B Managing fall risk	Percentage of patients age 75 and older who reported that their doctor or other health provider had done anything to help prevent falls or treat problems with balance or walking	
Osteoporosis testing in older women	Percentage of female patients age 65 and older who reported receiving a bone density test (BMD) to check for osteoporosis	NCQA

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* Previously endorsed by the National Quality Forum in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.*

Table 1 – National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Prevention, Immunization, and Screening - Immunization		
Childhood immunization status*	Percentage of children two years of age who had four DtaP/DT, three IPV, one MMR, three H influenza type B, three hepatitis B, one chicken pox vaccine (VZV), and four pneumococcal conjugate vaccines by their second birthday. The measure calculates a rate for each vaccine and two separate combination rates	NCQA
Flu shots for adults ages 50 to 64*	Percentage of patients age 50 to 64 who report having received an influenza vaccination during the past influenza vaccination season	NCQA
Flu shots for older adults*	Percentage of patients age 65 and over who received an influenza vaccination from September through December of the year	CMS/NCQA
Influenza immunization*	Percentage of patients who received an influenza vaccination	AMA PCPI
Pneumococcal vaccine needed for all adults aged 65 years or older	Percentage of adults age 65 to 67 years who have not received a pneumococcal vaccine	RHI
Pneumonia vaccination status for older adults	Percentage of Medicare patients 65 years of age and older who ever received a pneumococcal vaccination	NCQA
Pneumonia vaccination*	Percentage of patients who ever received a pneumococcal vaccination	CMS/NCQA

* Previously endorsed by the National Quality Forum in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.*

Appendix A
Specifications of the NQF-Endorsed Consensus Standards for Ambulatory Care—Part 1

The following table summarizes the detailed specifications for each of the National Quality Forum (NQF)-endorsed™ national voluntary standards for ambulatory care, part 1. All information presented has been derived directly from measure sources/developers without modification or alteration (except when the measure developer agreed to such modification during the NQF Consensus Development Process) and is current as of July 2007.

All NQF-endorsed voluntary consensus standards are open source, meaning they are fully accessible and disclosed.

Issues regarding any NQF-endorsed consensus standards (e.g., modifications to specifications, emerging evidence) may be submitted to NQF for review and consideration via the "Implementation Feedback Form" found at www.qualityforum.org/implemenation_feedback.htm. NQF will transmit this information to the measure developers and/or compile it for consideration in updating the measure set.

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1

ASTHMA/RESPIRATORY ILLNESS

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ASTHMA ASSESSMENT	AMA PCPI[2,3]	Patients who were evaluated during at least one office visit during the reporting year for the frequency (numeric) of daytime and nocturnal asthma symptoms.* *To be counted in calculations of this measure, symptom frequency must be numerically quantified. Measure may also be met by physician documentation or patient completion of an asthma assessment tool/survey/questionnaire. Assessment tools may include the QualityMetric Asthma Control Test™; NAEPP Asthma Symptoms and Peak Flow Diary. CPT II Code 1005F-Asthma symptoms evaluated.	All patients ages 5-40 years with asthma. Patient selection: ICD-9-CM Codes for asthma: 493.00-493.92 and CPT Codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99383-99385, 99393-99396, 99401-99404 *AND* Patient's age is between 5 and 40 years.	None.	Paper medical record, paper flowsheet, administrative data using CPT II Codes, and EHRS.

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[1] Intellectual Property (IP) owner. *For the most current specifications and supporting information please refer to the IP owner.*

IP Owners
AAOS - American Academy of Orthopeadic Surgeons (www.aaos.org)
ACC/AHA - American College of Cardiology/American Heart Association
Alliance - National Diabetes Quality Improvement Alliance (www.nationaldiabeatesalliance.org)
AMA PCPI - American Medical Association Physician Consortium for Performance Improvement (www.physicianconsortium.org)
CMS - Centers for Medicare & Medicaid Services (www.cms.gov)
CMS-SCRIPT - The SCRIPT measures were developed by the Coalition for Quality in Medication Use, funded by CMS, and are in the public domain. The project has concluded, and the coalition is no longer available to maintain the measures; however, NCQA has indicated that it will maintain them.
HealthPartners - (www.healthpartners.com)
ICSI - Institute for Clinical Systems Improvement (www.icsi.org)
IPRO - www.ipro.org
NCQA - National Committee for Quality Assurance (www.ncqa.org)
NCQA/WC - National Committee for Quality Assurance and Washington Circle (www.washingtoncircle.org)
NICHQ - National Initiative for Children's Healthcare Quality (www.nichq.org)
NYC-DHMH - New York City Department of Health and Mental Hygiene (www.nyc.gov/html/doh/html/ome/home.shtml)
RHI - Resolution Health, Inc. (www.resolutionhealth.com)
STABLE - STABLE Project is a physician-led quality improvement initiative to develop evidence-based clinical performance measures for bipolar disorder.

[2] **AMA and NCQA Notice of Use.** Broad public use and dissemination of these measures is encouraged and the measure developers have agreed with NQF that noncommercial uses do not require the consent of the measure developer. Use by health care providers in connection with their own practices is not a commercial use. Commercial use of a measure does require the prior written consent of the measure developer and commercial uses may be subject to a license agreement at the discretion of the measure developer. As used herein, a "commercial use" refers to any sale, license, or distribution of a measure for commercial gain, or incorporation of a measure into any product or service that is sold, licensed, or distributed for commercial gain, (even if there is no actual charge for inclusion of the measure).

[3] Physician Performance Measures (Measures) and related data specifications, developed by the Physician Consortium for Performance Improvement (the Consortium), are intended to facilitate quality improvement activities by physicians. These Measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance Measures are not clinical guidelines and do not establish a standard of medical care. The Consortium has not tested its Measures for all potential applications. The Consortium encourages the testing and evaluation of its Measures. Measures are subject to review and may be revised or rescinded at any time by the Consortium. The Measures may not be altered without the prior written approval of the Consortium. Measures developed by the Consortium, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, e.g., use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and American Medical Association, on behalf of the Consortium. Neither the Consortium nor its members shall be responsible for any use of these Measures. **THE MEASURES ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND**© 2004 American Medical Association. All Rights Reserved. Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, the Consortium, and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
MANAGEMENT PLAN FOR PEOPLE WITH ASTHMA	IPRO	Patients for whom there is documentation, at any time during the abstraction period, that a written asthma management plan was provided either to the patient or the patient's caregiver *OR* at a minimum, specific written instructions on under what conditions the patient's doctor should be contacted or the patient should go to the emergency room. Inclusions: Copy of asthma management plan on record *OR* written note by provider documenting having given the patient/parent/caregiver written asthma management instructions. Instructions can include when to use PEFR or change medications in response to a change in patient symptoms and/or when to contact a physician and/or when to go directly to the emergency room.	Patients who had at least two (2) separate ambulatory visits to your practice site for asthma during the time period January through December. A visit is considered an asthma visit if, in any claims-diagnostic field, the patient has an ICD-9-CM Diagnosis Code of 493.XX (i.e., 493 alone or with any extension-the common code combinations are 493, 493.0, 493.1, 493.9; there may be a fifth digit which is either a 0 or 1, e.g., 493.90). If your claims/encounter system also uses CPT Codes-acceptable CPT Codes with these ICD-9-CM Codes are listed below. Acceptable CPT Codes with ICD-9 Codes above include: 99201-99205; 99211-99215; 99241-99245; 99271-99275.	**Numerator:** Documentation of verbal directions given to patient/parent/caregiver without documentation of written directions being given to patient/parent/caregiver.	Medical record abstraction, identified by administrative data.

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA	NCQA[2,4]	**Electronic Collection:** Dispensed at least one prescription for inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers, or methylxanthines during the measurement year. **Medical Record Collection**: Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator:** Documentation in the medical record must include, at a minimum, a note indicating the patient received at least one written prescription for inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers, or methylxanthines during the measurement year.	**Electronic Collection:** All patients ages 5-56 years as of December 31 of the measurement year with persistent asthma reported in three age stratifications (5-9, 10-17, 18-56) and as a combined rate. To identify patients with persistent asthma, use all applicable coding schemes listed below (i.e., count patients that meet the criteria for any one of the approaches below. Criteria need not be the same across years). Step 1: Identify patients as having persistent asthma who met at least one of the four criteria below, during *both* the measurement year and the year prior to the measurement year. ■ At least one Emergency Department (ED) visit based on CPT Codes: 99281-99285, UB-92 Codes: 045X, 0981 with asthma (ICD-9 Code 493) as the principal diagnosis ■ At least one acute inpatient discharge based on CPT Codes: 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291 and UB-92 Revenue Codes: 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016X, 020X–022X, 072X, 0987 with asthma ICD-9 Code 493 as the principal diagnosis	Exclude from the eligible population all patients diagnosed with emphysema and chronic obstructive pulmonary disease (COPD) any time on or prior to December 31 of the measurement year as identified by the following codes, or for medical record collection, as documented within the chart: Emphysema ICD-9 Codes: 492, 506.4, 518.1, 518.2; COPD ICD-9 Codes: 491.2, 493.2, 496, 506.4.	Electronic data (visit and pharmacy encounter data or claims or medical record data).

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[4] This performance measure was developed by and is owned by the National Committee for Quality Assurance ("NCQA"). This performance measure is not a clinical guideline and does not establish a standard of medical care. NCQA makes no representations, warranties or endorsement about the quality of any organization or physician that uses or reports performance measures and NCQA has no liability to anyone who relies on such measures. NCQA holds a copyright in this measure and can rescind or alter the measure at any time. Users of the measure shall not have the right to alter, enhance, or otherwise modify the measure and shall not disassemble, recompile, or reverse engineer the source code or object code relating to the measure. Anyone desiring to use or reproduce the measure without modification for a noncommercial purpose may do so without obtaining any approval from NCQA. All commercial uses must be approved by NCQA and are subject to a license at the discretion of NCQA.

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA *continued*			■ At least four outpatient asthma visits based on CPT Codes: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99382-99386, 99392-99396, 99401-99404, 99411, 99412, 99420, 99429, 99499; UB-92 Revenue Codes: 051X,0520, 0521, 0523, 0526, 0527, 0528, 0529, 057X-059X, 077X, 0982, 0983; with asthma; ICD-9 Code 493 as one of the listed diagnoses and at least two asthma medication dispensing events ■ At least four asthma medication dispensing events (i.e., an asthma medication was dispensed on four occasions). Asthma Medications (NCQA will provide a comprehensive list of NDC codes on its web site). *Preferred therapy:* Cromolyn sodium, inhaled Inhaled corticosteroids Leukotriene modifiers Methylxanthines Nedocromil *Add-on therapy:* Long-acting, inhaled beta-2 agonists; short-acting, inhaled beta-2 agonists. Step 2: For a patient identified as having persistent asthma because of at least four asthma medication dispensing events, where leukotriene modifiers were the sole asthma medication dispensed, the patient must: meet any one of the other three criteria in step 1, or have at least one diagnosis of asthma in any setting in the same year as the		

(more)

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA *continued*			leukotriene modifier (i.e., measurement year or year prior to the measurement year). **Medical Record Collection:** EHR users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Denominator:** All patients ages 5-56 years as of December 31 of the measurement year with persistent asthma reported in three age stratifications (5-9, 10-17, 18-56) and as a combined rate. To identify patients with persistent asthma, use criteria listed below (i.e., count patients that meet the criteria for any one of the approaches below. Criteria need not be the same across years). Step 1: Identify patients as having persistent asthma who met at least one of the four criteria below, during *both* the measurement year and the year prior to the measurement year. ■ At least one ED visit with asthma as the principal diagnosis ■ At least one acute inpatient discharge with asthma as the principal diagnosis ■ At least four outpatient asthma visits with asthma as one of the listed diagnoses and at least two asthma medication prescription/refill events		

(more)

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA *continued*			■ At least four asthma medication prescription events (i.e., an asthma medication was prescribed/refilled on four occasions). Asthma Medications (NCQA will provide a comprehensive list of NDC codes on its web site). *Preferred therapy:* Cromolyn sodium Inhaled corticosteroids Leukotriene modifiers Methylxanthines Nedocromil *Add-on therapy:* Long-acting, inhaled beta-2 agonists Short-acting, inhaled beta-2 agonists Step 2: For a patient identified as having persistent asthma because of at least four asthma medication prescription/refill events, where leukotriene modifiers were the sole asthma medication prescribed, the patient must: ■ Meet any one of the other three criteria in step 1 *OR* ■ Have at least one diagnosis of asthma in any setting in the same year as the leukotriene modifier (i.e., measurement year or year prior to the measurement year). **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA *continued*			encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.		
ASTHMA: PHARMACOLOGIC THERAPY	AMA PCPI[2,3]	Patients who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment (leukotriene modifiers, cromolyn sodium, nedocromil sodium, or sustained-released methylxanthines) (drug list available) *OR* CPT II Code 4015F Persistent asthma, preferred long-term control medication, or acceptable alternative treatment, prescribed.	All patients age 5-40 years with mild, moderate, or severe persistent asthma. Patient selection: ICD-9-CM Codes for asthma: 493.00-493.92 *AND* Additional individual medical record review must be completed to identify those patients with mild, moderate, or severe persistent asthma *OR* CPT II Code 1038F Persistent asthma (mild, moderate or severe) *AND* Patient's age is between 5 and 40 years.	Documentation of patient reason(s) for not prescribing either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment *OR* CPT II Code w/modifier 4015F 2P.	Paper medical record, paper flowsheet, administrative data using CPT II Codes, and EHRS.

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INAPPROPRIATE ANTIBIOTIC TREATMENT FOR ADULTS WITH ACUTE BRONCHITIS	NCQA[2,4]	**Electronic Collection:** A dispensed outpatient prescription for antibiotic medication on or within three days after the Episode Date. Outpatient Antibiotic Medications include: Amikacin, Amoxicillin, Amox/Clavulanate, Ampicillin, Ampicillin-sulbactam, Azithromycin, Aztreonam, Benzathine penicillin, Cefaclor, Cefadroxil, Cefadroxil hydrate, Cefazolin, Cefixime, Cefotetan, Cefoxitin, Cefdinir, Cefditoren, Cefepime, Cefoperzone, Cefotaxime, Cefpodoxime proxetil, Cefprozil, Ceftazidime, Ceftibuten, Ceftizoxime, Ceftriaxone, Cefuroxime, Cephalexin, Cephradine, Chloramphenical, Ciprofloxacin, Clarithromycin, Clindamycin, Daptomycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/Sulfisoxazole, Fosfomycin, Gatifloxacin, Gentamicin, Gemifloxacin, Kanamycin, Levofloxacin, Lincomycin, Linezolid, Lomefloxacin, Loracarbef, Metronidazole, Moxifloxacin, Minocycline, Nafcillin, Neomycin, Nitrofurantoin, Norfloxacin, Ofloxacin, Oxacillin, Penicillin VK, Penicillin G, Piperacillin, Piperacillin-Tazobactam, Procaine penicillin, Rifampin, Quinupristin/ Dalfopristin, Sparfloxacin, Streptomycin, Sulfisoxazole, Sulfadiazine, Sulfamethoxazole, Sulfasalzine, Telithromycin, Tetracycline, Ticarcillin, Ticarcillin-Clavulanate, Trimethoprim, Trimethoprim-sulfamethoxazole, Vancomycin. NCQA will provide a list of NDC codes on its web site.	**Electronic Collection:** Step 1: Identify all patients 18 years as of January 1 of the year prior to the measurement year to 64 years as of December 31 of the measurement year who during the Intake Period had a claim/ encounter with any diagnosis of acute bronchitis and an outpatient visit code. (The Intake Period is between January 1-December 24 of the measurement year.) Codes to identify acute bronchitis: ICD-9-CM Code 466.0 Codes to identify outpatient visits: Evaluation and management codes - office or other outpatient services: CPT Codes 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99385, 99386, 99395, 99396, 99401-99404, 99411, 99412, 99420, 99429, 99499 Clinic: UB-92 Revenue Code 51X Freestanding clinic: UB-92 Revenue Codes 051X, 0520-0523, 0526-0529, 077X Professional fees, outpatient services: UB-92 Revenue Code 0982 Professional fees, clinic: UB-92 Revenue Code 0983 Codes to identify ED visits:* UB-92 Bill Codes 13X, *AND* UB-92 Revenue Codes 045X, 0981 *OR* CPT Codes 99281-99285 *Exclude from the denominator patients admitted to the hospital from the ED. Step 2: Determine all acute bronchitis Episode Dates. For each patient identified in step 1, determine all outpatient Episode Dates.	Exclusion for competing diagnoses is built into the denominator specifications.	Electronic data (visit and pharmacy encounter data or claims or medical record data).

(more)

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INAPPROPRIATE ANTIBIOTIC TREATMENT FOR ADULTS WITH ACUTE BRONCHITIS *continued*		**Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator:** Documentation in the medical record must include, at a minimum, a note indicating the patient having received a prescription for antibiotic medications on or within three days after the First Eligible Episode date. Outpatient Antibiotic Medications include: Amikacin, Amoxicillin, Amox/Clavulanate, Ampicillin, Ampicillin-sulbactam, Azithromycin, Aztreonam, Benzathine penicillin, Cefaclor, Cefadroxil, Cefadroxil hydrate, Cefazolin, Cefixime, Cefotetan, Cefoxitin, Cefdinir, Cefditoren, Cefepime, Cefoperzone, Cefotaxime, Cefpodoxime proxetil, Cefprozil, Ceftazidime, Ceftibuten, Ceftizoxime, Ceftriaxone, Cefuroxime, Cephalexin, Cephradine, Chloramphenical, Ciprofloxacin, Clarithromycin, Clindamycin, Daptomycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/Sulfisoxazole, Fosfomycin, Gatifloxacin, Gentamicin, Gemifloxacin, Kanamycin, Levofloxacin, Lincomycin, Linezolid, Lomefloxacin, Loracarbef, Metronidazole, Moxifloxacin, Minocycline, Nafcillin, Neomycin, Nitrofurantoin, Norfloxacin,Ofloxacin, Oxacillin, Penicillin VK, Penicillin G, Piperacillin, Peperacillin-Tazobactam,	Step 3: Exclude patients who during the 12 months prior to the Episode Date, had at least one claim/ encounter with a diagnosis for a comorbid condition. *Note:* If the acute bronchitis episode occurred on January 1 of the measurement year, look 12 months prior to the start of the measurement year to check for the patient's comorbid condition history. Codes to Identify Comorbid Conditions: HIV infection; HIV asymptomatic: ICD-9-CM Code 042, V Code V08 Cystic fibrosis: ICD-9-CM Code 277.0 Disorders of the immune system: ICD-9 CM Code 279 Malignancy neoplasms: ICD-9-CM Code 140-208 Chronic bronchitis: ICD-9-CM Code 491 Emphysema: ICD-9-CM Code 492 Bronchiectasis: ICD-9-CM Code 494 Extrinsic allergic alveolitis: ICD-9-CM Code 495 Chronic airway pulmonary obstruction, not otherwise classified: ICD-9-CM Codes 496, 493.2 Pneumoconiosis and other lung disease due to external agents: ICD-9-CM Codes 500-508 Other diseases of the respiratory system: ICD-9-CM Codes 510-519 Tuberculosis: ICD-9-CM Codes 010-018. Step 4: Test for negative medication history. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or which was active on the Episode Date.		*(more)*

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INAPPROPRIATE ANTIBIOTIC TREATMENT FOR ADULTS WITH ACUTE BRONCHITIS *continued*		Procaine penicillin, Rifampin, Quinupristin/ Dalfopristin, Sparfloxacin, Streptomycin, Sulfisoxazole, Sulfadiazine, Sulfamethoxazole, Sulfasalzine, Telithromycin, Tetracycline, Ticarcillin, Ticarcillin-Clavulanate, Trimethoprim, Trimethoprim-sulfamethoxazole, Vancomycin.	Outpatient Antibiotic Medications include: Amikacin, Amoxicillin, Amox/Clavulanate, Ampicillin, Ampicillin-sulbactam, Azithromycin, Aztreonam, Benzathine penicillin, Cefaclor, Cefadroxil, Cefadroxil hydrate, Cefazolin, Cefixime, Cefotetan, Cefoxitin, Cefdinir, Cefditoren, Cefepime, Cefoperzone, Cefotaxime, Cefpodoxime proxetil, Cefprozil, Ceftazidime, Ceftibuten, Ceftizoxime, Ceftriaxone, Cefuroxime, Cephalexin, Cephradine, Chloramphenical, Ciprofloxacin, Clarithromycin, Clindamycin, Daptomycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/Sulfisoxazole, Fosfomycin, Gatifloxacin, Gentamicin, Gemifloxacin, Kanamycin, Levofloxacin, Lincomycin, Linezolid, Lomefloxacin, Loracarbef, Metronidazole, Moxifloxacin, Minocycline, Nafcillin, Neomycin, Nitrofurantoin, Norfloxacin, Ofloxacin, Oxacillin, Penicillin VK, Penicillin G, Piperacillin, Piperacillin-Tazobactam, Procaine penicillin, Rifampin, Quinupristin/ Dalfopristin, Sparfloxacin, Streptomycin, Sulfisoxazole, Sulfadiazine, Sulfamethoxazole, Sulfasalzine, Telithromycin, Tetracycline, Ticarcillin, Ticarcillin-Clavulanate, Trimethoprim, Trimethoprim-sulfamethoxazole, Vancomycin. *Note:* If the acute bronchitis episode occurred on January 1 of the measurement year, look 30 days prior to the start of the measurement year to check for the patient's negative medication history. (Please refer to the NCQA web site for a comprehensive list of NDC codes for antibiotic medications.)		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INAPPROPRIATE ANTIBIOTIC TREATMENT FOR ADULTS WITH ACUTE BRONCHITIS *continued*			Step 5: Test for Competing Diagnoses. Exclude Episode Dates where there is a claim or encounter with a competing diagnosis 30 days prior to the Episode Date through 7 days after the Episode Date. *Note:* If the episode occurred on January 1 of the measurement year, look 30 days prior to the start of the measurement year to check for the patient's competing diagnosis history. Codes to Identify Competing Diagnoses: Intestinal infections: ICD-9-CM Codes (001-009) Pertussis: ICD-9-CM (033) Bacterial infection unspecified: ICD-9-CM (041.9) Lyme disease and other arthropod-borne diseases: ICD-9-CM (088) Otitis media: ICD-9-CM (382) Acute sinusitis: ICD-9-CM (461) Acute pharyngitis: ICD-9-CM (462, 034.0) Acute tonsillitis: ICD-9-CM (463) Chronic sinusitis: ICD-9-CM (473) Infections of the pharynx, larynx, tonsils, adenoids: ICD-9-CM (464.1-464.3, 474, 478.21, 478.22, 478.24, 478.29, 478.71. 478.79, 478.9) Prostatitis: ICD-9-CM (601) Cellulitis, mastoiditis, other bone infections: ICD-9-CM (681, 682, 730, 383) Acute lymphadenitis: ICD-9-CM (683) Impetigo: ICD-9-CM (684) Skin staph infections: ICD-9-CM (686)		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INAPPROPRIATE ANTIBIOTIC TREATMENT FOR ADULTS WITH ACUTE BRONCHITIS *continued*			Pneumonia: ICD-9-CM (481-486) Gonococcal infections and venereal diseases: ICD-9-CM (098, 099) V Codes (V01.6, V02.7, V02.8) Syphilis: ICD-9-CM (090-097) Chlamydia: ICD-9-CM (078.88, 079.88, 079.98) Inflammatory diseases: (female reproductive organs); ICD-9-CM (614- 616) Infections of the kidney: ICD-9-CM (590) Cystitis or UTI: ICD-9-CM (595, 599.0). Step 6: Calculate Measure Denominator. This measure examines one Eligible Episode per patient. Select the First Eligible Episode for each patient during the measurement Intake Period that meets all criteria for inclusion in the denominator. This is the patient's First Eligible Episode. **Medical Record Collection:** EHR users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. Step 1: Identify all patients 18 years as of January 1 of the year prior to the measurement year to 64 years as of December 31 of the measurement year who during the Intake Period had an outpatient diagnosis of acute bronchitis. (The Intake Period is between January 1-December 24 of the measurement year.)		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INAPPROPRIATE ANTIBIOTIC TREATMENT FOR ADULTS WITH ACUTE BRONCHITIS *continued*			ED visits that do not result in a hospital admission are considered an outpatient visit for this measure. Exclude from the denominator patients admitted to the hospital from the ED. Step 2: Determine all acute bronchitis Episode Dates. For each patient identified in step 1, determine all outpatient Episode Dates. Step 3: Exclude patients who during the 12 months prior to the Episode Date had at least one diagnosis for a comorbid condition. *Note:* If the acute bronchitis episode occurred on January 1 of the measurement year, look 12 months prior to the start of the measurement year to check for the patient's comorbid condition history. Comorbid conditions: HIV infection; HIV asymptomatic; cystic fibrosis; disorders of the immune system; malignancy neoplasms; chronic bronchitis; emphysema; bronchiectasis; extrinsic allergic alveolitis; chronic airway pulmonary obstruction, not otherwise classified; pneumoconiosis and other lung disease due to external agents; other diseases of the respiratory system; tuberculosis. Step 4: Test for negative medication history. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was written 30 days prior to the Episode Date or which was active on the Episode Date. Outpatient Antibiotic Medications include: Amikacin, Amoxicillin, Amox/Clavulanate, Ampicillin, Ampicillin-sulbactam, Azithromycin,		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INAPPROPRIATE ANTIBIOTIC TREATMENT FOR ADULTS WITH ACUTE BRONCHITIS *continued*			Aztreonam, Benzathine penicillin, Cefaclor, Cefadroxil, Cefadroxil hydrate, Cefazolin, Cefotetan, Cefoxitin, Cefdinir, Cefditoren, Cefepime, Cefixime, Cefoperzone, Cefotaxime, Cefpodoxime proxetil, Cefprozil, Ceftazidime, Ceftibuten, Ceftizoxime, Ceftriaxone, Cefuroxime, Cephalexin, Cephradine, Chloramphenical, Ciprofloxacin, Clarithromycin, Clindamycin, Daptomycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/Sulfisoxazole, Fosfomycin, Gatifloxacin, Gentamicin, Gemifloxacin, Kanamycin, Levofloxacin, Lincomycin, Linezolid, Lomefloxacin, Loracarbef, Metronidazole, Moxifloxacin, Minocycline, Nafcillin, Neomycin, Nitrofurantoin, Norfloxacin,Ofloxacin, Oxacillin, Penicillin VK, Penicillin G, Piperacillin, Piperacillin-Tazobactam, Procaine penicillin, Rifampin, Quinupristin/ Dalfopristin, Sparfloxacin, Streptomycin, Sulfisoxazole, Sulfadiazine, Sulfamethoxazole, Sulfasalzine, Telithromycin, Tetracycline, Ticarcillin, Ticarcillin-Clavulanate, Trimethoprim, Trimethoprim-sulfamethoxazole, Vancomycin. *Note:* If the acute bronchitis episode occurred on January 1 of the measurement year, look 30 days prior to the start of the measurement year to check for the patient's negative medication history. Step 5: Test for Competing Diagnoses. Exclude Episode Dates where there is a competing diagnosis 30 days prior to the episode date through 7 days after the Episode Date. *Note:* If the episode occurred on January 1 of the measurement year, look 30 days prior to the start of the measurement year to check for the patient's competing diagnosis history.		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INAPPROPRIATE ANTIBIOTIC TREATMENT FOR ADULTS WITH ACUTE BRONCHITIS *continued*			Competing Diagnoses: Intestinal infections; pertussis; bacterial infection unspecified; Lyme disease and other arthropod-borne diseases; otitis media; acute sinusitis; acute pharyngitis; acute tonsillitis; chronic sinusitis; infections of the pharynx, larynx, tonsils, adenoids; prostatitis; cellulitis, mastoiditis, other bone infections; acute lymphadenitis; impetigo; skin staph infections; pneumonia; gonococcal infections and venereal diseases; syphilis; chlamydia; inflammatory diseases (female reproductive organs); infections of the kidney; cystitis. Step 6: Calculate Measure Denominator. This measure examines one Eligible Episode per patient. Select the First Eligible Episode for each patient during the measurement Intake Period that meets all criteria for inclusion in the denominator. This is the patient's First Eligible Episode. A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior 12 months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
APPROPRIATE TREATMENT FOR CHILDREN WITH UPPER RESPIRATORY INFECTION	NCQA[2,4]	**Electronic Collection:** **Numerator:** A dispensed prescription for antibiotic medication on or within three days after the Episode Date. The measure examines one Eligible Episode per patient. Antibiotic Medications (NCQA will provide a list of NDC codes for antibiotic medications on its web site): Amoxicillin, Amox/Clavulanate, Ampicillin, Azithromycin, Cefaclor, Cefadroxil hydrate, Cefazolin, Cefdinir, Cefixime, Cefditoren, Ceftibuten, Cefpodoxime proxetil, Cefprozil, Ceftriaxone, Cefuroxime, Cephalexin,Cephradrine, Ciprofloxacin, Clindamycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/Sulfisoxazole, Gatifloxacin, Levofloxacin, Lomefloxacin, Loracarbef, Minocycline, Ofloxacin, Penicillin VK, Penicillin G, Sparfloxacin, Sulfisoxazole, Tetracycline, Trimethoprim, Trimethoprim-sulfamethoxazol. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator:** Documentation in the medical record must include, at a minimum, a note indicating a written prescription for antibiotic medication (drug list available) on the Episode Date. The measure examines one Eligible Episode per patient.	**Electronic Collection:** **Denominator:** Step 1: Identify all children age 3 months as of July 1 of the year prior to the measurement year to 18 years as of June 30 of the measurement year who had an outpatient visit with only a diagnosis of non-specific URI and an outpatient visit code. Codes to identify URI: Acute nasopharyngitis (common cold): 460 URI unspecified site: 465. Codes to identify outpatient visits: Evaluation and management codes-office or other outpatient service, CPT: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99381-99385, 99391-99395, 99401-99404, 99411, 99412, 99420, 99429, 99499 - Clinic UB-92: 051X Freestanding clinic UB-92: 0520-0523, 0526-0529, 077X, 052X Professional fees-outpatient services UB-92: 0982 Professional fees-clinic UB-92: 0983 Codes to identify ED visits* UB-92 Type of Bill Codes: 13X, and UB-92 Revenue Codes: 045X 0459, 0981 or CPT Code: 99281-99285 *Exclude from the denominator patients admitted to the hospital from the ED. Step 2: For each patient identified in step 1, determine all outpatient Episode Dates. Step 3: Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or which was active on the Episode Date.	None.	Electronic data (visit and pharmacy encounter data or claims or medical record data).

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
APPROPRIATE TREATMENT FOR CHILDREN WITH UPPER RESPIRATORY INFECTION *continued*			Antibiotic Medications: Amoxicillin, Amox/Clavulanate, Ampicillin, Azithromycin, Cefaclor, Cefadroxil hydrate, Cefazolin, Cefdinir, Cefixime, Cefditoren, Ceftibuten, Cefpodoxime proxetil, Cefprozil, Ceftriaxone, Cefuroxime, Cephalexin, Cephradine, Ciprofloxacin, Clindamycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/ Sulfisoxazole, Lomefloxacin, Gatifloxacin, Levofloxacin, Loracarbef, Minocycline, Ofloxacin, Penicillin VK, Penicillin G, Sparfloxacin, Sulfisoxazole, Tetracycline, Trimethoprim, Trimethoprim-sulfamethoxazol. *Note:* If the episode occurred on July 1 of the year prior to the measurement year, look 30 days prior to the start of the Intake Period (June 1-30) to check for negative medication history. Step 4: This measure examines one eligible episode per patient. Select the First Eligible Episode for each patient during the measurement intake period that meets all criteria for inclusion in the denominator. **Medical Record Collection:** EHR users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample.		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
APPROPRIATE TREATMENT FOR CHILDREN WITH UPPER RESPIRATORY INFECTION *continued*			Step 1: Identify all children age 3 months as of July 1 of the year prior to the measurement year to 18 years as of June 30 of the measurement year who had an outpatient visit with only a diagnosis of non-specific upper respiratory infection (acute nasopharyngitis [common cold] or URI unspecified site). Step 2: For each patient identified in step 1, determine all outpatient Episode Dates. Step 3: Exclude Episode Dates where a new or refill prescription for an antibiotic medication was written 30 days prior to the Episode Date or which was active on the Episode Date. Antibiotic Medications: Amoxicillin, Amox/Clavulanate, Ampicillin, Azithromycin, Cefaclor, Cefadroxil hydrate, Cefazolin, Cefdinir, Cefixime, Cefditoren, Ceftibuten, Cefpodoxime proxetil, Cefprozil, Ceftriaxone, Cefuroxime, Cephalexin, Cephraddine, Ciprofloxacin, Clindamycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/Sulfisoxazole, Gatifloxacin, Levofloxacin, Lomefloxacin, Loracarbef, Minocycline, Ofloxacin, Penicillin VK, Penicillin G, Sparfloxacin, Sulfisoxazole, Tetracycline, Trimethoprim, Trimethoprim-sulfamethoxazol. *Note:* If the episode occurred on July 1 of the year prior to the measurement year, look 30 days prior to the start of the Intake Period (June 1-30) to check for negative medication history.		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
APPROPRIATE TREATMENT FOR CHILDREN WITH UPPER RESPIRATORY INFECTION *continued*			Step 4: This measure examines one Eligible Episode per patient. Select the First Eligible Episode for each patient during the measurement Intake Period that meets all criteria for inclusion in the denominator. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD): ASSESSMENT OF OXYGEN SATURATION	AMA PCPI[2,3]	Patients with oxygen saturation assessed and documented. CPT Codes for oxygen saturation: 94760, 94761, 82803, 82805, 82810 or LOINC Codes for oxygen saturation: 11556-8, 2704-5, 2710-2, 19211-2, 2705-2, 3148-4, 3149-2, 34163-6, 19218-7, 19219-5, 19221-1, 19220-3, 20564-1, 2708-6, 2709-4, 19224-5, 2711-0, 2714-4, 2715-1, 2716-9, 2717-7, 24336-0, 24337-8, 24338-6, 24339-4, 24341-0, 24342-8, 24343-6, 24344-4 *OR* CPT II Code: 3028F - Oxygen saturation results documented and reviewed (includes assessment through pulse oximetry or arterial blood gas measurement).	All patients aged ≥18 years with the diagnosis of COPD and a functional expiratory volume (FEV_1) <40 % of predicted value. Patient selection: Documentation in the medical record of a diagnosis of COPD *OR* ICD-9-CM Codes for COPD: 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 496 *AND* CPT Codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* Documentation in the medical record of a FEV_1 <40% of predicted value *OR* CPT II Codes: 3040F FEV_1 <40% of predicted value; 3042F FEV_1 ≥40% of predicted value *AND* Patient's age is ≥18 years of age.	Documentation of medical reason(s) for not assessing oxygen saturation (equipment not available, other medical reason) *OR* CPT II Code w/modifier: 3028F 1P Documentation of patient reason(s) for not assessing oxygen saturation (economic, social, religious, other patient reasons) *OR* CPT II Code w/modifier: 3028F 2P Documentation of system reason(s) for not assessing oxygen saturation *OR* CPT II Code w/modifier: 3028F 3P.	Paper medical record, paper flowsheet, administrative data using CPT II Codes, and EHRS.

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHRONIC OBSTRUCTIVE PULMONARY DISORDER: SPIROMETRY EVALUATION	AMA PCPI[2,3]	Patients with spirometry results documented (FEV_1 and FEV_1/FVC). CPT Codes for spirometry: 94010, 94014, 94015, 94016, 94060, 94070, 94620 *OR* CPT II Code 3023F: Spirometry results documented and reviewed.	All patients aged ≥18 years with the diagnosis of COPD. Patient selection: Documentation in the medical record of a diagnosis of COPD *OR* ICD-9-CM Codes for COPD: 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 496 *AND* Patient's age is ≥18 years of age.	Documentation of medical reason(s) for no spirometry evaluation (patient physically unable to perform spirometry, other medical reasons) *OR* CPT II Code w/modifier: 3023F 1P. Documentation of patient reason(s) for no spirometry evaluation (patient refusal, other patient reasons) *OR* CPT II Code w/modifier: 3023F 2P. Documentation of system reason(s) for no spirometry evaluation *OR* CPT II Code w/modifier: 3023F 3P.	Paper medical record, paper flowsheet, administrative data using CPT II Codes, and EHRS.
CHRONIC OBSTRUCTIVE PULMONARY DISORDER: INHALED BRONCHODILATOR THERAPY	AMA PCPI[2,3]	Symptomatic patients who were prescribed an inhaled bronchodilator (ß2-agonist and/or anticholinergic; drug list available). *OR* CPT II Code: 4025F Inhaled bronchodilator prescribed.	All patients aged ≥18 years with the diagnosis of COPD who have FEV_1/FVC <70% and have symptoms. Patient selection: Documentation in the medical record of a diagnosis of COPD *OR* ICD-9-CM Codes for COPD: 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 496 *AND* CPT codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99383-99385, 99393-99395, 99401-99404 *AND* Documentation in the medical record of FEV_1/FVC <70%	Documentation of medical reason(s) for not prescribing an inhaled bronchodilator (allergy, drug interaction, contraindication, other medical reasons) *OR* CPT II Code w/modifier: 4025F 1P. Documentation of patient reason(s) for not prescribing an inhaled bronchodilator (economic, social, religious, other patient reasons) *OR* CPT II Code w/modifier: 4025F 2P. Documentation of system reason(s) for not prescribing an inhaled bronchodilator *OR* CPT II Code w/modifier: 4025F 3P.	Paper medical record, paper flowsheet, administrative data using CPT II Codes, and EHRS.

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHRONIC OBSTRUCTIVE PULMONARY DISORDER: INHALED BRONCHODILATOR THERAPY *continued*			*AND* Documentation in the medical record of COPD symptoms (synonyms available). There must be documentation of the presence of at least one of the following: dyspnea, cough/sputum, or wheezing *OR* CPT II Codes: 3025F Spirometry test results demonstrate $FEV_1/FVC < 70\%$ with COPD symptoms (e.g., dyspnea, cough/sputum, wheezing); 3027F Spriometry test results demonstrate $FEV_1/FVC \geq 70\%$, or patient does not have COPD symptoms) *OR* ICD-9 Codes for dyspnea: 786.00, 786.01, 786.02, 786.05, 786.06, 786.09, 493.2 *OR* ICD-9 Codes for cough: 786.2, 491.0 *OR* ICD-9 Codes for sputum: 786.3, 786.4 *OR* ICD-9 Codes for wheezing: 786.07 *AND* Patient's age is ≥18 years of age. *Note:* Documentation of FEV_1/FVC and COPD symptoms do not have to occur during the same office visit.		

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
APPROPRIATE TESTING FOR CHILDREN WITH PHARYNGITIS	NCQA[2,4]	**Electronic Collection:** A strep test administered in the seven-day period from three days prior through three days after the First Eligible Episode Date. Codes to Identify Group A Streptococcus Tests, antigen detection by enzyme immunoassay: CPT (87430) LOINC (6556-5, 6557-3, 6558-1, 6559-9, 18481-2, 31971-5), by nucleic acid CPT (87650-87652) LOINC (5036-9), by direct optical observation CPT (87880), by throat culture CPT (87081, 87070-87071) LOINC (626-2, 11268-0, 11475-1, 17656-0). **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. Documentation in the medical record must include at minimum, a note indicating a strep test was administered in the seven-day period from three days prior through three days after the First Eligible Episode Date. Group A Streptococcus Tests include antigen detection by enzyme immunoassay, nucleic acid, by direct optical observation, or by throat culture.	**Electronic Collection:** Step 1: Identify children age 2 years as of July 1 of the year prior to the measurement year to 18 years as of June 30 of the measurement year who had an outpatient visit with only a diagnosis of pharyngitis. Exclude claims/encounters with more than one diagnosis. ICD-9-CM Codes to Identify Pharyngitis: Acute or unspecified pharyngitis: 462 Acute tonsillitis: 463 Streptococcal tonsillitis: 034.0 CPT Codes to identify outpatient visits: Evaluation and management codes-office or other outpatient services: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99382-99385, 99392-99395 99401-99404, 99411, 99412, 99420, 99429, 99499 UB-92 Codes to identify outpatient visits: Clinic: 051X Freestanding clinic: 0520-0523, 0526-0529, 077X Professional fees-outpatient services: 0982 Professional fees-clinic: 0983 Codes to identify ED visits:* UB-92 Type of Bill Codes: 13X and UB-92 Revenue Codes: 045X, 0981 or CPT Codes 99281-99285. *Patients admitted to the hospital from the ED should not be included in the denominator. Step 2: For each patient identified in step 1, determine all outpatient Episode Dates.	None.	Electronic data (visit and pharmacy encounter data or claims or medical record data).

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ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
APPROPRIATE TESTING FOR CHILDREN WITH PHARYNGITIS *continued*			Step 3: For each Episode Date with a qualifying diagnosis, determine if antibiotics were prescribed on or within three days after the Episode Date. Exclude Episode Date if the patient did not receive antibiotics on or within three days after the Episode Date. Antibiotic Medications (NCQA will provide a list of NDC codes for antibiotic medications on its web site): Amoxicillin, Amox/Clavulanate, Ampicillin, Azithromycin, Cefaclor, Cefadroxil hydrate, Cefazoline, Cefdinir, Cefixime, Cefditoren, Ceftibuten, Cefpodoxime proxetil, Cefprozil, Ceftriaxone, Cefuroxime, Cephalexin, Cephadrine, Ciprofloxacin, Clindamycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/Sulfisoxazole, Gatifloxacin, Levofloxacin, Lomefloxacin, Loracarbef, Minocycline, Ofloxacin, Penicillin VK, Penicillin G, Sparfloxacin, Sulfisoxazole, Tetracycline, Trimethoprim, Trimethoprim-sulfamethoxazole. Step 4: Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Dates or which was active on the Episode Dates. *Note:* If the episode occurred on July 1 of the year prior to the measurement year, look-back 30 days prior to the start of the Intake Period (i.e., June 1-30) to check for the patient's medication history. Step 5: The measure examines one Eligible Episode per patient. When calculating the final measure denominator, select the First Eligible Episode for each patient during the measurement Intake Period that meets all criteria for inclusion in the denominator.		

(more)

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
APPROPRIATE TESTING FOR CHILDREN WITH PHARYNGITIS *continued*			**Medical Record Collection:** EHR users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. Step 1: Identify children age 2 years as of July 1 of the year prior to the measurement year to 18 years as of June 30 of the measurement year who had an outpatient visit with only a diagnosis of pharyngitis (acute or unspecified pharyngitis, acute tonsillitis or streptococcal tonsillitis). Exclude encounters with more than one diagnosis. Step 2: For each patient identified in step 1, determine all outpatient Episode Dates. Step 3: For each Episode Date with a qualified diagnosis, determine if antibiotics were prescribed on or within three days after the Episode Dates. Exclude Episode Date if the patient did not receive antibiotics on or within three days after the Episode Date. Antibiotic Medications (NCQA will provide a list of NDC codes for antibiotic medications on its web site): Amoxicillin, Amox/Clavulanate, Ampicillin, Azithromycin, Cefaclor, Cefadroxil hydrate, Cefazolin, Cefdinir, Cefixime, Cefditoren, Ceftibuten, Cefpodoxime proxetil, Cefprozil, Ceftriaxone, Cefuroxime, Cephalexin, Cephradine, Ciprofloxacin, Clindamycin, Dicloxacillin, Doxycycline, Erythromycin, Ery E-Succ/Sulfisoxazole, Gatifloxacin, Levofloxacin, Lomefloxacin, Loracarbef,		*(more)*

ASTHMA/RESPIRATORY ILLNESS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
APPROPRIATE TESTING FOR CHILDREN WITH PHARYNGITIS *continued*			Minocycline, Ofloxacin, Penicillin VK, Penicillin G, Sparfloxacin, Sulfisoxazole, Tetracycline, Trimethoprim, Trimethoprim-sulfamethoxazole. Step 4: Exclude episode dates where a new or refill prescription for an antibiotic medication was written 30 days prior to the Episode Date or which was active on the Episode Date. Step 5: The measure examines one Eligible Episode per patient. When calculating the final measure denominator, select the First Eligible Episode for each patient during the measurement intake period that meets all criteria for inclusion in the denominator. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.		

(more)

BONE AND JOINT CONDITIONS

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
OSTEOARTHRITIS: FUNCTIONAL AND PAIN ASSESSMENT	AMA PCPI[2,3]/ AAOS	Patient visits with assessment for function and pain documented. Medical record must include: Documentation of the patient's satisfaction or dissatisfaction with function and pain *OR* Documentation of the use of a standardized scale or completion of an assessment questionnaire (e.g., SF-36, AAOS Hip & Knee Questionnaire) *OR* CPT II Code: 1006F Osteoarthritis symptoms and functional status assessed.	All visits for patients with OA ≥21 years of age: Patient selection: ICD-9-CM Codes for OA: 715.00-715.98 *AND* CPT Codes for patient visits: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* Patient's age is ≥21 years.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.
OSTEOARTHRITIS: ASSESSMENT FOR USE OF ANTI-INFLAMMATORY OR ANALGESIC OVER-THE-COUNTER MEDICATIONS	AMA PCPI[2,3]/ AAOS	Patient visits with assessment for use of anti-inflammatory or analgesic OTC medications documented (drug list is available). Assessment may include: documentation of current medications, continue same medications, change in medication dose, documentation indicating that the patient was asked about OTC medication use *OR* CPT II Code: 1007F Use of anti-inflammatory or analgesic OTC medications assessed.	All visits for patients with OA ≥21 years of age. Patient selection: ICD-9-CM Codes for OA: 715.00-715.98 *AND* CPT Codes for patient visits: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* Patient's age is ≥21 years.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LOW BACK PAIN (LBP): USE OF IMAGING STUDIES	NCQA[2,4]	**Electronic Collection:** Patients who received an imaging study (plain x-ray, MRI, CT scan) conducted on the Episode Start Date or in the 28 days following the Episode Start Date. Codes to identify imaging studies for LBP (only if they appear in conjunction with an applicable low back pain diagnosis—see denominator for codes). Radiologic examination: CPT Codes: 72010, 72020, 72052, 72100, 72110, 72114, 72120, 72200, 72202, 72220; UB-92 Revenue Codes: 320, 329. Computed tomography: CPT Codes: 72131, 72133; UB-92 Revenue Codes: 350, 352, 359. Magnet resonance imaging: CPT Codes: 72141, 72142, 72146, 72149, 72156, 72158; UB-92 Revenue Codes: 610, 612, 614, 619 Professional fees: UB-92 Revenue Code: 972. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator: Medical Record Collection:** Patients with documentation of an imaging study (plain x-ray, MRI, CT scan) conducted on the Episode Start Date or in the 28 days following the Episode Start Date.	**Electronic Collection:** All patients aged 18-50 years as of December 31 of the measurement year with a new episode of low back pain. Follow steps below to determine denominator population. Step 1: Identify all patients ages 18-50 years who had an ambulatory encounter with a principal diagnosis of low back pain between January 1 and December 31 of the measurement year. Codes to identify ambulatory encounters for low back pain: Low back pain: ICD-9-CM Codes: 721.3, 722.10, 722.32, 722.52, 722.93, 724.02, 724.2, 724.3, 724.5, 724.6, 724.70, 724.71, 724.79, 738.5, 739.3, 739.4, 846.0, 846.1, 846.2, 846.3, 846.8, 846.9, 847.2. Evaluation and management codes – office or other outpatient services: CPT-Codes: 98925-98929, 98940-98942, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99385,-99386, 99395, 99396-, 99401-99404, 99411, 99412, 99421, 99429, 99455-99456, 99499. Emergency department services and after-hours, non-emergency urgent care: CPT-Codes: 99281-99285; UB-92 Revenue Codes: 0450, 0451, 0452, 0456, 0459 Outpatient and clinic services: UB-92 Revenue Codes: 051X, 0520-0523, 0526-0529, 057X-059X Professional fees, emergency and outpatient services: UB-92 Revenue Codes: 0981, 0982 Professional fees, clinic: UB-92 Revenue: 0983	Exclusions are noted in the denominator specifications.	The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims or encounter data for visits, and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the *(more)*

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LOW BACK PAIN (LBP): USE OF IMAGING STUDIES *continued*		Documentation of imaging study could include: physician orders for study, imaging results/report from radiologist, or other clear indication study performed during the timeframe.	Step 2: Determine the Episode Start Date for each patient by identifying the date of patient's earliest encounter with a primary diagnosis of low back pain during the measurement year. Step 3: Determine if the Episode Start Date is a New Episode. Patients with a New Episode of low back pain must have a negative diagnosis history. Patients with a low back pain diagnosis within the previous 180 days of the Episode Start Date should be excluded from the denominator. Step 4: Exclude patients with an indication for imaging studies in the presence of low back pain. Cancer: ICD-9-CM Codes: 140208, 230-234, 235-239 (Recent) Trauma: ICD-9-CM Codes: 800, 839, 850-854, 860-869, 905-909, 926.11, 926.12, 929, 952, 958-959 (Recent) IV drug abuse: ICD-9-CM Codes: 304.0, 304.1X, 304.2X, 304.4X, 305.4X, 305.5X, 305.6X, 305.7X (Recent) Neurologic impairment: ICD-9-CM Codes: 344.60, 729.2. **Denominator: Medical Record Collection:** A systematic sample of patients ages 18-50 years with a new episode of low back pain.		measure description, those practices that have electronic health records system can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

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BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: INITIAL ASSESSMENT	NCQA[2]	Patients with a diagnosis of back pain who have medical record documentation of all of the following on the date of the initial visit to the physician. **Frequency:** On the date of the initial visit to the physician. (Initial visit = The date of the earliest encounter with the applicant for an eligible diagnosis.) **FACTOR 1: PAIN ASSESSMENT** The number of patients with documentation of assessment of pain on the date of the initial visit with the physician. **Documentation Requirements:** ■ Date of assessment ■ Use of any of the following assessment tools will satisfy the pain assessment requirement: • SF-36 • Oswestry Low Back Pain Disability Questionnaire • Roland-Morris Disability Questionnaire • Quebec Pain Disability Scale • Sickness Impact Profile • Multidimensional Pain Inventory ■ If there is no evidence of any of the above tools in the medical record, documentation of any of the following pain scales is acceptable. • McGill Pain Questionnaire • Visual analog scale • Brief pain inventory • Chronic pain grade	The total patient sample with low back pain (see codes table below).		Medical record.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: INITIAL ASSESSMENT *continued*		• Neuropathic pain scale • Numerical rating scale (e.g., pain intensity 1-10) • Verbal descriptive scale (e.g., pt. report: "burning, shooting, stabbing") • Faces pain scale • Other. **FACTOR 2: FUNCTIONAL STATUS** The number of patients with documentation of assessment of functional status on the date of the initial visit with the physician. **Documentation Requirements:** ■ Date of assessment ■ Use of any of the following assessment tools will satisfy the functional assessment requirement: • SF-36 • Oswestry Low Back Pain Disability Questionnaire • Roland-Morris Disability Questionnaire • Quebec Pain Disability Scale • Sickness Impact Profile • Multidimensional Pain Inventory • Other ■ If there is no evidence of any of the above tools in the medical record, there must be documentation that activities of daily living (ADLs) were assessed. Assessment of all of the following ADLs must be documented:			

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BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: INITIAL ASSESSMENT *continued*		• Eating • Bathing • Using the toilet • Dressing • Getting up from bed or a chair. **FACTOR 3: PATIENT HISTORY** The number of patients with documentation of a patient history that notes absence or presence of "red flags" as listed below on the date of the initial visit with the physician. Definition – Red Flags: ■ History of cancer • Unexplained weight loss ■ Current infection • Immunosuppression ■ Fracture or suspected fracture • Motor vehicle accident or industrial injury with suspicion of fracture • Major fall with suspicion of fracture ■ Cauda equina syndrome or progressive neurologic deficit • Saddle anesthesia • Recent onset bladder dysfunction (urine retention, increased frequency, overflow incontinence) • Recent onset fecal incontinence (loss of bowel control) • Major motor weakness.			

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: INITIAL ASSESSMENT *continued*		**Documentation Requirements:** ■ Date of the patient history ■ Documentation necessary to satisfy assessment for red flags can include the following: • Indication/notation of presence or absence of red flags. **FACTOR 4: ASSESSMENT OF PRIOR TREATMENT AND RESPONSE** The number of patients with documentation of assessment of their previous history of back pain treatment and response, if applicable, on the date of the initial visit with the physician. **Documentation Requirements:** ■ Date of the assessment ■ Clear notation that the patient has been queried about back pain episode(s), treatment, and response ■ Notation could include the following: • No prior back pain • Diagnosis and dates of back pain reports for the previous two years, or as far back as the patient is able to provide information • Report from referring physician with summary of back pain history • Patient report of history and attempted treatments, including diagnostic tests (e.g., imaging).			

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: INITIAL ASSESSMENT *continued*		**FACTOR 5: EMPLOYMENT STATUS** The number of patients with assessment of employment status on the date of the initial visit with the physician. **Documentation Requirements:** ■ Date of assessment ■ Evidence of use of either of the following assessment tools will satisfy this requirement: • Sickness Impact Profile • Multidimensional Pain Inventory ■ If there is no evidence of either of the above tools in the medical record, variables of an employment assessment can count. These variables must include documentation of at least one of the following: • Type of work, including job tasks that may affect back pain management • Work status (e.g., out of work, part-time work, work with or without limitations) • If patient is not working or limited in work capacity, length of time for work limitations ■ Workers' compensation or litigation involvement.			

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: PHYSICAL EXAM	NCQA	The number of patients with documentation of a physical exam on the date of the initial visit with the physician. **Frequency:** On the date of the initial visit to the physician. (Initial visit = The date of the earliest encounter with the applicant for an eligible diagnosis.) **Documentation requirements:** ■ Date of the physical exam ■ For patients with radicular symptoms, documentation of physical exam must include the following, at a minimum: • Indication of straight leg raise test, AND notation of completion of neurovascular exam (a neurovascular exam must include ankle and knee reflexes; quadriceps; ankle and great toe dorsiflexion strength; plantar flexion; muscle strength; motor testing; pulses in lower extremities; and sensory exam) ■ For patients without radicular symptoms, documentation of physical exam must include the following: • Documentation of straight leg raise or neurovascular exam or clear notation of absence or presence of neurologic deficits.	The total patient sample with low back pain (see codes table below).		Medical record.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: MENTAL HEALTH ASSESSMENT	NCQA	The number of patients with at least one mental health assessment during the Eligible Episode. **Frequency:** At least once during the Eligible Episode; timing is dependent on denominator criteria as specified below. **Documentation Requirements:** ■ Determine if the patient has had back surgery or epidural steroid injection, which indicates an intervention has occurred ■ If the patient has evidence of a back pain intervention, determine if a mental health assessment occurred prior to the date of intervention • Count only patients with documentation of a mental health assessment prior to intervention toward the numerator ■ If there is no evidence of a back pain intervention, determine if the patient's pain duration is six weeks or more at any time during the Eligible Episode • If the patient's pain duration is six weeks or more, determine if a mental health assessment occurred at least once during the treatment Eligible Episode • Count a mental health assessment that occurs any time during the Eligible Episode toward the numerator ■ Date of assessment ■ Use of the following assessment tools will satisfy this requirement: • SF-36 or SF-12 • Sickness Impact Profile • Multidimensional Pain Inventory	Back pain patients who meet either of the following criteria: ■ Evidence of back surgery or epidural steroid injection *OR* ■ More than six weeks pain duration.		Medical record.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: MENTAL HEALTH ASSESSMENT *continued*		■ If there is no evidence of any of the above comprehensive assessment tools in the medical record, evidence of the following mental health assessment tools will satisfy this requirement: • PHQ-9 • PHQ-2 (mood or anhedonia screener) • Distress and Risk Assessment Method (DRAM) • Zung Scale • Symptom Check List (SCL-90-R) • Beck Depression Inventory • Millon Behavioral Health Inventory • Minnesota Multiphasic Personality Inventory • Other ■ If there is no evidence of any of the above tools in the medical record, elements of a mental health assessment can be counted. Documentation of any of the following elements counts as a mental health assessment • Affect • Cognition • Anxiety/stress • Coping • Fear • Depression • Distress • Anger. Documentation of active depression treatment by a physician or behavioral health practitioner counts toward this numerator.			

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: APPROPRIATE IMAGING FOR ACUTE BACK PAIN	NCQA	The number of patients with an order for or report on an imaging study during the six weeks after pain onset. **Documentation Requirements:** ■ Determine the date of pain onset. This is the day the patient indicates that back pain started • If the patient cannot specify the exact date, determine approximate number of days the pain has been present and convert into weeks • If the date of pain onset, or patient estimate, is not documented, use the initial visit date as the pain onset date ■ Determine if there is documentation of the presence of any of the following red flags: • History of cancer • Current infection • Fracture or suspected fracture • Cauda equina syndrome. Refer to the list in the Initial Assessment measure, factor 3. These patients should be excluded from the denominator. ■ Determine if an imaging study (plain x-ray, MRI, CT scan, bone scan, myelography, diskography) was ordered in the six-week period starting from the date of pain onset or the best estimate of pain onset date; or, if a pain onset date is not documented, determine if an imaging study was ordered in the four-week period from the date of the initial visit	Patients with back pain lasting six weeks or less.	Patients with documentation of red flags.	Medical record.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: APPROPRIATE IMAGING FOR ACUTE BACK PAIN *continued*		■ Include in the numerator both physician orders for imaging studies *AND* radiology reports that occurred any time from the date of pain onset through six weeks after pain onset ■ Include only orders and reports generated by the applicant physician or practice.			
LBP: REPEAT IMAGING STUDIES	NCQA	The number of patients with inappropriate imaging studies (as defined below). **Documentation Requirements:** ■ Include all imaging studies ordered or documented from the date of the initial visit to the end of the Eligible Episode ■ The following types of imaging studies should be counted toward the numerator of this measure, unless otherwise specified below • Plain x-ray • Bone scan • MRI • Myleography • Discography • CT scan ■ Determine if more than one imaging study has been ordered or if a report is present during the Eligible Episode. If the patient has been under the care of another physician, there should be documentation that the patient was asked about prior imaging studies and attempts made to get those studies/reports • Patients with one imaging study or no documentation of assessing for prior studies count toward the numerator	Patients with more than one imaging study and patients with only one imaging study and no documentation in medical record of physician asking about prior imaging.	Patients with red flags or worsening/ progressive signs.	Medical record.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: REPEAT IMAGING STUDIES *continued*		• Include imaging studies in the numerator and denominator if they have been ordered by the applicant or if there are imaging reports from another provider ■ Do not include CT scan or MRI toward the numerator if the first imaging study is a plain x-ray. If the patient is a surgical patient, the following rules apply: • Do not count an imaging study (MRI, CT scan, myleography only) as a repeat in the numerator if it occurs in the 12 weeks prior to the surgical date • If the surgical procedure was instrumented fusion or disc replacement, do not count plain, postoperative x-rays toward the numerator. • Do not count an imaging study toward the numerator that occurs postoperatively as a repeat if there is documentation of surgical complications ■ Exclude patients from the denominator with evidence or notation of any of the following in their medical record in the seven-day (one-week) period preceding the second imaging study. • Red flags (e.g., history of cancer, current infection, fracture or suspected fracture, cauda equina syndrome) • Worsening/progressive signs (e.g., objective findings of progressive neurologic symptoms such as new sciatica; new or worsening numbness or weakness; or physical exam findings indicating new missing reflex or worsening weakness). *Note:* Failure to respond to treatment is not an indication of worsening symptoms.			

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BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: ADVICE FOR NORMAL ACTIVITIES	NCQA	The number of patients with documentation of advice to maintain or resume normal activities on the date of the initial visit with the physician. **Frequency:** On the date of the initial visit to the physician. **Documentation requirements:** ■ The date of notation on which the advice was provided ■ A clear notation that the patient was advised to either maintain or resume normal activity or the activities of daily living as early as possible in the course of back pain.	The total patient sample with low back pain (see codes table below).		Medical record.
LBP: ADVICE AGAINST BED REST	NCQA	The number of patients with documentation of advice against bed rest of four days or longer on the date of the initial visit with the physician. **Frequency:** On the date of the initial visit to the physician. Definition of extended bed rest: Bed rest lasting four days or longer. **Documentation Requirements:** ■ Date of notation on which advice was provided ■ Clear notation that the patient was advised against bed rest.	The total patient sample with low back pain (see codes table below).		Medical record.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: RECOMMENDATIONS FOR EXERCISE	NCQA	The number of patients with documentation that a supervised exercise program was recommended or that they were provided instructions for therapeutic exercise with follow-up by the physician. **Frequency:** At least once during the Eligible Episode. **Documentation Requirements:** At a minimum, documentation in medical record must include a note indicating the date on which exercise was directed or a supervised exercise program was recommended. ■ Documentation that supervised exercise was recommended *OR* ■ Documentation that instructions for therapeutic, exercise were provided on appropriate strengthening, stretching, conditioning, aerobic or mobility exercises. If the patient is expected to complete exercise program at home, there must also be documentation of provider follow-up to ensure correct form and duration of treatment. **Definitions:** Therapeutic exercise: Strengthening, general stretching, McKenzie method of passive end-range stretching exercises, conditioning, aerobic and conventional physical therapy (stretching, flexibility, and coordination exercises). Supervised exercise: Must be instructed in the office or administered by a physical therapist or other trained professional. Physical therapy must involve active participation by the patient.	Patients with back pain lasting more than 12 weeks.		Medical record.

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BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: APPROPRIATE USE OF EPIDURAL STEROID INJECTIONS	NCQA	The number of patients who have received an epidural steroid injection during the Eligible Episode in the absence of radicular pain and patients with radicular pain who received an epidural injection without image guidance. **Documentation Requirements:** ■ Determine if there is documentation of radicular pain • If there is documentation of radicular pain, determine if there is documentation of the use of image guidance to validate epidural placement of the steroid. Patients without documentation of image guidance count toward the numerator • All patients with documentation of an epidural steroid injection, but without documentation of radicular pain count toward the numerator ■ Documentation of the epidural steroid injection can include the following: • Notation of order or referral for epidural steroid injection • Notation of administration of epidural steroid injection by applicant. **Definitions**: Radicular pain: Pain experienced along the dermatome (sensory distribution) of a nerve due to pressure on the nerve root.	The total patient sample with low back pain (see codes table below).		Medical record.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: SURGICAL TIMING	NCQA	The number of patients with a surgical intervention to treat back pain within the first six weeks of pain. **Definitions:** Cauda equina syndrome: Progressive loss of nerve function, including bowel and bladder incontinence.	Patients who have had back surgery.	Patients with documentation of a red flag: ■ History of cancer ■ Current infection ■ Fracture or suspected fracture ■ Cauda equina syndrome.	Medical record.
LBP: PATIENT REASSESSMENT	NCQA	**FACTOR 1: PAIN REASSESSMENT** The number of patients with documentation of reassessment of pain within four to six weeks of their initial back pain visit or of a surgical procedure date. **Frequency:** Nonsurgical patients: Reassessment should occur within four to six weeks of the initial visit date. Surgical patients: Reassessment should occur within four to six weeks of the surgical procedure date. If there is more than one surgical procedure, a reassessment should be conducted for each occurrence. **Measure Calculation:** ■ Do not count patients toward the numerator who do not have documentation of a pain assessment at their initial visit with the physician ■ Do not count assessment of pain that occurs as part of the initial patient assessment toward the reassessment numerator ■ Determine if the patient has evidence of a surgical procedure within six weeks of the initial visit.			

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BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: PATIENT REASSESSMENT *continued*		• If there is evidence of a surgical procedure, the reassessment of pain should be documented within four to six weeks of the surgical procedure • If there is no evidence of a surgical procedure: – The reassessment of functional status should be documented within four weeks of the initial visit, but no later than six weeks from the initial visit date – Count assessment of pain toward the numerator only if it occurs within the timeframes outlined above. Follow-up visits do not need to be with a physician, but they must meet the above criteria. **Documentation Requirements:** ■ Date of assessment. ■ Use of the following assessment tools will satisfy this requirement: • SF-36 • Oswestry Low Back Pain Disability Questionnaire • Roland-Morris Disability Questionnaire • Quebec Pain Disability Scale • Sickness Impact Profile • Multidimensional Pain Inventory ■ If there is no evidence of any of the above tools in the medical record, documentation of any of the following pain scales is acceptable: • McGill Pain Questionnaire • Visual analog scale			

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: PATIENT REASSESSMENT *continued*		• Brief pain inventory • Chronic pain grade • Neuropathic pain scale • Numerical rating scale (e.g., pain intensity 1-10) • Verbal descriptive scale (e.g., patient report: "burning, shooting, stabbing") • Faces pain scale • Other. **FACTOR 2: FUNCTIONAL STATUS** The number of patients with documentation of reassessment of functional status within four to six weeks of their initial back pain visit or of a surgical procedure date. **Frequency:** Nonsurgical patients: Reassessment should occur within four to six weeks of the initial visit date. Surgical patients: Reassessment should occur within four to six weeks of the surgical procedure date. If there is more than one surgical procedure, a reassessment should be conducted for each occurrence. **Measure Calculation:** ■ Do not count patients toward the numerator who do not have documentation of a functional status assessment at their initial visit with the physician ■ Do not count functional status assessment that occurs as part of the initial patient assessment toward the numerator of the reassessment measure			*(more)*

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: PATIENT REASSESSMENT *continued*		■ Determine if the patient has evidence of surgical procedure • If there is evidence of a surgical procedure, the reassessment of functional status should be documented within four to six weeks of the surgical procedure • If there is no evidence of a surgical procedure: – The reassessment of functional status should be documented within four to six weeks of the initial visit – Count assessment of functional status toward the numerator only if it occurs within the timeframes outlined above. Follow-up visits do not need to be with a physician; however, they must meet the above criteria. **Documentation Requirements:** ■ Date of assessment. ■ Use of any of the following assessment tools will satisfy the requirement: • SF-36 • Oswestry Low Back Pain Disability Questionnaire • Roland-Morris Disability Questionnaire • Quebec Pain Disability Scale • Sickness Impact Profile • Multidimensional Pain Inventory • Other			

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LBP: PATIENT REASSESSMENT *continued*		■ If there is no evidence of any of the above tools in the medical record, there must be documentation that ADLs were assessed. All of the following ADLs must be documented: • Eating • Bathing • Using the toilet • Dressing • Getting up from bed or a chair.			
LBP: SHARED DECISION-MAKING	NCQA	The number of patients who had surgery, with documentation in the medical record that a clinician and the patient discussed treatment options prior to surgery, including alternatives to surgery, risks and benefits, and evidence of effectiveness. **Frequency:** At least once during the Eligible Episode prior to surgery. **Documentation Requirements:** The patient record must contain written documentation that a clinician discussed the following related to the patient's condition: ■ Treatment options, including alternatives to surgery ■ Risks and benefits ■ Evidence of effectiveness. Provision of a signed informed consent for a procedure or treatment does not meet the intent of this measure.	Patients who had surgery (see code table below).		Medical record.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Description	Scoring	Data Source
LBP: PATIENT EDUCATION (STRUCTURAL MEASURE)	NCQA	The practice provides educational materials (e.g., brochures, pamphlets, web-based information, videos, other written or electronic materials) in lay language that includes the following information: ■ Natural history of low back pain ■ Treatment options, including alternatives to surgery ■ Risks and benefits ■ Evidence base for different treatments.	Patient educational materials include the following: Yes / No 1. Natural history of low back pain ☐ ☐ 2. Treatment options ☐ ☐ 3. Risks and benefits ☐ ☐ 4. Evidence base for different treatments ☐ ☐	Materials.
LBP: POSTSURGICAL OUTCOMES (STRUCTURAL MEASURE)	NCQA	**ELEMENT A: TRACKS BACK SURGERY COMPLICATIONS** The physician demonstrates a system for collecting data on back surgery complications for 6-12 weeks after surgery. Ideally, the physician collects data on all back surgery patients to obtain a complete picture of complications. The 6- to12-week period should start the day the patient undergoes the surgical procedure. This requirement applies to physician applicants who perform back surgeries. Back surgery-related complications within 6-12 weeks of surgery may include, but are not limited to, the following: ■ Infection ■ Wound dehiscence ■ Hematoma ■ CSF leak ■ Other.	**ELEMENT A: TRACKS BACK SURGERY COMPLICATIONS** **Documentation Requirements:** To meet the requirements for this standard, the physician must submit a copy of the tracking tool used to identify the complications of back surgery. The physician tracks the following: Yes / No 1. Wound infection ☐ ☐ 2. Wound dehiscence ☐ ☐ 3. Hematoma ☐ ☐ 4. CSF leak ☐ ☐ 5. Other ☐ ☐	Electronic or paper tracking system.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Description	Scoring	Data Source
LBP: POSTSURGICAL OUTCOMES (STRUCTURAL MEASURE) *continued*		**ELEMENT B: ANALYZE SURGICAL OUTCOME DATA** The physician conducts a periodic analysis of surgical complications data and develops a plan for improving outcomes. The physician must demonstrate that there is a process for periodically: ■ analyzing the surgical outcomes data to reduce the number and severity of surgical complications ■ improving surgical outcomes, based on the analysis. The requirement applies to physicians who perform back surgeries and should include all patients having back surgery.	**ELEMENT B: ANALYZE SURGICAL OUTCOME DATA** **Documentation Requirements:** To meet the requirements for this standard, the physician must submit a copy of the data analysis and the plan for improving outcomes. Scoring: Yes / No 1. The physician analyzes surgical outcomes data. ☐ ☐ 2. The physician has a plan for improving surgical outcome. ☐ ☐	Electronic or paper report summarizing postsurgical complications data and plan for improvement.

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Description	Scoring	Data Source
LBP: EVALUATION OF PATIENT EXPERIENCE (STRUCTURAL MEASURE)	NCQA	**ELEMENT A: COLLECTS PATIENT EXPERIENCE DATA** The physician collects data on patient experience of care.	**ELEMENT A: COLLECTS PATIENT EXPERIENCE DATA** **Documentation Requirements:** The instrument used to collect patient experience data, e.g., phone survey questions or a paper or electronic survey. The survey instrument addresses the following areas of patient experience: ■ Patient access to care (e.g., the ability to make an appointment and see physician, timeliness and quality of phone calls, office wait time) ■ Quality of physician communication with the patient (e.g., response to questions, instructions and information about diagnosis, treatment, medication, follow-up care) ■ Patient confidence in self-care (e.g., patient knowledge of and ability to provide self-care involving activity, exercise, medications, reporting change in symptoms) ■ Patient satisfaction with care (may include staff, e.g., explanation and concern, time with physician, staff, and treatment, e.g., pain management, x-ray work, prescriptions, lab work). Scoring: **Yes** **No** 1. Patient access to care ☐ ☐ 2. Quality of physician communication ☐ ☐ 3. Patient confidence in self-care ☐ ☐ 4. Patient satisfaction with care ☐ ☐	Patient survey instrument.
		ELEMENT B: ANALYZES PATIENT EXPERIENCE DATA The physician analyzes data on patient experience with care and has a plan for improving the patient experience.	**ELEMENT B: ANALYZES PATIENT EXPERIENCE DATA** **Documentation Requirements:** Report demonstrating analysis of patient experience with care. The physician must provide a report that includes a compilation of the patient survey information and an analysis that shows, at the least, areas of success and areas needing improvement. Plan for improving patient experience. The report must include a plan for addressing the areas of patient concern or lack of satisfaction with care. Scoring: **Yes** **No** 1. Physician analyzes patient experience with care. ☐ ☐ 2. Physician has plan for improving experience. ☐ ☐	

(more)

CODES TO IDENTIFY BACK PAIN DIAGNOSES

Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "x," which represents a required digit. For example, ICD-9-CM Diagnosis Code 721.4X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.

ICD-9-CM Code	Description
721.3	Lumbosacralspondylosis without myelopathy
721.4, 721.4X	Thoracic or lumbar spondylosis with myelopathy
721.90	Spondylosis of unspecified site, without mention of myelopathy
722	Intervertebral disc disorders
	Displacement of thoracic or lumbar intervertebral disc without myelopathy
	Displacement of intervertebral disc, site unspecified without myelopathy
	Schmorl's nodes
	Intervertebral disc disorder with myelopathy—classified by region: unspecified, cervical, thoracic, lumbar
	Postlaminectomy syndrome—classified by region: unspecified, cervical, thoracic, lumbar
	Other and unspecified disc disorder (calcification of intervertebral cartilage or disc, discitis) classified by region: unspecified, cervical, thoracic, lumbar
723.0	Spinal stenosis in cervical region
724.0X	Spinal stenosis, other than cervical—classified by region—unspecified region other than cervical, thoracic, lumbar, other region other than cervical
724.2	Lumbago
724.3	Sciatica
724.4	Thoracic or lumbosacral neuritis or radiculitis
724.5	Backache, unspecified
724.6	Disorders of sacrum
724.70	Unspecified disorder of coccyx
724.71	Hypermobility of coccyx
724.79	Disorders of coccyx, other
738.4	Acquired spondylolisthesis (degenerative spondylolisthesis, spondylolysis, acquired; excludes congenital)
756.12	Congenital spondylolisthesis
738.5	Other acquired deformity of the back or spine
739.3	Nonallopathic lesion of lumbar region, not elsewhere classified
739.4	Nonallopathic lesion of lumbar region, not elsewhere classified
846.0	Sprains and strains of sacroiliac region, lumbosacral
846.1	Sprains and strains of sacroiliac region, sacroiliac ligament
846.2	Sprains and strains of sacroiliac region, sacrospinatus
846.3	Sprains and strains of sacroiliac region, sacrotuberous
846.8	Sprains and strains of sacroiliac region, other specified sites of sacroiliac region
846.9	Sprains and strains of sacroiliac region, unspecified site of sacroiliac region
847.2	Sprains and strains of other and unspecified parts of back, lumbar

CODES TO IDENTIFY SURGICAL PROCEDURES

Procedure Type	CPT Codes*	ICD-9 Procedure Codes
Osteotomy	22210, 22214, 22220, 22222, 22224, 22226	
Arthrodesis	22532-22534, 22548, 22554, 22556, 22558-22585, 22590, 22595, 22600, 22612, 22614, 22630, 22632	
Kyphectomy	22818, 22819	
Spinal fusion	22830, 22840-22849	81.XX
Laminectomy	63001-63017, 63048, 63170-63173, 63180-63182, 63185, 63190, 63191, 63194-63200	03.02
Laminotomy	63020, 63030, 63035, 63040, 63042-63048	
Decompression—spinal cord, equina, and/or nerve root (herniated intervertebral disc)	63055-63057, 63064, 63066	03.09
Disketomy	63075-63078	80.5X
Vertebral corpectomy	63081, 63082, 63085-63088, 63090, 63091, 63101-63103	

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
OSTEOPOROSIS MANAGEMENT IN WOMEN WHO HAD A FRACTURE	NCQA[2,4]	**Electronic Collection:** Patients who were appropriately treated or tested for osteoporosis after the fracture. Appropriate treatment or testing is defined by any one of the three criteria below: ■ Had a BMD test on the Index Episode Start Date or in the 180-day period after the Index Episode Start Date ■ Had a BMD test during the acute care inpatient stay for the fracture (applies only to fractures requiring hospitalization) ■ Dispensed a prescription to treat osteoporosis on the Index Episode Start Date or in the 180-day period after the Index Episode Start Date. Codes to identify bone mineral density test Computerized axial tomography bone density study: CPT: 76070, 76071 Dual energy x-ray absorptiometry (DEXA), bone density study CPT: 76075-76077 Radiographic absorptiometry (e.g., photodensitometry, radiogrammetry) CPT: 76078 Ultrasound bone density measurement and interpretation CPT: 76977 Bone density (bone mineral content) study CPT: 78350-78351 ICD-9-CM: 88.98 Special screening for osteoporosis ICD-9-CM Codes: V82.81 HCPCS: G0130	**Electronic Data Collection:** Women 67 years and older* as of December 31 of the measurement year who had a fracture between July 1 of the year prior to the measurement year through June 30 of the measurement year. If a patient has more than one fracture during the specified period, include only the first fracture identified through the following criteria: Step 1: Select the first eligible fracture during the 12-month Intake Period. Step 2: Identify the Index Episode Start Date and negative diagnosis history. For each patient identified in step 1, determine the Index Episode Start Date by finding the earliest fracture in the 12-month period. Identify patients who were diagnosed with a new fracture by determining if the patient has a negative diagnosis history. Patients with a diagnosis of fracture within 60 days prior to the Index Episode Start Date should be excluded from the measure. For patients with an inpatient stay, use the admission date to determine a negative diagnosis history. Step 3: Exclude patients who have received osteoporosis testing or treatment in the prior year. Exclude patients who had a BMD test during the 365 days prior to the Index Episode Start Date. For patients with an inpatient stay, use the admission date to determine a negative diagnosis. Exclude patients who received any medication listed during the 365 days prior to the Index Episode Start Date. For patients with an inpatient	Included in specifications above.	The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims or encounter data for visits, procedures, and pharmacy. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
OSTEOPOROSIS MANAGEMENT IN WOMEN WHO HAD A FRACTURE *continued*		FDA approved osteoporosis therapies: ■ Alendronate ■ Risedronate ■ Calcitonin ■ Raloxifene ■ Estrogen ■ Teriparatide ■ Alendronate-cholecalciferol (Fosamax Plus D) ■ Ibandronate (Boniva) ■ Injectable Estrogens **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator:** Documentation of appropriate treatment or testing for osteoporosis after the fracture. Appropriate treatment or testing is defined by any one of the three criteria below: ■ Documentation of a BMD test on the index Episode Start Date or in the 180-day period after the Index Episode Start Date ■ Documentation of a BMD test during the acute care inpatient stay for the fracture (applies only to fractures requiring hospitalization) ■ Documentation of a prescription to treat osteoporosis on the Index Episode Start Date or in the 180-day period after the Index Episode Start Date.	stay, use the admission date to determine a negative medication history. Codes to identify fractures: CPT Codes: 21800, 21825, 22305, 22328, 22520,22521, 22523, 22524, 23500, 23515, 23570, 23630, 23665, 23680, 24500, 24587, 24620, 24635, 24650, 24685, 25500,25652, 25680, 25685, 27193, 27248, 27254, 27500 , 27514, 27520, 27540, 27750, 27828 HCPCS: S2360, S2362 ICD-9-CM Codes: 79.00-79.03, 79.05-79.07, 79.09, 79.10-79.13, 79.15-79.17, 79.19, 79.20-79.23, 79.25-79.27, 79.29, 79.30-79.33, 79.35-79.37, 79.39, 79.60-79.63, 79.65-79.67, 79.69, 81.65, 81.66, 733.1, 805-806, 807.0-807.4, 808-815, 818-825, 827, 828 DRGs: 235, 236. Fractures of the finger, toe, face, and skull are not included in this measure. **Note:* Given the measurement look-back period, women 65 years and older will be captured in this measure. **Medical Record Collection:** A systematic sample of women 67 years and older* as of December 31 of the measurement year who had a fracture between July 1 of the year prior to the measurement year through June 30 of the measurement year. If a patient has more than one fracture during the specified period, include only the first fracture identified through the following criteria:		description, those practices that have electronic health records system can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
OSTEOPOROSIS MANAGEMENT IN WOMEN WHO HAD A FRACTURE *continued*		The following describe BMD tests and treatments for the prevention of osteoporosis: ■ Computerized axial tomography bone density study ■ Dual energy x-ray absorptiometry (DEXA), bone density study ■ Radiographic absorptiometry (e.g., photodensitometry, radiogrammetry) ■ Ultrasound bone density measurement and interpretation ■ Bone density (bone mineral content) study ■ Special screening for osteoporosis. Allowable therapies: ■ Alendronate ■ Risedronate ■ Calcitonin ■ Raloxifene ■ Estrogen ■ Teriparatide ■ Alendronate-cholecalciferol (Fosamax Plus D) ■ Ibandronate (Boniva) ■ Injectable estrogens.	Step 1: Select the first eligible fracture documented during the 12-month Intake Period Step 2: Identify the Index Episode Start Date and negative diagnosis history. For each patient identified in step 1, determine the Index Episode Start Date by finding the earliest fracture documented in the 12-month period. Identify patients who were diagnosed with a new fracture by determining if the patient has a negative diagnosis history. Patients with a documented diagnosis of fracture within 60 days prior to the Index Episode Start Date should be excluded from the measure. For patients with an inpatient stay, use the admission date to determine a negative diagnosis. Step 3: Exclude patients who have received documented osteoporosis testing or documented treatment in the prior year. Exclude patients who had documentation for a BMD test during the 365 days prior to the Index Episode Start Date. For patients with an inpatient stay, use the admission date to determine a negative diagnosis. Exclude patients who were prescribed any medication listed above during the 365 days prior to the Index Episode Start Date. For patients with an inpatient stay, use the admission date to determine a negative medication history. Fractures of the finger, toe, face, and skull are not included in this measure. **Note:* Given the measurement look-back period, women 65 years and older will be captured in this measure.		

(more)

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
OSTEOPOROSIS MANAGEMENT IN WOMEN WHO HAD A FRACTURE *continued*			**Definitions:** Index Episode Start Date: The date of service for any outpatient claim/encounter during the Intake Period with a diagnosis of fracture. For fractures requiring hospitalization (inpatient), the date of service is the date of discharge from the inpatient setting. Intake Period: A 12-month window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year. The Intake Period is used to capture Eligible Episodes. Negative diagnosis history: A period of 60 days prior to the Index Episode Start Date, during which time the patient had no diagnosis of fracture. For fractures requiring an inpatient stay, use the date of admission to determine a negative diagnosis history.		
ARTHRITIS: DISEASE MODIFYING ANTI-RHEUMATIC DRUG THERAPY IN RHEUMATOID ARTHRITIS	NCQA[2,4]	**Electronic Collection:** Patients who had at least one ambulatory prescription dispensed for a disease modifying anti-rheumatic drug (DMARD) during the measurement year. DMARD List: ■ Methotrexate ■ Sulfasalazine ■ Leflunomide ■ Hydroxychloroquine ■ Infliximab* J1745 ■ Cyclophosphamide * J9070, J9080, J9090-J9096 ■ Penicillamine ■ Etanercept * J1438 ■ Anakinra	**Electronic Collection:** All patients, ages 18 years and older as of December 31 of the measurement year, with a diagnosis of RA. Two face-to-face physician encounters with a rheumatoid arthritis diagnosis with different dates of service in an ambulatory or non-acute inpatient setting between January 1 and November 30 of the measurement year are required to confirm an RA diagnosis. Codes to identify ambulatory/non-acute services for RA: ICD-9-CM: 714.0, 714.1, 714.2, 714.81 CPT Codes (outpatient/non-acute inpatient services): 99201-99205, 99211-99215, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337, 99341-99345, 99347-99350, 99384-99387,	Exclude the following patients from the denominator: Women who are identified as being pregnant (ICD-9-CM Codes: 630-677, V22-V23, V28), during the measurement year. Patients who have been diagnosed with human immunodeficiency virus (ICD-9-CM Codes: 042, V08). At the health plan level, the reporting of the measure is stratified by insurance coverage (commercial, Medicare and Medicaid).	According to NCQA, the electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims or encounter data for visits, and pharmacy. The medical record option requires manual or *(more)*

BONE AND JOINT CONDITIONS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ARTHRITIS: DISEASE MODIFYING ANTI-RHEUMATIC DRUG THERAPY IN RHEUMATOID ARTHRITIS *continued*		■ Gold (oral or intramuscular) ■ Cyclosporine ■ Azathioprine * J7501 ■ Adalimumab ■ Minocycline ■ Staphyloccal Protein A ■ Abatacept. *A list of NDC Codes is available on NCQA's web site www.ncqa.org. **Medical Record Data Specifications:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population. **Numerator: Medical Record Collection:** Patients who had documentation of at least one ambulatory prescription for a DMARD (medication list above) during the measurement year.	99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499 UB-92 Revenue Codes (Outpatient/non-acute inpatient services): 0118, 0128, 0138, 0148, 0158, 019X 051X, 0520-0523, 0526-0529, 055X, 057x-059X, 066X, 077X, 0982, 0983. **Medical Record Collection:** A systematic sample of patients, ages 18 years and older as of December 31 of the measurement year, with a diagnosis of RA. Two face-to-face physician encounters with a rheumatoid arthritis diagnosis with different dates of service in an ambulatory or non-acute inpatient setting between January 1 and November 30 of the measurement year are required to confirm an RA diagnosis.		electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

DIABETES

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
EYE EXAM	Alliance/ NCQA[2,4]	**Electronic Collection:** An eye screening for diabetic retinal disease as identified by administrative data. This includes those patients with diabetes who had one of the following: ■ A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in the measurement year. The following codes may be used to identify eye exams*: CPT Codes 67028, 67038-67040, 67101, 67105, 67107-67108, 67110, 67112, 67141, 67145, 67208, 67210, 67218, 67227, 67228, 92002, 92004, 92012, 92014, 92018, 92019, 92225, 92226, 92230, 92235, 92240, 92250, 92260, 99203-99205, 99213-99215, 99242-99245; HCPCS: S0620, S0621, S0652, S3000; ICD-9-CM Codes 14.1-14.5, 14.9, 95.02-95.04, 95.11, 95.12, 95.16, V72.0 *Eye exams provided by eye care professional are a proxy for dilated eye examinations because there is no administrative way to determine that a dilated exam was performed. CPT Category II Code 2022F may be used within the measurement year to identify a dilated retinal eye exam with interpretation by an ophthalmologist or optometrist documented and reviewed. CPT Category II Code 2024F may be used within the measurement year to identify a seven standard field stereoscopic photo with interpretation by an ophthalmologist or optometrist documented and reviewed. CPT Category II Code 2026F.	**Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year prior to measurement year: ■ 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. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available) ■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or year prior to the measurement year with a diagnosis of diabetes.* *Codes to identify patients with diabetes include: ■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 295 ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411,	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. **Medical Record Collection:** Exclude patients with a diagnosis of polycystic ovaries on the problem list who did not also have a diagnosis of diabetes on the problem list during the measurement year or year prior to the measurement year. Exclude patients with a diagnosis of gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	Electronic data (visit, procedure, procedure results and pharmacy encounter data or claims) or medical record data (paper based or EHR). This measure requires the use of claims/encounter, pharmacy data, or medical record data for identification of diabetes for the denominator, and claims/encounter data, or medical record review to indicate whether an eye exam was performed.

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
EYE EXAM *continued*		■ A negative retinal exam (no evidence of retinopathy) by an eye care professional in the year prior to the measurement year. An automated result must be available. CPT Category II Code 3072F may be used within the measurement year to identify low risk for retinopathy (no evidence of retinopathy in the prior year). **Medical Record Collection:** An eye screening for diabetic retinal disease. This includes diabetics who had one of the following: ■ A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in the measurement year ■ A negative retinal exam (no evidence of retinopathy) by an eye care professional in the year prior to the measurement year. Documentation in the medical record of a retinal eye exam during the measurement year or a *negative* retinal eye exam during the year prior to the measurement year must include: ■ A note or letter from an ophthalmologist, optometrist or other health care professional summarizing the date on which the procedure was performed and the results of a retinal evaluation performed by an eye-care professional *OR* ■ A chart or photograph of retinal abnormalities. If fundus photography was used in the exam, there must be documentation in the medical record indicating the date on which the procedure was performed and evidence that	99412, 99420, 99429, 99455, 99456, 99499; UB-92 Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052 0-0523, 0524, 0525, 0526-0529, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through: ■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available) ■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed,		

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
EYE EXAM *continued*		an eye care professional reviewed the results. Alternatively, results must be read by a qualified reading center that operates under the direction of a medical director who is a retinal specialist *OR* ■ a note, which may be prepared by a primary care provider, indicating the date on which the procedure was performed, and that an opthalmoscopic exam was completed by an eye-care professional, with the results of the exam.	it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example, ICD-9 CM diagnosis code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual. **Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year		
FOOT EXAM	Alliance/ NCQA[2,4]	**Electronic Collection:** Patients who received a foot exam (visual inspection, sensory exam with monofilament, or pulse exam) during the measurement year. CPT Category II Code 2028F may be used to identify foot examination performed (includes examination through visual inspection, sensory exam with monofilament, and pulse exam—report when any of the three components are completed). **Medical Record Collection:** Patients who received a foot exam (visual inspection, sensory exam with monofilament, or pulse exam) during the measurement year. Indication of a test result and date must be documented.	prior to measurement year: ■ 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. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available). ■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or year prior to the measurement year with a diagnosis of diabetes.* *Codes to identify patients with diabetes include: ■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2,	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. Additionally, patients with bilateral foot/leg amputation (ICD-9-CM Exclusion Codes for foot exam: 896.2, 896.3, 897.6, 897). **Medical Record Collection:** Exclude patients with a diagnosis of polycystic ovaries on the problem list who did not also have a diagnosis of diabetes on the problem list during the measurement year	Electronic data (visit, CPT Category II Codes and pharmacy encounter data or claims) or medical record data (paper based or EHR). This measure requires the use of claims/encounter, pharmacy data, or medical record data for identification of diabetes for the denominator, and claims/ encounter data, or medical record review to indicate *(more)*

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
FOOT EXAM *continued*			362.0, 366.41, 648.0; DRGs 294, 295 ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99496, 99499; UB-92. Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052X, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through: ■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/ antihyperglycemics prescriptions (drug list is available).	or year prior to the measurement year. Exclude patients with a diagnosis of gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	whether a foot exam was performed.

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
FOOT EXAM *continued*			■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9 CM diagnosis code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual. **Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year		
HEMOGLOBIN A1C TESTING	Alliance/ NCQA[2,4]	**Electronic Collection:** One or more HbA1c tests performed during the measurement year as identified by claim/encounter or automated laboratory data. Use any of the following codes: CPT Codes 83036, 83037; CPT Category II Codes: 3046F, 3047F or LOINC Codes: 4548-4, 4549-2, 17856-6. **Medical Record Collection:** One or more HbA1c tests performed during the measurement year. At a minimum, documentation in the medical record must include a note indicating the date on which the HbA1c test was performed and the result. Notation of the following in the medical record may be counted:	prior to measurement year: ■ 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. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available) ■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or year	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. **Medical Record Collection:** Exclude patients with a diagnosis of polycystic	Electronic data (visit, lab, and pharmacy encounter data or claims) or medical record data (paper based or EHR). These measures require the use of claims/encounter, pharmacy data or medical record data for identification of patients

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEMOGLOBIN A1C TESTING *continued*		■ A1c ■ HbA1c ■ Hemoglobin A1c ■ Glycohemoglobin A1c ■ HgbA1c.	prior to the measurement year with a diagnosis of diabetes.* *Codes to identify patients with diabetes include: ■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 295 ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99496, 99499; UB-92. Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052X, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through:	ovaries on the problem list who did not also have a diagnosis of diabetes on the problem list during the measurement year or year prior to the measurement year. Exclude patients with a diagnosis of gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	with diabetes for the denominator, and claims/ encounter data, laboratory data, or medical record review for HbA1c test information.

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEMOGLOBIN A1C TESTING *continued*			■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available) ■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9 CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEMOGLOBIN A1C MANAGEMENT	Alliance/ NCQA[2,4]	**Electronic Collection:** Using automated laboratory data, identify the *most recent* HbA1c test during the measurement year. The patient is numerator compliant if the most recent automated HbA1c level is >9.0% or is missing a result or if an HbA1c test was not done during the measurement year. CPT Category II Code 3046F may also be used within the measurement year to identify an A1c level >9.0%. The patient is **not** numerator compliant if the automated result for the most recent HbA1c test during the measurement year is ≤9.0%. CPT Category II Code 3047F may be also be used to identify an A1c level ≤9.0% (which is not numerator compliant). *Note:* For this indicator, a lower rate indicates better performance (i.e., low rates of poor control indicate better care). **Medical Record Collection:** The *most recent* HbA1c level (performed during the measurement year) is >9.0% or is missing or was not done during the measurement year. The patient is not numerator compliant if the result for the most recent HbA1c test during the measurement year is ≤9.0%. At a minimum, documentation in the medical record must include a note indicating the date on which the HbA1c test was performed and the result.	**Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year prior to measurement year: ■ 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. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available) ■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or year prior to the measurement year with a diagnosis of diabetes.* *Codes to identify patients with diabetes include: ■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 295 ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. **Medical Record Collection:** Exclude patients with a diagnosis of polycystic ovaries on the problem list who did not also have a diagnosis of diabetes on the problem list during the measurement year or year prior to the measurement year. Exclude patients with a diagnosis of gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	Electronic data (visit, lab test, lab test results and pharmacy encounter data or claims) or medical record data (paper based or EHR). These measures require the use of claims/encounter, pharmacy data or medical record data for identification of patients with diabetes for the denominator, and claims/encounter data, laboratory data, or medical record review for HbA1c test information.

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEMOGLOBIN A1C MANAGEMENT *continued*			99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99496, 99499; UB-92 Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052X, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through: ■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available) ■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis.		

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEMOGLOBIN A1C MANAGEMENT *continued*			Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9 CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		
HEMOGLOBIN A1C TEST FOR PEDIATRIC PATIENTS	Alliance	The number of patients in the sample who have documentation of date and result for the most recent HbA1c test during the 12-month abstraction period. The following are not acceptable documentation of HbA1c results: fructosamine, Hgb, hemoglobin, Hb, and Hg without reference to either "glycated," "glycosylated" and "A1" or "A1c" and findings reported on progress notes or other non-laboratory documentation.	A systematic sample of patients, age 5-17 years old with a diagnosis of diabetes and/or notation of prescribed insulin or oral hypoglycemics/ antihyperglycemics for at least 12 months who has been under the care of the physician or physician group for at least 12 months. This is defined by documentation of a face-to-face visit for diabetes care between the physician and the patient that *predates* the most recent visit by at least 12 months. Codes and descriptions to identify a patient with a diagnosis of diabetes: ICD-9 Codes: 250 or 648.0. The need for diet management, insulin or oral hypoglycemic agent, report of home urine or home blood glucose testing or the presence of an insulin pump anywhere in the medical record. *Synonyms:* Insulin-dependent diabetes mellitus (IDDM), non-insulin dependent diabetes (NIDDM), Type I, Type II, DM, AODM, sugar diabetes, maturity onset diabetes, diet controlled diabetes	Patients with gestational or steroid-induced diabetes should be excluded from the denominator.	Physicians may use administrative data systems to identify the eligible patients. Administrative data sources include medical encounters, medical claims and ambulatory pharmacy records. Determination of patient eligibility may be based on an administrative data system, but must be supported by documentation found in the medical record. Numerator results

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEMOGLOBIN A1C TEST FOR PEDIATRIC PATIENTS *continued*			ICD-9 Code 357.2: Any mention of a diagnosis of diabetic polyneuropathy in the medical record. *Synonyms*: Neuropathy or peripheral neuropathy, decreased or altered sensation, extremity numbness or tingling, paresthesia in the lower extremity, foot ulcers, distal symmetric polyneuropathy, loss of sensation (vibration/touch) in the feet, loss of ankle reflexes, Charcot's joints, malperforans ulcer, loss of light touch and pin prick, knife-like or burning pain of feet, sensory loss or pain in hands, or mononeuropathy. ICD-9 Code 362.0: Any mention of a diagnosis of diabetic retinopathy in the medical record. *Synonyms:* Diabetic eye changes: proliferative diabetic retinopathy, new vessels on the disc (NVD), new vessels elsewhere in iris or retina, preretinal or vitreous hemorrhage, fibrosis rubeosis diabetic retinal changes, macular lesion, background retinopathy, preproliferative retinopathy, venous beading/looping, large retinal blot hemorrhages, multiple cotton wool spots, multi-preintroretinal microvascular abnormalities, diabetic macular edema, non-proliferative diabetic retinopathy, microaneurysms, blot hemorrhage, hard exudates, 1-2 soft exudates. ICD-9 Code 366.41: Any mention of a diagnosis of diabetic cataract in the medical record. Descriptions to identify patients with notation of prescribed insulin or oral hypoglycemics/ antihyperglycemics: Insulin: Any mention of routine insulin use during the past 12 months in the medical record.		are obtained from the medical record.

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEMOGLOBIN A1C TEST FOR PEDIATRIC PATIENTS *continued*			*Synonyms:* Any insulin, including regular insulin, insulin pump, insulin pen, 70/30, CSII (continuous subcutaneous infusion of insulin), Humalog, Humulin, Lente, Lispro, MDI (multiple daily injections), Novolin, Novolin Penfill, NPH Novo Nordisk, Semilente, Ultralente, Velosulin Oral hypoglycemics/antihyperglycemics: Any mention of oral hypoglycemic or antihyperglycemic use during the past 12 months in the medical record. *Synonyms:* Acarbose, Acetohexamide, Amaryl, Chlorpropamide, Diabeta, Diabinase, Dymelor, Glipizide, Glipizide XL, Glucamide, Glucophage, Glucotrol, Glucotrol XL, Glyburide, Glynase, Metformin, Micronase, Orinase, Orimide, Prandin (Repaglinide), Precose, Tolazamide, Tolamide, Tolbutamide, Tolinase, Troglitazone.		
BLOOD PRESSURE MANAGEMENT	Alliance/ NCQA[2,4]	**Electronic Collection:** Identify the *most recent* BP reading during the measurement year. Identify the lowest systolic and lowest diastolic BP reading from the most recent BP notation in the medical record. The member is numerator compliant if the most recent level is <140/80 mm Hg. If the result for the most recent BP reading during the measurement year is ≥140/80 mm Hg or is missing, or if a BP reading was not taken during the measurement year, the member is not numerator compliant. CPT Category II Codes 3076F (indicating most recent systolic BP<140) and 3077F (indicating most recent diastolic BP <80) must be used in combination in the measurement year to be numerator compliant.	**Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year prior to measurement year: ■ 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. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available).	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. **Medical Record Collection:** Exclude patients with a diagnosis of polycystic ovaries on the problem list who did not	Electronic data (visit, CPT Category II Codes and pharmacy encounter data or claims) or medical record data (paper based or EHR). This measure requires the use of claims/encounter, pharmacy data or medical record data for identification of *(more)*

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BLOOD PRESSURE MANAGEMENT *continued*		**Medical Record Collection:** Patients with most recent systolic blood pressure measurement <140 mm Hg and a diastolic blood pressure <80 mm Hg during the measurement year, as documented through medical record review. The following steps should be followed below to determine representative BP: ■ *Identify the most recent visit to the doctor's office or clinic* that occurred during the measurement year in which a BP reading was noted. • To be eligible, the representative BP must have been obtained during a visit to the practitioner's office or other non-emergency outpatient facility, such as a clinic or urgent care center. Outpatient visits for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole) are not eligible • BP measurements obtained the same day as a major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy) or at an emergency room visit are not eligible ■ *Identify the lowest systolic and lowest diastolic BP reading* from the most recent BP notation in the medical record. If there are multiple BPs recorded for a single date, use the lowest systolic and lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading.	■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or year prior to the measurement year with a diagnosis of diabetes.* *Codes to identify patients with diabetes include: ■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 295. ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99496, 99499; UB-92 Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052X, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2).	also have a diagnosis of diabetes on the problem list during the measurement year or year prior to the measurement year. Exclude patients with a diagnosis of gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	diabetes in the denominator, and CPT Category II Codes, or medical record review for blood pressure information.

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BLOOD PRESSURE MANAGEMENT *continued*			Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through: ■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available). ■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three- digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9-CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		
URINE PROTEIN SCREENING	Alliance/ NCQA[2,4]	**Electronic Collection:** Screening for nephropathy or evidence of nephropathy, as documented through administrative data. Patients who have been screened for microalbumin, or patients who have nephropathy, as demonstrated by either evidence of medical attention for nephropathy, a visit to a nephrologists or a positive urine macroalbumin test count toward the numerator.	**Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year prior to measurement year: ■ Pharmacy data: Patients who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced	Electronic data (visit, lab test, lab test results and pharmacy encounter data or claims) or medical record data (paper based or EHR). This measure *(more)*

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
URINE PROTEIN SCREENING *continued*		Medical attention for nephropathy: screening for nephropathy. A nephropathy screening test during the measurement year. Use the following codes to identify a screening test: CPT Codes: 82042, 82043, 82044, 84156; CPT Category II Codes: 3060F, 3061F or LOINC Codes 11218-5, 14956-7, 14957-5, 14958-3, 14959-1, 30000-4, 30001-2, 30003-8, 1753-3, 1754-1, 1755-8, 9318-7, 13705-9, 14585-4, 20621-9, 21059-1, 32294-1, 2887-8, 2888-6, 2889-4, 2890-2, 12842-1, 13801-6, 18373-1, 21482-5, 26801-1, 27298-9, 32209-9, 32551-4, 34366-5, 35663-4. Evidence of nephropathy. Documentation of nephropathy by one of the following methods during the measurement year: ■ Evidence of diagnosis or treatment for nephropathy during the measurement year using the following codes: CPT Codes 36145, 36800, 36810, 36815, 36818, 36819-36821, 36831-36833, 50300, 50320 50340, 50360, 50365, 50370, 50380, 90920, 90921, 90924, 90925, 90935, 90937, 90939. 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512; ICD-9-CM Codes 38.95, 39.27, 39.42, 39.43, 39.53, 39.93-39.95, 54.98, 55.4-55.6, 250.4, 403, 404, 405.01, 405.11, 405.91, 581.81, 582.9, 583.81, 584-586, 588, 753.0, 753.1, 791.0; V-Codes V42.0, V45.1, V56, UB-92 Revenue Codes 0367, 080X, 082X-085X, 088X; DRGs 316, 317. CPT Category II Code 3066F may also be used during the measurement year to document treatment for nephropathy	the measurement year on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available). ■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or year prior to the measurement year with a diagnosis of diabetes.* *Codes to identify patients with diabetes include: ■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 295. ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99496, 99499; UB-92 Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052X, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134,	diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. **Medical Record Collection:** Exclude patients with a diagnosis of polycystic ovaries on the problem list who did not also have a diagnosis of diabetes on the problem list during the measurement year or year prior to the measurement year. Exclude patients with a diagnosis of gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	requires the use of claims/encounter, pharmacy data or medical record data for identification of diabetes for the denominator, and claims/encounter data, laboratory data or medical record review for testing or medical treatment data.

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
URINE PROTEIN SCREENING *continued*		■ A nephrologist visit during the measurement year (no restriction on the diagnosis or procedure code submitted). ■ A positive urine macroalbumin test during the measurement year, as documented by claim/encounter or automated laboratory data. Codes to identify urine microalbumin tests* (CPT Codes 81000-81003, 81005; LOINC Codes 5804-0, 20454-5, 24356-8, 24357-6) and automated laboratory data must be used to confirm a positive result. "Trace" urine macroalbumin test results are not considered numerator-compliant. *Automated laboratory data must be used to confirm a positive result for a urine macroalbumin test identified through administrative data. CPT II Code 3062F may also be used during the measurement year to identify a positive macroalbuminuria test result was documented and reviewed. ■ Evidence of ACE inhibitor/ARB therapy (or combination products—drug list available) during the measurement year. Patients who had a claim indicating therapy or who received an ambulatory prescription for therapy within the measurement year are compliant. Ambulatory prescriptions any time during the measurement year count toward this measure. Prescriptions for ACE inhibitors/ARBs that are active at the start of the measurement year may also be counted. A prescription is active if the days supply indicated on the date when the patient filled the prescription is the number of days or	0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through: ■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available). ■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9 CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
URINE PROTEIN SCREENING *continued*		more between the date the prescription was filled and the start of the measurement year. CPT II Code 4009F may also be used during the measurement year to identify ACE inhibitor/ ARB therapy. **Medical Record Collection:** Screening for nephropathy or evidence of nephropathy. Urine microalbumin test: At a minimum, documentation in the medical record must include a note indicating the date on which the urine microalbumin test was performed, and the result. Notation of the following may count in the medical record for urine microalbumin test: ■ 24-hour urine for microalbumin ■ Timed urine for microalbumin ■ Spot urine for microalbumin ■ Microalbumin/creatinine ratio ■ 24-hour urine for total protein ■ Random urine for protein/creatinine ratio Medical attention for nephropathy. Visit to a nephrologists or medical attention for nephropathy. Documentation in the medical record must include, at a minimum, a note indicating medical attention during the measurement year for: ■ Diabetic nephropathy ■ End-stage renal disease (ESRD) ■ Chronic renal failure (CRF) ■ Renal insufficiency ■ Acute renal failure (ARF) ■ Proteinuria			

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
URINE PROTEIN SCREENING *continued*		■ Albumuria ■ Renal dysfunction ■ Dialysis, hemodialysis, or peritoneal dialysis A positive urine macroalbumin test during the measurement year. At a minimum, documentation in the medical record must include a note indicating the date on which the test was performed, and a positive result for protein in the urine. The following may be counted in the medical record: ■ Positive urinalysis (timed, spot, or random) for protein ■ Positive urine (random, spot or timed) for protein ■ Positive urine dipstick for protein ■ Positive tablet reagent for urine protein ■ Positive result for albuminuria ■ Positive result for macroalbuminuria ■ Positive result for proteinuria ■ Positive result for gross proteinuria. *Note:* "Trace" urine macroalbumin test results are not considered numerator compliant. Evidence of ACE inhibitor/ARB therapy during the measurement year. Documentation in the medical record must include, at minimum, a note indicating that the patient received a prescription for ACE inhibitors/ARBs on an ambulatory basis within the measurement year.			

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LIPID PROFILE	Alliance/ NCQA[2,4]	**Electronic Collection:** An LDL-C test performed during the measurement year, as identified by claim/encounter or automated laboratory data. Codes to identify LDL-C screening include: CPT Codes: 80061, 83700, 83701, 83704, 83715, 83716, 83721; LOINC Codes: 2089-1, 12773-8, 13457-7, 18261-8, 18262-6, 22748-8, 24331-1, 39469-2; CPT Category II Codes: 3048F, 3049F, 3050F. **Medical Record Collection:** An LCL-C test performed during the measurement year. Documentation in the medical record must include, at a minimum, a note indicating the date on which the LDL-C test was performed and the result.	**Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year prior to measurement year: ■ 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. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/ antihyperglycemics prescriptions (drug list is available). ■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or year prior to the measurement year with a diagnosis of diabetes. *Codes to identify patients with diabetes include: ■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 295. ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328,	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. **Medical Record Collection:** Exclude patients with a diagnosis of polycystic ovaries on the problem list who did not also have a diagnosis of diabetes on the problem list during the measurement year or year prior to the measurement year. Exclude patients with a diagnosis of gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	Electronic data (visit, lab test, and pharmacy encounter data or claims) or medical record data (paper based or EHR). This measure requires the use of claims/encounter, pharmacy data or medical record review for identification of diabetes for the denominator, and claims/encounter data, laboratory data, or medical record review for LDL test information.

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DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LIPID PROFILE *continued*			99331-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99496, 99499; UB-92 Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052X, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through: ■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available). ■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity		

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
LIPID PROFILE *continued*			required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9-CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		
MEASURE PAIR: **a. Lipid Management: LDL-C <130**	Alliance/ NCQA[2,4]	**Electronic Collection:** Using automated laboratory data, identify the *most recent* LDL-C test during the measurement year. The patient is numerator compliant if the most recent automated LDL-C level is <130 mg/dL. If the automated result for the most recent LDL-C test during the measurement year is ≥130 mg/dL or is missing, or if an LDL-C test was not done during the measurement year, the patient is not numerator compliant. CPT Category II Codes 3048F or 3049F may be used to identify LDL-C results <130 mg/dL within the measurement year. **Medical Record Collection:** The most recent LDL-C level performed during the measurement year is <130mg/dL. If the result for the most recent LDL-C test during the measurement year is ≥130 mg/dL or is missing, or if an LDL-C test was not done during the measurement year, the patient is not numerator compliant. At a minimum, documentation in the medical record must include a note indicating the date on which the LDL-C test was performed, and the result.	**Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year prior to measurement year: ■ 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. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available). ■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or year prior to the measurement year with a diagnosis of diabetes.* *Codes to identify patients with diabetes include:	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. **Medical Record Collection:** Exclude patients with a diagnosis of polycystic ovaries on the problem list who did not also have a diagnosis of diabetes on the problem list during the measurement year or year prior to the measurement year. Exclude patients with a diagnosis of gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	Electronic data (visit, lab test, lab test results and pharmacy encounter data or claims) or medical record data (paper based or EHR). This measure requires the use of claims/encounter, pharmacy data or medical record review for identification of diabetes for the denominator, and claims/encounter data, laboratory data, or medical record review for LDL test information.

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
a. Lipid Management: LDL-C <130 *continued*		LDL-C levels may be calculated from total cholesterol, HDL-C and triglycerides using the Friedewald equation if the triglycerides are ≤400 mg/dL: (LDL-C)=(total cholesterol)-(HDL)-(triglycerides/5). If lipoprotein (a) is measured, this calculation is: (LDL-C)=(total cholesterol)-(HDL)-(triglycerides/5)-0.3[lipoprotein (a)]. These formulae are used when all levels are expressed in mg/dL and cannot be used if triglycerides >400 mg/dL.	■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 295 ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99496, 99499; UB-92 Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052X, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through: ■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available)		

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
a. Lipid Management: LDL-C <130 *continued*			■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9 CM diagnosis code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		
b. Lipid Management: LDL-C <100	Alliance/ NCQA[2,4]	**Electronic Collection:** Using automated laboratory data, identify the *most recent* LDL-C test during the measurement year. The patient is numerator compliant if the most recent automated LDL-C level is <100 mg/dL. If the automated result for the most recent LDL-C test during the measurement year is ≥100 mg/dL or is missing, or if an LDL-C test was not done during the measurement year, the patient is not numerator compliant. CPT Category II Code 3048F may be used within the measurement year to identify LDL-C results <100 mg/dL. **Medical Record Collection:** The *most recent* LDL-C level performed during the measurement year is <100mg/dL. If the result for the most recent LDL-C test during the measurement year is ≥100 mg/dL or is missing, or if an LDL-C test was not done during the measurement year, the patient is not numerator compliant. At a minimum,	**Electronic Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Two methods are provided to identify patients with diabetes during the measurement year, or year prior to measurement year: ■ 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. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available). ■ Claim/encounter data: Patients who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter	**Electronic Collection:** Exclude patients with a diagnosis of polycystic ovaries (ICD-9-CM Code 256.4) who did not have any face-to-face encounters with the diagnosis of diabetes (see codes for diabetes above), in any setting, during the measurement year or year prior to the measurement year. Exclude patients with gestational diabetes (ICD-9-CM Code 648.8) or steroid-induced diabetes (ICD-9-CM Codes 251.8, 962.0) during the measurement year. **Medical Record Collection:** Exclude patients with a diagnosis of polycystic ovaries on the problem list who did not also have a diagnosis of diabetes on the problem list during the measurement year or year prior to the measurement year. Exclude patients with a diagnosis of	Electronic data (visit, lab test, lab test results and pharmacy encounter data or claims) or medical record data (paper based or EHR). These measures require the use of claims/encounter, pharmacy data or medical record data for identification of patients with diabetes for the denominator, and claims/encounter

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Lipid Management: LDL-C <100 *continued*		documentation in the medical record must include a note indicating the date on which the LDL-C test was performed, and the result. LDL-C levels may be calculated from total cholesterol, HDL-C and triglycerides using the Friedewald equation if the triglycerides are ≤400 mg/dL. (LDL-C)=(total cholesterol)-(HDL)-(triglycerides/5). If lipoprotein (a) is measured, this calculation is: (LDL-C)=(total cholesterol)-(HDL)-(triglycerides/5)-0.3[lipoprotein (a)]. These formulae are used when all levels are expressed in mg/dL and cannot be used if triglycerides >400 mg/dL.	in an acute inpatient or emergency room setting during the measurement year or year prior to the measurement year with a diagnosis of diabetes.* *Codes to identify patients with diabetes include: ■ Diabetes diagnosis: ICD-9-CM Codes 250, 357.2, 362.0, 366.41, 648.0; DRGs 294, 295 ■ Outpatient/non-acute inpatient: CPT Codes 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99496, 99499; UB-92 Revenue Codes 0118, 0128, 0138, 0148, 0158, 019X, 051X, 052X, 055X, 057X-059X, 066X, 077X, 082X-085X, 088X, 0982, 0983 ■ Acute inpatient/emergency department: CPT Codes 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99281-99285, 99291; UB-92 Revenue Codes 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159,016X, 020X-022X, 045X, 072X, 080X, 0981, 0987. **Medical Record Collection:** Patients 18-75 years of age as of December 31 of the measurement year who had a diagnosis of diabetes (type 1 or type 2). Patients with diabetes can be identified during the measurement year, or year prior to the measurement year through:	gestational diabetes or steroid-induced diabetes on the problem list during the measurement year.	data, laboratory data, or medical record review for HbA1c test information.

(more)

DIABETES (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Lipid Management: LDL-C <100 *continued*			■ Pharmacy data: Patients who were prescribed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis. Prescriptions to identify patients with diabetes include: insulin prescriptions (drug list is available) and oral hypoglycemics/antihyperglycemics prescriptions (drug list is available). ■ A diagnosis of diabetes on the problem list or at least two visits with diabetes listed as a diagnosis. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four- or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example, ICD-9 CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HEART DISEASE

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CORONARY ARTERY DISEASE: SYMPTOM AND ACTIVITY ASSESSMENT	AMA PCPI[2,3]/ ACC/AHA	Patients evaluated for both level of activity and anginal symptoms during one or more office visits. Medical record must include documentation of the patient's level of activity and anginal symptoms *AND/OR* Grading of angina by the Canadian Cardiovascular Society Classification System *AND/OR* The patient completed a symptom and/or activity questionnaire (e.g., Seattle Angina Questionnaire) *OR* CPT II Code: 1002F Anginal symptoms and level of activity assessed.	All patients with CAD ≥18 years of age. Patient selection: ICD-9-CM Codes for CAD: 414.00-414.07, 414.8, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82 *OR* CPT Diagnosis Codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536 *AND* CPT Codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* Patient's age is ≥18 years.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.
CORONARY ARTERY DISEASE: ANGIOTENSIN CONVERTING ENZYME INHIBITOR/ ANGIOTENSIN RECEPTOR BLOCKER THERAPY	AMA PCPI[2,3]/ ACC/AHA	Patients who were prescribed ACE inhibitor or ARB therapy (drug list available at www.ama-assn.org/ama/ pub/category/4837.html) *OR* CPT II Code: 4009F: ACE inhibitor or ARB therapy prescribed.	All patients with CAD ≥18 years of age who also have diabetes and/or LVSD. Patient selection: ICD-9-CM Codes for CAD: 414.00-414.07, 414.8, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82 *OR* CPT Codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536 *AND* ICD-9-CM Codes for diabetes: 250.00-250.93, 357.2, 362.01-362.07, 366.41, 648.00-648.04 *OR* With an active antidiabetic medication* prescribed (drug list available)	Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy: ■ Allergy or intolerance to ACE inhibitor or ARB *OR* ■ ACE inhibitor contraindications including angioedema, anuric renal failure, moderate or severe aortic stenosis or pregnancy ICD-9-CM Exclusion Codes: 440.1, V56.0, V56.8, 39.95, 54.98, 788.5, 586, 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 584.5-584.9, 585.5, 585.6, 395.0, 395.2, 396.0, 396.2, 396.8, 425.1, 747.22, V22.0-V23.9, 277.6	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CORONARY ARTERY DISEASE: ANGIOTENSIN CONVERTING ENZYME INHIBITOR/ ANGIOTENSIN RECEPTOR BLOCKER (ARB) THERAPY *continued*			*OR* CPT Procedure Codes for testing LVSD: 78414, 78468, 78472, 78473, 78480, 78481, 78483, 78494, 93303, 93304, 93307, 93308, 93312, 93314, 93315, 93317, 93350, 93543 *AND* Additional individual medical record review must be completed to identify patients who had documentation of an ejection fraction <40% (use most recent value) *OR* CPT II Codes: 3021F Left ventricular ejection fraction (LVEF) <40% or documentation of moderately or severely depressed left ventricular systolic function *AND* Patient's age is ≥18 years.	*OR* ■ Other medical reason documented by the practitioner for not prescribing ACE inhibitor or ARB therapy *OR* ■ CPT II Code w/modifier. 4009F 1P Other patient reason (e.g., economic, social, religious) *OR* ■ CPT II Code w/ modifier 4009F 2P Other system reason for not prescribing ACE inhibitor or ARB therapy: *OR* ■ CPT II Code w/modifier 4009F 3P.	
CORONARY ARTERY DISEASE: ANTIPLATELET THERAPY	CMS/AMA PCPI[2,3]/ ACC/AHA	Patients who were prescribed antiplatelet therapy (aspirin, clopidogrel or combination of aspirin and dipyridamole) (drug list available at www.ama-assn.org/ama/pub/category/4837.html) *OR* CPT II Code: 4011F Oral antiplatelet therapy prescribed.	All patients with CAD ≥18 years of age. Patient selection: ICD-9-CM Codes for CAD: 414.00-414.07, 414.8, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82 *OR* CPT Diagnosis Codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536 *AND* CPT Codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404	Documentation of medical reason(s) for not prescribing antiplatelet therapy: ■ Active bleeding in the previous six months, which required hospitalization(s) or transfusion(s) *OR* ■ Aspirin/clopidogrel allergy/intolerance ICD-9-CM Exclusion Codes: 995.0 and E935.3, 995.1 and E935.3, 995.2 and E935.3, 995.0, and E934.8, 995.1 and E934.8, 995.2 and E934.8 *OR*	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CORONARY ARTERY DISEASE: ANTIPLATELET THERAPY *continued*			*AND* Patient's age is ≥18 years.	■ Other medical reason(s) documented by the practitioner for not prescribing antiplatelet therapy *OR* ■ CPT II Code w/modifier: 4011F 1P Documentation of patient reason(s) (e.g., economic, social, religious) *OR* CPT II Code w/modifier: 4011F 2P Documentation of system reason(s) documented by the practitioner for not prescribing antiplatelet therapy *OR* CPT II Code w/modifier 4011F 3P.	
ISCHEMIC VASCULAR DISEASE (IVD): USE OF ASPIRIN OR ANOTHER ANTITHROMBOTIC	NCQA[2,4]	The number of patients who have documentation of use of aspirin or another antithrombotic during the 12-month measurement period. Documentation in the medical record must include, at a minimum, a note indicating the date on which aspirin or another antithrombotic was prescribed or documentation of prescription from another treating physician.	A systematic sample of patients, age 18 years and older with a diagnosis of ischemic vascular disease (IVD) for at least 12 months, who have been under the care of the physician or physician group for IVD for at least 12 months (this is defined by documentation of a face-to-face visit for IVD care between the physician and the patient that predates the most recent IVD visit by at least 12 months). Codes to identify a patient with a diagnosis of ischemic vascular disease: ICD-9: 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445 DRG: 140, 559. If using health plan administrative claims to identify the eligible population and then attributing to physicians, use the following denominator specifications: Discharged alive for AMI, CABG or PTCA on or between 1/1-11/1 of the year prior to the measurement year or at one outpatient or acute	Exclude patient self-report.	Physicians may use administrative data systems to identify eligible patients. Administrative data sources include medical encounters, medical claims and ambulatory pharmacy records. Determination of patient eligibility may be based on

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ISCHEMIC VASCULAR DISEASE (IVD): USE OF ASPIRIN OR ANOTHER ANTITHROMBOTIC *continued*			inpatient during the measurement year and year prior to the measurement year. AMI: ICD-9: 410.X1, DRG: 121, 122, 516 PTCA: CPT: 33140, 92980-92982, 92984, 92995, 92996, ICD-9:00.66, 36.01, 36.02, 36.05, 36.06, 36.07, 36.09, DRG: 516, 517, 526, 527, 555-558 CABG: CPT: 33510-33514, 33516-33519, 33521-33523, 33533-33536, 35600, 33572, HCPCS: S2205-S2209, ICD-9:36.1, 36.2, DRG: 106, 107, 109, 547-550. Codes to Identify a patient with a diagnosis of ischemic vascular disease: ICD-9: 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445 DRG: 140, 559. Outpatient codes: CPT: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499, UB-92: 051X, 0520-0523, 0526-0529, 057X-059X, 077X, 0982, 0983. Acute inpatient: CPT: 99221-99223, 99231-99233, 99238, 99239, 99251, 99255, 99261-99263, 99291, UB-92: 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016X, 020X-022X, 072X, 0987. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four- or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9 CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		an administrative data system, but must be supported by documentation found in the medical record. Numerator results are obtained from the medical record.

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CORONARY ARTERY DISEASE—BETA BLOCKER THERAPY: PRIOR MYOCARDIAL INFARCTION	AMA PCPI[2,3]/ ACC/AHA	Patients who were prescribed beta blocker therapy (drug list available at www.ama-assn.org/ama/pub/category/4837.html) *OR* CPT II Code 4006F: Beta blocker therapy prescribed.	All patients with CAD who also have prior MI at any time ≥18 years of age. Patient selection: ICD-9-CM Codes for CAD: 414.00-414.07, 414.8, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82 *OR* CPT Codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536 *AND* ICD-9-CM Codes for MI: 410.00-410.92, 412 *AND* Patient's age is ≥18 years.	Documentation of medical reason(s) for not prescribing beta blocker therapy: ■ Documentation of bradycardia <50 bpm (without beta blocker therapy) on two consecutive readings, history of Class IV (congestive) heart failure, history of second- or third-degree atrioventricular (AV) block without permanent pacemaker. ICD-9-CM Exclusion Codes: 493.00-493-92, 458.0, 458.1, 458.21, 458.29, 458.8, 458.9, 426.0 without V45.01, 426.12 without V45.01, 426.13 without V45.01, 427.81, 427.89 *OR* ■ Other medical reason(s) documented by the practitioner for not prescribing beta blocker therapy *OR* ■ CPT II Code with modifier: 4006F 1P. Documentation of patient reason(s) (e.g., economic, social, religious) *OR* CPT II Code with modifier: 4006F 2P. Documentation of system reason(s) for not prescribing beta blocker therapy *OR* CPT II Code w/modifier 4006F 3P.	EHRS, retrospective paper medical records, Prospective flowsheet, administrative data using CPT II Codes.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ACUTE MYOCARDIAL INFARCTION: PERSISTENCE OF BETA BLOCKER TREATMENT AFTER A HEART ATTACK	NCQA[2,4]	**Electronic Collection:** The number of patients in the denominator population whose days' supply of beta blockers dispensed is ≥135 days in the 180 days following discharge. Persistence of treatment for this measure is defined as at least 75% of the days' supply filled. To account for patients who are on beta blockers prior to admission, factor those prescriptions into adherence rates if the actual treatment days fall within the 180 days following discharge. An updated list of NDC Codes for beta-blockers is posted to the NCQA web site, www.ncqa.org. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator:** The number of patients in the denominator population whose days' supply of beta blockers prescribed is ≥135 days in the 180 days following discharge. Persistence of treatment for this measure is defined as at least 75% of the days' supply filled. To account for patients who are on beta blockers prior to admission, factor those prescriptions into adherence rates if the actual treatment days fall within the 180 days following discharge.	**Electronic Collection:** All patients aged 35 and older as of December 31 of the measurement year, discharged alive from an acute inpatient setting with an AMI between July 1 of the year prior to the measurement year through June 30 of the measurement year. If a patient has more than one episode of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year, include only the first discharge and use the codes listed identify AMIs. Codes to identify AMIs: ICD-9-CM Code: 410X1 DRG: 121, 122, 516, 526. Transfers to acute facilities: Include hospitalizations in which the patient was transferred directly to another *acute care facility* for any diagnosis. Count the discharge from the subsequent, not the initial, acute inpatient facility. The discharge date from the facility to which the patient was transferred must occur on or before June 30 of the measurement year. Transfers to non-acute facilities: Exclude from the denominator hospitalizations in which the patient was transferred directly to a non-acute care facility for any diagnosis. Readmissions: If the patient is readmitted to an acute or non-acute care facility for any diagnosis, include the patient in the denominator and use the discharge date from the original hospitalization.	Exclude patients who are identified as having a contraindication to beta blocker therapy or previous adverse reaction to beta blocker therapy. Look as far back as possible in the patient's history through either administrative data or medical record review for evidence of contraindication or a previous adverse reaction to beta blocker therapy. Codes to identify contraindications to beta-blockers: History of asthma: prescription: inhaled corticosteroids, ICD-9: 493 Hypotension: 458 Heart block >1 degree: 426.0, 426.12, 426.13, 426.2, 426.4, 426.51, 426.52, 426.54, 426.7Sinus bradycardia: 427.81 COPD: 491.2, 496, 506.4.	Visit and pharmacy encounter data or claims. Electronic data may be supplemented with medical record data.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ACUTE MYOCARDIAL INFARCTION: PERSISTENCE OF BETA BLOCKER TREATMENT AFTER A HEART ATTACK *continued*		Documentation in medical record must include, at a minimum, a note indicating that the patient received a prescription for beta blockers within the timeframe specified.	**Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Denominator:** All patients aged 35 and older as of December 31 of the measurement year, discharged alive from an acute inpatient setting with an AMI between July 1 of the year prior to the measurement year through June 30 of the measurement year. If a patient has more than one episode of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year, include only the first discharge. Transfers to acute facilities: Include hospitalizations in which the patient was transferred directly to another *acute care facility* for any diagnosis. Count the discharge from the subsequent, not the initial, acute inpatient facility. The discharge date from the facility to which the patient was transferred must occur on or before June 30 of the measurement year. Transfers to non-acute facilities: Exclude from the denominator hospitalizations in which the patient was transferred directly to a non-acute care facility for any diagnosis. Readmissions: If the patient is readmitted to an acute or non-acute care facility for any diagnosis,		*(more)*

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ACUTE MYOCARDIAL INFARCTION: PERSISTENCE OF BETA BLOCKER TREATMENT AFTER A HEART ATTACK *continued*			include the patient in the denominator and use the discharge date from the original hospitalization. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims or other codified encounter data should be used to identify patients who have had an acute myocardial infarction in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.		
CORONARY ARTERY DISEASE: BETA BLOCKER TREATMENT AFTER A HEART ATTACK	NCQA[2,4]	**Electronic Collection:** Patients who have a claim indicating beta blocker therapy or who received an ambulatory prescription for beta blockers within seven days (inclusive) after discharge. Prescriptions rendered on an *ambulatory basis* any time while the patient is hospitalized for AMI through the seventh day after discharge count toward this measure. If unable to determine if the prescription was rendered on an inpatient or ambulatory basis, prescriptions rendered after discharge may only count. To account for patients who are on beta blockers prior to admission, count prescriptions for beta blockers that are active at the time of admission. A prescription is considered active if the "days supply" indicated on the date the patient filled the	**Electronic Collection:** Patients 35 of age and older as of December 31 of the measurement year who are discharged alive from an inpatient setting with an AMI from January 1 to December 24 of the measurement year. If a patient has more than one episode of AMI from January 1–December 24 of the measurement year, only include the first eligible discharge. Use the following codes to identify AMIs: ICD-9-CM Code: 410.X1; DRGs: 121, 122, 516, 526. Transfers to acute facilities: Include hospitalizations in which the patient was transferred directly to another acute care facility for any diagnosis. The discharge date from the facility to which the patient was transferred must occur on or before December 24 of the measurement year.	Exclude from the denominator patients who are identified as having a contraindication to beta blocker therapy or previous adverse reaction (i.e., intolerance) to beta blocker therapy. Look-back as far as possible in the patient's history through either administrative data or medical record review for evidence of a contraindication or previous adverse reaction to beta blocker therapy. Any of the following codes may be used: History of asthma (prescription: Inhaled corticosteroids): ICD-9: 493 Hypotension: ICD-9: 458	Visit and pharmacy encounter data or claims. Electronic data may be supplemented with medical record data.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CORONARY ARTERY DISEASE: BETA BLOCKER TREATMENT AFTER A HEART ATTACK *continued*		prescription is the number of days or more between the date the prescription was filled and the relevant admission date. Transfers: If a patient was directly transferred to another acute facility, the prescription is active on the date of admission for the initial inpatient stay for AMI or that the patient received a beta blocker prescription within seven days after the discharge from the facility to which the patient was transferred. An updated list of NDC Codes for beta blockers is posted to the NCQA web site, www.ncqa.org. Codes to identify beta blocker therapy prescribed include CPT Category II Code: 4006F. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. Patients who received an ambulatory prescription for beta blockers rendered within seven days after discharge. Prescriptions filled on an ambulatory basis anytime while the patient is hospitalized for AMI through the seventh day after discharge count toward this measure. If unable to determine if the prescription was rendered on an inpatient or ambulatory basis, count those prescriptions rendered after discharge.	Transfers to non-acute facilities: Exclude from the denominator hospitalizations in which the patient was transferred directly to a non-acute care facility for any diagnosis. Readmissions. Exclude from the denominator hospitalizations in which the patient was readmitted to an acute or non-acute care facility for any diagnosis within seven days after discharge, because tracking the patient between admissions is not deemed feasible. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. A systematic sample of patients age 35 years and older as of December 31 of the measurement year who are discharged alive from an inpatient setting with an AMI from January 1 to December 24 of the measurement year. If a patient has more than one episode of AMI from January 1 to December 24 of the measurement year, only include the first eligible discharge. Transfers to acute facilities: Include hospitalizations in which the patient was transferred directly to another acute care facility for any diagnosis. The discharge date from the facility to which the patient was transferred must occur on or before December 24 of the measurement year.	Heart block >1 degree: ICD-9: 426.0, 426.12, 426.13, 426.2, 426.4, 426.51, 426.54, 426.7 Sinus bradycardia: ICD-9: 427.81 COPD: ICD-9: 491.2, 496, 506.4.	

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CORONARY ARTERY DISEASE: BETA BLOCKER TREATMENT AFTER A HEART ATTACK *continued*		To account for patients who are on beta blockers prior to admission, count prescriptions for beta blockers that are active at the time of admission. Documentation in medical record must include, at a minimum, a note indicating that the patient received a prescription for beta blockers within the timeframe specified.	Transfers to non-acute facilities: Exclude from the denominator hospitalizations in which the patient was transferred directly to a non-acute care facility for any diagnosis. Readmissions. Exclude from the denominator hospitalizations in which the patient was readmitted to an acute or non-acute care facility for any diagnosis within seven days after discharge, because tracking the patient between admissions is not deemed feasible. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.		

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ISCHEMIC VASCULAR DISEASE: BLOOD PRESSURE CONTROL	NCQA[2,4]	Number of patients who, at their most recent blood pressure reading during the 12-month measurement period, had a blood pressure result of <140/90 mm HG.	A systematic sample of patients, age 18 years and older with a diagnosis of ischemic vascular disease (IVD) for at least 12 months, who have been under the care of the physician or physician group for IVD for at least 12 months (this is defined by documentation of a face-to-face visit for IVD care between the physician and the patient that predates the most recent IVD visit by at least 12 months). Codes to identify a patient with a diagnosis of ischemic vascular disease: ICD-9: 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445 DRG: 140, 559. If using health plan administrative claims to identify the eligible population and then attributing to physicians, use the following denominator specifications: Discharged alive for AMI, CABG or PTCA on or between 1/1-11/1 of the year prior to the measurement year or at one outpatient or acute inpatient during the measurement year and year prior to the measurement year. AMI: ICD-9: 410.X1, DRG: 121, 122, 516 PTCA: CPT: 33140, 92980-92982, 92984, 92995, 92996, ICD-9:00.66, 36.01, 36.02, 36.05, 36.06, 36.07, 36.09, DRG: 516, 517, 526, 527, 555-558 CABG: CPT: 33510-33514, 33516-33519, 33521-33523, 33533-33536, 35600, 33572, HCPCS: S2205-S2209, ICD-9:36.1, 36.2, DRG: 106, 107, 109, 547-550. Codes to identify a patient with a diagnosis of ischemic vascular disease: ICD-9: 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445 DRG: 140, 559. Outpatient codes: CPT: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345,	**Denominator** (patients for inclusion): A sample should be determined using the most accurate data available. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. BPs that are self-reported by the patient (e.g., home and health-fair BPs reported by the patient) are not eligible.	Visit and pharmacy encounter data or claims. Electronic data may be supplemented with medical record data.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ISCHEMIC VASCULAR DISEASE: BLOOD PRESSURE CONTROL *continued*			99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499, UB-92: 051X, 0520-0523, 0526-0529, 057X-059X, 077X, 0982, 0983. Acute inpatient: CPT: 99221-99223, 99231-99233, 99238, 99239, 99251, 99255, 99261-99263, 99291, UB-92: 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016X, 020X-022X, 072X, 0987. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9 CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		
CORONARY ARTERY DISEASE: DRUG THERAPY FOR LOWERING LDL-CHOLESTEROL	AMA PCPI/ ACC/AHA[2,3]	Patients who were prescribed lipid-lowering therapy (based on current ACC/AHA guidelines). Drug list is available. *OR* CPT II Code: 4002F Statin therapy prescribed.	All patients with CAD ≥18 years of age. Patient selection: ICD-9-CM Codes for CAD: 414.00-41407, 414.8, 414.9, 410.00-410.92, 412, 411.0-411.89, 413.0-413.9, V45.81, V45.82 *OR* CPT Diagnosis Codes: 92980-92982, 92984, 92995, 92996, 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536 *AND* Patient's age is ≥18 years.	Documentation of medical reason(s) for not prescribing lipid-lowering therapy: ■ Lipid-lowering drug therapy allergy/ intolerance ICD-9-CM Exclusion Codes: 995.0 and E942.2, 995.1 and E942.2, 995.27 and E942.2, 995.29 and E942.2 *OR* ■ LOINC (LN) Codes with associated LDL values <130 mg/dL: 12773-8, 13457-7, 18262-6, 2089-1, 22748-8, 24331-1-1, 39469-2 *AND* LDL <130 mg/dl *OR*	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CORONARY ARTERY DISEASE: DRUG THERAPY FOR LOWERING LDL-CHOLESTEROL *continued*				■ CPT (C4) codes with associated LDL values <130 mg/dL: 80061,83700, 83701, 83704, 83721 *AND* LDL-C <130 mg/dl *OR* ■ Other medical reason(s) documented by the practitioner for not prescribing lipid-lowering therapy *OR* ■ CPT II Code w/modifier: 4002F 1P *OR* ■ Documentation of patient reason(s) (e.g., economic, social, religious) *OR* ■ CPT II Code w/modifier: 4002F 2P *OR* ■ Documentation of system reason(s) (e.g., resources to perform service not available) *OR* ■ CPT II Code w/modifier: 4002F 3P.	
ISCHEMIC VASCULAR DISEASE: COMPLETE LIPID PROFILE AND LDL CONTROL <100	NCQA[2,4]	**Numerator a:** Number of patients with a full lipid profile completed during the 12-month measurement period with date of each component of the profile documented. ■ Identify the most recent visit to the doctor's office or clinic that occurred during the measurement year (but after the diagnosis of IVD was made) in which a full lipid profile was documented	A systematic sample of patients, age 18 years and older with a diagnosis of ischemic vascular disease (IVD) for at least 12 months, who have been under the care of the physician or physician group for IVD for at least 12 months (this is defined by documentation of a face-to-face visit for IVD care between the physician and the patient that predates the most recent IVD visit by at least 12 months).	Exclude patient self-report or self-monitoring, LDL to HDL ratio, and findings reported on progress notes or other non-laboratory documentation.	Physicians may use administrative data systems to identify eligible patients. Administrative data sources

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ISCHEMIC VASCULAR DISEASE: COMPLETE LIPID PROFILE AND LDL CONTROL <100 *continued*		■ Each component of the lipid profile must be noted with the date of the laboratory test and results. **Numerator b:** Number of patients with an LDL completed during the 12-month abstraction period with date and LDL less than 100 mg/dl documented. CPT II Codes for compliance: 3048F CPT II Codes for non-compliance: 3049F, 3050F.	Codes to identify a patient with a diagnosis of ischemic vascular disease: ICD-9: 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445 DRG: 140, 559. If using health plan administrative claims to identify the eligible population and then attributing to physicians, use the following denominator specifications: Discharged alive for AMI, CABG, or PTCA on or between 1/1-11/1 of the year prior to the measurement year or at one outpatient or acute inpatient during the measurement year and year prior to the measurement year. AMI: ICD-9: 410.X1, DRG: 121, 122, 516 PTCA: CPT: 33140, 92980-92982, 92984, 92995, 92996, ICD-9: 00.66, 36.01, 36.02, 36.05, 36.06, 36.07, 36.09, DRG: 516, 517, 526, 527, 555-558 CABG: CPT: 33510-33514, 33516-33519, 33521-33523, 33533-33536, 35600, 33572, HCPCS: S2205-S2209, ICD-9: 36.1, 36.2, DRG: 106, 107, 109, 547-550. Codes to identify a patient with a diagnosis of ischemic vascular disease: ICD-9: 411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445 DRG: 140, 559. Outpatient codes: CPT: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499, UB-92: 051X, 0520-0523, 0526-0529, 057X-059X, 077X, 0982, 0983.		include medical encounters, medical claims and ambulatory pharmacy records. Determination of patient eligibility may be based on an administrative data system, but must be supported by documentation found in the medical record. Numerator results are obtained from the medical record.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ISCHEMIC VASCULAR DISEASE: COMPLETE LIPID PROFILE AND LDL CONTROL <100 *continued*			Acute inpatient: CPT: 99221-99223, 99231-99233, 99238, 99239, 99251, 99255, 99261-99263, 99291, UB-92: 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016X, 020X-022X, 072X, 0987. Presentation of codes: Unless otherwise noted, codes are stated to the minimum specificity required. For example, if a three-digit code is listed, it is valid as a three-, four-, or five-digit code. When necessary, a code may be specified with an "X" which represents a required digit. For example ICD-9 CM Diagnosis Code 640.0X means that a fifth digit is required, but the fifth digit could be any number allowed by the coding manual.		
CORONARY ARTERY DISEASE: OPTIMALLY MANAGED MODIFIABLE RISK FACTORS	HealthPartners	All members from the denominator who reach treatment targets* for all numerator components: ■ Low-Density Lipoprotein (LDL) Screening—Coronary artery disease (CAD) population who had an LDL during the measurement year or the year prior to the measurement year with a level less than 100 for the most recent screening. ■ Tobacco Non-User—CAD population with documented non-smoking status. ■ Blood Pressure Control—CAD population whose blood pressure is in control less than 140/90 during the measurement year. ■ Aspirin Usage—CAD population eligible for aspirin use who were on aspirin therapy. *Numerator component target measure may be modified to reflect changing recommendations of treatment targets.	Members between 18 and 75 years of age as of December 31 of the reporting year, who were continually enrolled with not more than 1 month break in coverage and have a diagnosis of coronary artery disease (CAD).* *CAD diagnosis: 410.XX Acute Myocardial Infarction (AMI), 411.XX Post Myocardial Infarction Syndrome, 412 Old AMI, 413.XX Angina Pectoris, 414.0X Coronary Atherosclerosis, 414.10 Aneurysm of Heart Wall, 414.8 Other Chronic Ischemic Heart Disease (IHD), 414.9 Chronic IHD.	Numerator exclusion: Members contraindicated to aspirin therapy are excluded from the "Aspirin Usage" component of the measure. Denominator exclusions: Members can be validly excluded from the sample for the following reasons during the measurement year: member died, resident in nursing home, or hospice. Sampling error member does not have CAD.	Administrative data, medical record.

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEART FAILURE: ASSESSMENT OF ACTIVITY LEVEL	AMA PCPI/ ACC/AHA[2,3]	Patient visits with assessment of current level of activity *OR* documentation of standardized scale or completion of assessment tool.* Medical record must include: Documentation of the current level of activity *OR* Documentation that a standardized scale or assessment tool was used *OR* CPT II Code: 1003F Level of activity assessed. *Standardized scale or assessment tools may include the New York Heart Association Functional Classification of Congestive Heart Failure (level of activity only); Kansas City Cardiomyopathy Questionnaire; Minnesota Living with Heart Failure™ Questionnaire; or Chronic Heart Failure Questionnaire (Guyatt).	All patient visits for patients aged ≥18 years with HF. Patient selection: ICD-9-CM Codes for HF: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20-428.23, 428.30-428.33, 428.40-428.43, 428.9 *AND* CPT Codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* Patient age is ≥18 years.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.
HEART FAILURE: ASSESSMENT OF CLINICAL SYMPTOMS OF VOLUME OVERLOAD (EXCESS)	AMA PCPI/ ACC/AHA[2,3]	Patient visits with assessment of clinical symptoms of volume overload (excess) or documentation of standardized scale or completion of assessment tool.* Medical record must include: Assessment for the absence or presence of symptoms of volume overload – Dyspnea or orthopnea *OR* Documentation of standardized scale or completion of assessment tool *OR* CPT II Code: 1004F Clinical symptoms of volume overload (excess) assessed.	All patient visits for patients aged ≥18 years with HF. Patient selection: ICD-9-CM Codes for HF: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20-428.23, 428.30-428.33, 428.40-428.43, 428.9 *AND* CPT Codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354, 99355, 99385-99387, 99395-99397, 99401-99404 *AND* Patient's age is ≥18 years.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEART FAILURE: ASSESSMENT OF CLINICAL SYMPTOMS OF VOLUME OVERLOAD (EXCESS) *continued*		*Standardized scale or assessment tools may include the New York Heart Association Functional Classification of Congestive Heart Failure (level of activity only); Kansas City Cardiomyopathy Questionnaire; Minnesota Living with Heart Failure™ Questionnaire; or Chronic Heart Failure Questionnaire (Guyatt).			
HEART FAILURE: LEFT VENTRICULAR FUNCTION ASSESSMENT	AMA PCPI/ ACC/AHA[2,3]	Patients with quantitative or qualitative results of LVF assessment recorded. CPT Codes: 78414, 78468, 78472, 78473, 78480, 78481, 78483, 78494, 93303, 93304, 93307, 93308, 93312, 93314, 93315, 93317, 93350, 93543 *AND* Medical record must include documentation of quantitative or qualitative results of LVF assessment *OR* CPT II Code: 3020F Left ventricular function (LVF) assessment (e.g., echocardiography, nuclear test, or ventriculography) documented in the medical record.	All patients with heart failure ≥18 years of age. Patient selection: ICD-9-CM Codes for HF: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20-428.23, 428.30-428.33, 428.40-428.43, 428.9 *AND* Patient's age is ≥18 years.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEART FAILURE: ANGIOTENSIN CONVERTING ENZYME INHIBITOR/ ANGIOTENSIN RECEPTOR BLOCKER THERAPY	AMA PCPI/ ACC/AHA[2,3]	Patients who were prescribed ACEI or ARB therapy (drug list available at www.ama-assn.org/ama/pub/category/4837.html) *OR* CPT II Code: 4009F Angiotensin Converting Enzyme (ACE) inhibitor or Angiotensin Receptor Blocker therapy prescribed.	All HF patients ≥18 years of age with LVEF <40% or with moderately or severely depressed left ventricular systolic function. Patient selection: ICD-9-CM Codes for HF: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20-428.23, 428.30-428.33, 428.40-428.43, 428.9 *AND* CPT Procedure Codes for LVF assessment testing: 78414, 78468, 78472, 78473, 78480, 78481, 78483, 78494, 93303, 93304, 93307, 93308, 93312, 93314, 93315, 93317, 93350, 93543 *AND* Additional individual medical record review must be completed to identify patients who had documentation of an ejection fraction <40% (use most recent value) or moderately or severely depressed left ventricular systolic function *OR* [CPT II Codes: 3021F Left ventricular ejection fraction (LVEF) <40% or documentation of moderately or severely depressed left ventricular systolic function AND Patient's age is ≥18 years.	Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy: ■ Allergy or intolerance to ACE inhibitor or ARB *OR* ■ ACE inhibitor contraindications including angioedema, anuric renal failure, moderate or severe aortic stenosis or pregnancy ICD-9-CM Exclusion Codes: 440.1, V56.0, V56.8, 39.95, 54.98, 788.5, 586, 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 584.5-584.9, 585.5-585.6, 395.0, 395.2, 396.0, 396.2, 396.8, 425.1, 747.22, V22.0-V23.9, 277.6 *OR* ■ Other medical reason documented by the practitioner for not prescribing ACE inhibitor or ARB therapy *OR* ■ CPT II Code w/modifier: 4009F 1P. Patient reason (e.g., economic, social, religious) *OR* CPT II Code w/modifier: 4009F 2P. Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy *OR* CPT II Code 4099F 3P.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEART FAILURE: PATIENT EDUCATION	AMA PCPI/ ACC/AHA[2,3]	Patients provided with patient education during one or more visit(s). Patient education should include one or more of the following: weight monitoring; diet (sodium restriction); symptom management; physical activity; smoking cessation; medication instruction; minimizing or avoiding use of NSAIDS; referral for visiting nurse or specific educational or management programs; or prognosis/end-of-life issues. CPT II Code: 4003F Patient education, written/ oral, appropriate for patients with heart failure performed.	All patient visits for patients aged ≥18 years with HF. Patient selection: ICD-9-CM Codes for HF: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20-428.23, 428.30-428.33, 428.40-428.43, 428.9 *AND* CPT Codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* Patient aïge is ≥18 years.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.
HEART FAILURE: BETA BLOCKER THERAPY	AMA PCPI/ ACC/AHA[2,3]	Patients who were prescribed beta blocker therapy (drug list available at www.ama-assn.org/ama/pub/category/4837.html) *OR* CPT II Code: 4006F beta blocker therapy prescribed.	All HF patients ≥18 years of age with LVEF <40% or with moderately or severely depressed left ventricular systolic function. Patient selection: ICD-9-CM Codes for HF: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20-428.23, 428.30-428.33, 428.40-428.43, 428.9 *AND* CPT Procedure Codes for LVF assessment testing: 78414, 78468, 78472, 78473, 78480, 78481, 78483, 78494, 93303, 93304, 93307, 93308, 93312, 93314, 93315, 93317, 93350, 93543 *AND* Additional individual medical record review must be completed to identify patients who had documentation of an ejection fraction <40% (use most recent value) or moderately or severely depressed left ventricular systolic function	Documentation of medical reason(s) for not prescribing beta blocker therapy: ■ Documentation of bradycardia <50 bpm (without beta blocker therapy) on two consecutive readings, history of Class IV (congestive) heart failure, history of second- or third-degree atrioventricular (AV) block without permanent pacemaker. ICD-9-CM Exclusion Codes: 493.00-493.92, 458.0, 458.1, 458.21, 458.29, 458.8-458.9, 426.0 without V45.01, 426.12 without V45.01, 426.13 without V45.01, 427.81, 427.89 *OR* ■ Other medical reason(s) documented by the practitioner for not prescribing beta blocker therapy	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEART FAILURE: BETA BLOCKER THERAPY *continued*			*OR* [CPT II Codes: 3021F Left ventricular ejection fraction (LVEF) <40% or documentation of moderately or severely depressed left ventricular systolic function; *AND* Patient's age is ≥18 years.	*OR* ■ CPT II Code w/modifier: 4006F 1P Documentation of patient reason(s) (e.g., economic, social, religious) *OR* ■ CPT II Code w/modifier: 4006F 2P Documentation of system reason(s) for not prescribing beta blocker therapy *OR* ■ CPT II Code w/modifier 4006F 3P.	
HEART FAILURE: WARFARIN THERAPY FOR PATIENTS WITH ATRIAL FIBRILLATION	AMA PCPI/ ACC/AHA[2,3]	Patients who were prescribed warfarin therapy (drug list available at www.ama-assn.org/ama/pub/category/4837.html)) *OR* CPT II Code: 4012F Warfarin therapy prescribed.	All HF patients ≥18 years of age with paroxysmal or chronic atrial fibrillation. Patient selection: ICD-9-CM Codes for HF: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20-428.23, 428.30-428.33, 428.40-428.43, 428.9 *AND* ICD-9-CM Code for atrial fibrillation: 427.31 *AND* Patient's age is ≥18 years.	Documentation of medical reason(s) for not prescribing warfarin therapy: ■ Allergy/intolerance 995.0 and E934.2, 995.1 and E934.2, 995.2 and E934.2 *OR* ■ Risk of bleeding or bleeding disorder ICD-9-CM Exclusion Codes: 203.00-208.91, 280.0, 280.9, 285.1, 286.0-286.7, 286.9, 287.30, 287.31, 287.32, 287.33, 287.39, 287.4, 287.5, 430, 431, 432.0, 432.1, 432.9, 437.3, 459.0, 530.7, 531.00-531.01, 531.20-531.21, 531.40-531.41, 531.60-531.61, 532.00-532.01, 532.20-532.21, 532.40-532.41, 532.60-532.61, 533.00-533.01, 533.20-533.21, 533.40-533.41, 533.60-533.61, 534.00-534.01, 534.20-534.21, 534.40-534.41, 534.60-534.61, 569.3, 570, 571.2, 571.5, 578.0, 578.1, 578.9, 599.7, 786.3	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

(more)

HEART DISEASE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
HEART FAILURE: WARFARIN THERAPY FOR PATIENTS WITH ATRIAL FIBRILLATION *continued*				*OR* ■ Other medical reason(s) documented by the practitioner for not prescribing warfarin therapy *OR* ■ CPT II Code w/modifier: 4012F 1P. Documentation of patient reason(s) (e.g., economic, social, religious) *OR* ■ CPT II Code w/modifier: 4012F 2P. Documentation of system reason(s) for not prescribing warfarin therapy *OR* CPT II Code 4012F 3P.	
HEART FAILURE: WEIGHT MEASUREMENT	AMA PCPI/ ACC/AHA[2,3]	Patient visits with weight measurement recorded *OR* CPT II Code: 2001F Weight recorded.	All visits for patients with HF ≥18 years of age Patient selection: ICD-9-CM Codes for HF: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20-428.23, 428.30-428.33, 428.40-428.43, 428.9 *AND* CPT Codes for patient visit: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* Patient's age is ≥18 years.	Patient visits in which practitioner was unable to weigh patient. CPT II Code w/modifier: 2001F 1P.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

HYPERTENSION

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BLOOD PRESSURE MEASUREMENT	AMA PCPI[2,3] ACC/AHA	Patient visits with BP measurement recorded *OR* CPT II Code: 2000F Blood pressure measured.	All visits for patients ≥18 years of age with diagnosed hypertension. Patient selection: ICD-9-CM Codes for hypertension: 401.0, 401.1, 401.9, 402.00, 402.01, 402.10, 402.11, 402.90, 402.91, 403.00, 403.01, 403.10, 403.11, 403.90, 403.91, 404.00, 404.01, 404.02, 404.03, 404.00, 404.01, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93 *AND* CPT office or other outpatient service codes: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404, *AND* Patient's age is ≥18 years.	None.	Electronic health records, administrative data using CPT II Codes, retrospective paper medical records, prospective flowsheet.
PLAN OF CARE	AMA PCPI[2,3] ACC/AHA	Patient visits with a documented plan of care for hypertension. Plan of care should include one or more of the following: recheck BP at specified future date, initiate or alter antihypertensive pharmacological therapy, and/or initiate or alter non-pharmacologic therapy. Non-pharmacological therapy may include weight reduction, decreased sodium and alcohol intake, and exercise *OR* CPT II Code 4050F: Hypertension plan of care documented as appropriate.	All visits for patients ≥18 years of age with diagnosed hypertension during which either systolic BP ≥140 mm Hg or diastolic BP ≥90 mm Hg. Patient selection: ICD-9-CM Codes for hypertension: 401.0, 401.1, 401.9, 402.00, 402.01, 402.10, 402.11, 402.90, 402.91, 403. 00, 403.01, 403.10, 403.11, 403.90, 403.91, 404.00, 404.01, 404.02, 404.03, 404.00, 404.01, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93 *AND* CPT office or other outpatient service codes: 99201-99205, 99212-99215, 99241-99245, 99354, 99355, 99385-99387, 99395-99397, 99401-99404 *AND*	None.	Electronic health records, administrative data using CPT II Codes, retrospective paper medical records, prospective flowsheet.

(more)

HYPERTENSION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
PLAN OF CARE *continued*			Additional individual medical record review must be completed to identify patient visits with a systolic BP ≥140 mm Hg or a diastolic BP ≥90 mm Hg *OR* CPT II Codes (report one code for systolic): 3074F Most recent systolic blood pressure <130 mm Hg *OR* 3075F Most recent systolic blood pressure 130 to 139 mm Hg *OR* 3077F Most recent systolic blood pressure ≥140 mm Hg *AND* (report one code for diastolic) 3078F Most recent diastolic blood pressure < 80 mm Hg *OR* 3079F Most recent diastolic blood pressure 80 to 89 mm Hg *OR* 3080F Most recent diastolic blood pressure ≥90 mm Hg *AND* Patient's age is ≥18 years.		
CONTROLLING HIGH BLOOD PRESSURE	CMS/NCQA[2,4]	Patients with last BP measurement adequately controlled to systolic BP <140 mm Hg *and* diastolic BP <90 mm Hg during the measurement year.	All patients ≥18 years of age with a diagnosis of hypertension in the first six months of the measurement year or any time prior. Patient selection: ICD-9-CM Codes for Hypertension: 401. A patient is considered to be hypertensive if there is at least one outpatient encounter (outpatient or other outpatient services) 99201-99205, 99211-99215, 99241, 99245, 99384-99387, 99394-99397) with a diagnosis of hypertension	None.	Electronic health records, retrospective flowsheet, medical record review.

(more)

HYPERTENSION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CONTROLLING HIGH BLOOD PRESSURE *continued*			(applicable ICD-9 Codes) during the first six months of the measurement year. To confirm the diagnosis of hypertension, notation of the following must be found in the medical record on or before June 30 of the measurement year: ■ HTN ■ High blood pressure (HBP) ■ Elevated BP ■ Borderline HTN ■ Intermittent HTN ■ History of HTN. The notation of hypertension may appear anytime on or before June 30 of the measurement year, including prior to the measurement year. It does not matter if hypertension was treated or is currently being treated. The notation indicating a diagnosis of hypertension may be recorded on any of the following documents: ■ A problem list, ■ Office note, ■ Subjective, objective, assessment plan (SOAP) note, ■ Encounter form, ■ Telephone call record, ■ Diagnostic report, and/or ■ Hospital discharge summary. Statements such as "rule out hypertension," "possible hypertension," "white-coat hypertension," "questionable hypertension," and "consistent with hypertension" are not sufficient to confirm the diagnosis of hypertension if such statements are the only notations of hypertension in the medical record.		

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MEDICATION MANAGEMENT

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DOCUMENTATION OF MEDICATION LIST IN THE OUTPATIENT RECORD	CMS-SCRIPT[5]	Patients with a medication list[6] in their medical record.	All patients who were continuously enrolled during the measurement year.	NA	Chart abstraction via paper-based abstraction tool designed for SCRIPT project.
DOCUMENTATION OF ALLERGIES AND ADVERSE REACTIONS IN THE OUTPATIENT RECORD	CMS-SCRIPT[5]	Patients with allergy and adverse reaction status[7] present in medical record.	All patients who were continuously enrolled during the measurement year.	NA	Chart abstraction via paper-based abstraction tool designed for SCRIPT project.
THERAPEUTIC MONITORING: ANNUAL MONITORING FOR PATIENTS ON PERSISTENT MEDICATIONS **a. Annual monitoring for patients on angiotensin converting enzyme inhibitors/ angiotensin receptor blockers**	NCQA[2,4]	**Electronic Collection:** **Numerator a:** The number of patients with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year. *Note:* The two tests do not need to occur on the same service date, only within the measurement year. Codes to identify physiologic monitoring tests (for patients on ACE inhibitors or ARBs, digoxin or diuretics and any combination products): **Serum Potassium (K+): CPT Codes:** 84132, 80050, 80051, 80053, 80048, 80069; LOINC Codes: 2824-1, 2823-3, 6298-4, 12812-4, 12813-2, 22760-3, 24320-4, 24321-2, 24322-0, 24323-8, 24326-1, 24362-6, 29349-8, 32713-0, 34548-8, 34554-6 *AND*	**Electronic Collection:** **Denominator a:** The number of patients ages 18 years and older who received at least a 180-days supply of ACE inhibitors or ARBs, including any combination products during the measurement year. A list of included drugs can be accessed at: www.ncqa.org/Programs/HEDIS/2006/Volume2/NDCLicense.htm. **Medical Record Collection:** EHR users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample.	Exclude patients from each rate denominator with a hospitalization in the measurement year. These patients may have received a monitoring event during the hospitalization which may not be captured. Hospitalizations can be identified using either codes for inpatient discharges or non-acute care or through the medical record. Codes to identify total inpatient discharges: ICD-9-CM Codes: (all principal diagnosis codes except: 290-316, 960-979 with a secondary diagnosis of chemical dependency, V30-V39) *WITH* UB-92 Codes: (Type of Bill Codes: 11X, 12X, 41X, 42X, 84X) OR DRGs: (1-423, 439-455, 461, 463-471, 473, 475-520, 524-540, 541-559) *OR* ICD-9-CM	Electronic data (i.e., claims or encounter data for visits, laboratory tests and pharmacy) or medical record review.

(more)

[5] The SCRIPT measures were developed by the Coalition for Quality in Medication Use funded by the Centers for Medicare and Medicaid Services and are in the public domain. Since the project has concluded and the coalition is no longer available to maintain the measures, NCQA has indicated that it will maintain them.

[6] A separate, additional document can satisfy the numerator, as can a list of medications simply noted in a patient's progress note.

[7] A separate, additional document can satisfy the numerator, as can a note in a patient's progress note.

MEDICATION MANAGEMENT (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
THERAPEUTIC MONITORING: ANNUAL MONITORING FOR PATIENTS ON PERSISTENT MEDICATIONS **a. Annual monitoring for patients on angiotensin converting enzyme inhibitors/ angiotensin receptor blockers** *continued*		Serum Creatinine (SCr): CPT Codes: 82565, 80050, 80053, 80048, 80069, 82575; LOINC Codes: 2160-0, 2163-4, 2164-2, 11041-1, 11042-9, 12195-4, 13441-1, 13442-9, 13443-7, 13446-0, 13447-8, 13449-4, 13450-2, 14682-9, 16188-5, 16189-3, 21232-4, 24321-2, 24322-0, 24323-8, 24320-4, 24362-6, 26752-6, 33558-8, 34555-3, 35591-7, 35592-5, 35593-3, 35594-1, 38483-4 *OR* Blood Urea Nitrogen (BUN): CPT Codes: 84520, 84525, 80050, 80053, 80048, 80069; LOINC Codes: 3094-0, 6299-2, 11064-3, 11065-0, 12964-3, 12965-0, 12966-8, 14937-7, 24320-4, 24321-2, 24322-0, 24323-8, 24362-6. **Medical Record Collection**: Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator a:** Documentation in the medical record must include, at a minimum, at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year. *Note:* The two tests do not need to occur on the same service date, only within the measurement year.	**Denominator a:** The number of patients ages 18 years and older who received a prescription for at least a 180-days supply of ACE inhibitors or ARBs, including any combination products during the measurement year (refer to drug lists detailed in the denominator statement for the electronic version). For medical record extraction, a sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.	Codes: (all principal diagnosis codes with an inpatient facility code except: 290-316, 960-979 with a secondary diagnosis of chemical dependency, V30-V39). Codes to identify non-acute care: Hospice - UB-92 Type of Bill Codes (81X, 82X), UB-92 Revenue Codes (115, 125, 135, 145, 155, 650, 656, 658, 659) SNF- UB-92 Type of Bill Codes (0524, 0525, 21X, 22X), UB-92 Revenue Codes (19X) Hospital transitional care, swing bed or rehabilitation - UB-92 Type of Bill Codes (18X) Rehabilitation - UB-92 Revenue Codes (118, 128, 138, 148, 158), DRG (462) Respite - UB-92 Revenue Codes (655) *OR* Other non-acute care facilities that do not use the UB-92 for billing (ICF, SNF, etc.).	

(more)

MEDICATION MANAGEMENT (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Annual monitoring for patients on digoxin	NCQA	**Electronic Collection:** **Numerator b:** The number of patients with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year. *Note:* The two tests do not need to occur on the same service date, only within the measurement year. Codes to identify physiologic monitoring tests (for patients on ACE inhibitors or ARBs, digoxin, or diuretics and any combination products): **Serum Potassium (K+):** CPT Codes: 84132, 80050, 80051, 80053, 80048, 80069; LOINC Codes: 2824-1, 2823-3, 6298-4, 12812-4, 12813-2, 22760-3, 24320-4, 24321-2, 24322-0, 24323-8, 24326-1, 24362-6, 29349-8, 32713-0, 34548-8, 34554-6 *AND* **Serum Creatinine (SCr):** CPT Codes: 82565, 80050, 80053, 80048, 80069, 82575; LOINC Codes: 2160-0, 2163-4, 2164-2, 11041-1, 11042-9, 12195-4, 13441-1, 13442-9, 13443-7, 13446-0, 13447-8, 13449-4, 13450-2, 14682-9, 16188-5, 16189-3, 21232-4, 24321-2, 24322-0, 24323-8, 24320-4, 24362-6, 26752-6, 33558-8, 34555-3, 35591-7, 35592-5, 35593-3, 35594-1, 38483-4 *OR* **Blood Urea Nitrogen (BUN):** CPT Codes: 84520, 84525, 80050, 80053, 80048, 80069; LOINC Codes: 3094-0, 6299-2, 11064-3, 11065-0, 12964-3, 12965-0, 12966-8, 14937-7, 24320-4, 24321-2, 24322-0, 24323-8, 24362-6.	**Electronic Collection:** **Denominator b:** The number of patients ages 18 years and older who received at least a 180-days supply of digoxin, including any combination products, during the measurement year. A list of included drugs can be accessed at: www.ncqa.org/Programs/HEDIS/2006/Volume2/NDCLicense.htm. **Medical Record Collection:** For medical record extraction, a sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator. **Denominator b:** The number of patients ages 18 years and older who received a prescription for at least a 180-days supply of digoxin, including any combination products, during the measurement year (refer to drug list mentioned above).	Exclude patients from each rate denominator with a hospitalization in the measurement year. These patients may have received a monitoring event during the hospitalization which may not be captured. Hospitalizations can be identified using either codes for inpatient discharges or non-acute care or through medical records. Codes to identify total inpatient discharges: ICD-9-CM Codes: (all Principal Diagnosis Codes except: 290-316, 960-979 with a secondary diagnosis of chemical dependency, V30-V39) *WITH* UB-92 Codes: (type of bill codes: 11X, 12X, 41X, 42X, 84X) *OR* DRGs: (1-423, 439-455, 461, 463-471, 473, 475-520, 524-540, 541-559) *OR* ICD-9-CM Codes: (all principal diagnosis codes with an inpatient facility code except: 290-316, 960-979 with a secondary diagnosis of chemical dependency, V30-V39). Codes to identify non-acute care: Hospice - UB-92 Type of Bill Codes (81X, 82X), UB-92 Revenue Codes (115, 125, 135, 145, 155, 650, 656, 658, 659) SNF-UB-92 Type of Bill Codes (0524, 0525, 21X, 22X), UB-92 Revenue Codes (19X) Hospital transitional care, swing bed or rehabilitation - UB-92 Type of Bill Codes (18X) Rehabilitation - UB-92 Revenue Codes (118, 128, 138, 148, 158), DRG (462)	Electronic data (i.e., claims or encounter data for visits, laboratory tests and pharmacy) or medical record review.

(more)

MEDICATION MANAGEMENT (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Annual monitoring for patients on digoxin *continued*		**Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator b:** Documentation in the medical record must include, at minimum, a note indicating the patient received at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year.		Respite - UB-92 Revenue Code (655) *OR* Other non-acute care facilities that do not use the UB-92 for billing (ICF, SNF, etc.).	
c. Annual monitoring for patients on diuretics	NCQA	**Electronic Collection:** **Numerator c:** The number of patients with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year. *Note:* The two tests do not need to occur on the same service date, only within the measurement year. Codes to identify physiologic monitoring tests (for patients on ACE inhibitors or ARB, Digoxin, or Diuretics and Any Combination Products): **Serum Potassium (K+):** CPT Codes: 84132, 80050, 80051, 80053, 80048, 80069; LOINC Codes: 2824-1, 2823-3, 6298-4, 12812-4, 12813-2, 22760-3, 24320-4, 24321-2, 24322-0, 24323-8, 24326-1, 24362-6, 29349-8, 32713-0, 34548-8, 34554-6 *AND*	**Electronic Collection:** **Denominator c:** The number of patients ages 18 years and older who received at least a 180-days supply of a diuretic, including any combination products, during the measurement year. A list of included drugs can be accessed at: www.ncqa.org/Programs/HEDIS/2006/Volume2/NDCLicense.htm. *Note:* Patients may switch therapy within any medication listed during the measurement year and have the days supply for the medications count toward the total 180-days supply. **Medical Record Collection:** For medical record extraction, a sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most	Exclude patients from each rate denominator with a hospitalization in the measurement year. These patients may have received a monitoring event during the hospitalization which may not be captured. Hospitalizations can be identified using either codes for inpatient discharges or non-acute care or medical records. Codes to identify total inpatient discharges: ICD-9-CM Codes: (all principal diagnosis codes except: 290-316, 960-979 with a secondary diagnosis of chemical dependency, V30-V39) *WITH* UB-92 Codes: (type of bill codes: 11X, 12X, 41X, 42X, 84X) OR DRGs: (1-423, 439-455, 461, 463-471, 473, 475-520, 524-540, 541-559) OR ICD-9-CM Codes: (all principal diagnosis codes with an inpatient facility code except: 290-316,	Electronic data (i.e., claims or encounter data for visits, laboratory tests and pharmacy) or medical record review. *(more)*

MEDICATION MANAGEMENT (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
c. Annual monitoring for patients on diuretics *continued*		Serum Creatinine (SCr): CPT Codes: 82565, 80050, 80053, 80048, 80069, 82575; LOINC Codes: 2160-0, 2163-4, 2164-2, 11041-1, 11042-9, 12195-4, 13441-1, 13442-9, 13443-7, 13446-0, 13447-8, 13449-4, 13450-2, 14682-9, 16188-5, 16189-3, 21232-4, 24321-2, 24322-0, 24323-8, 24320-4, 24362-6, 26752-6, 33558-8, 34555-3, 35591-7, 35592-5, 35593-3, 35594-1, 38483-4 *OR* Blood Urea Nitrogen (BUN): CPT Codes: 84520, 84525, 80050, 80053, 80048, 80069; LOINC Codes: 3094-0, 6299-2, 11064-3, 11065-0, 12964-3, 12965-0, 12966-8, 14937-7, 24320-4. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator c:** Documentation in the medical record must include, at minimum, a note indicating the patient received at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year. *Note:* The two tests do not need to occur on the same service date, only within the measurement year.	settings office visit claims or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator. **Denominator c:** The number of patients ages 18 years and older who received a prescription for at least a 180-days supply of a diuretic, including any combination products, during the measurement year.	960-979 with a secondary diagnosis of chemical dependency, V30-V39). Codes to identify non-acute care: Hospice - UB-92 Type of Bill Codes (81X, 82X), UB-92 Revenue Codes (115, 125, 135, 145, 155, 650, 656, 658, 659) SNF - UB-92 Type of Bill Codes (0524, 0525, 21X, 22X), UB-92 Revenue Codes (19X) Hospital transitional care, swing bed or rehabilitation - UB-92 Type of Bill Codes (18X) Rehabilitation - UB-92 Revenue Codes (118, 128, 138, 148, 158), DRG (462) Respite - UB-92 Revenue Codes (655) *OR* Other non-acute care facilities that do not use the UB-92 for billing (ICF, SNF, etc.).	

(more)

MEDICATION MANAGEMENT (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
d. Annual monitoring for patients on anticonvulsants	NCQA	**Electronic Collection:** **Numerator d:** The number of patients with at least one drug serum concentration level monitoring test for the prescribed drug in the measurement year. If a patient received only one type of anticonvulsant, the drug serum concentration level test must be for the specific drug taken as a persistent medication. If a patient persistently received multiple types of anticonvulsants, each anticonvulsant medication and drug monitoring test combination is counted as a unique event (i.e., a patient on both phenytoin and valproic acid with at least a 180-days supply for each drug in the measurement year must separately show evidence of receiving drug serum concentration tests for each drug to be considered numerator-compliant for each drug). Codes to identify drug serum concentration monitoring tests: Drug serum concentration for Phenobarbital: CPT Code: 80184, LOINC Codes: 3948-7, 3951-1, 10547-8, 14874-2, 34365-7; Drug serum concentration for phenytoin: CPT Codes: 80185, 80186, LOINC Codes: 3968-5, 3969-3, 14877-5, 32109-1, 34540-5; Drug serum concentration for valproic acid: CPT Code: 80164; LOINC Codes: 4086-5, 4087-3, 4088-1, 14946-8, 18489-5, 21590-5, 32119-0, 32283-4; Drug serum concentration for carbamaxepine: CPT Codes: 80156, 80157; LOINC Codes: 3432-2, 3433-0, 9415-1, 14056-6, 14639-9, 18270-9, 29147-6, 29148-4, 32058-0, 32852-6, 34545-4. **Medical Record Collection**: Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology	**Electronic Collection:** **Denominator d:** The number of patients in the denominator who received at least a 180-days supply for any anticonvulsant for phenytoin, phenobarbital, valproic acid, or carbamazepine during the measurement year. Each patient-drug combination is considered a unique event. *Note:* To count toward the denominator, patients must be on one of the four anticonvulsant medications listed during the measurement year for at least a 180-days supply. Patients who are on multiple anticonvulsant drugs count toward the denominator multiple times if they meet the persistent medications criteria for each drug taken during the measurement year (i.e., a patient who received at least 180 days of phenytoin and 180 days of valproic acid will be counted twice in the denominator for rate 4, once for each drug). A list of included drugs can be accessed at: www.ncqa.org/Programs/HEDIS/2006/Volume2/NDCLicense.htm. **Medical Record Collection:** For medical record extraction, a sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the	Exclude patients from each rate denominator with a hospitalization in the measurement year. These patients may have received a monitoring event during the hospitalization which may not be captured. Hospitalizations can be identified using either codes for inpatient discharges or non-acute care. Codes to identify total inpatient discharges: ICD-9-CM Codes: (all principal diagnosis codes except: 290-316, 960-979 with a secondary diagnosis of chemical dependency, V30-V39) WITH UB-92 Codes: (type of bill codes: 11X, 12X, 41X, 42X, 84X) *OR* DRGs: (1-423, 439-455, 461, 463-471, 473, 475-520, 524-540, 541-559) OR ICD-9-CM Codes: (all principal diagnosis codes with an inpatient facility code except: 290-316, 960-979 with a secondary diagnosis of chemical dependency, V30-V39). Codes to identify non-acute care: Hospice - UB-92 Type of Bill Codes (81X, 82X), UB-92 Revenue Codes (115, 125, 135, 145, 155, 650, 656, 658, 659) SNF - UB-92 Type of Bill Codes (0524, 0525, 21X, 22X), UB-92 Revenue Codes (19X) Hospital transitional care, swing bed or rehabilitation - UB-92 Type of Bill Codes (18X) Rehabilitation - UB-92 Revenue Codes (118, 128, 138, 148, 158), DRG (462)	Electronic data (i.e., claims or encounter data for visits, laboratory tests and pharmacy) or medical record review.

(more)

MEDICATION MANAGEMENT (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
d. Annual monitoring for patients on anticonvulsants *continued*		described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator d:** The number of patients with documentation of at least one drug serum concentration level monitoring test for the prescribed drug in the measurement year. If a patient received only one type of anticonvulsant, the drug serum concentration level test must be for the specific drug taken as a persistent medication. If a patient persistently received multiple types of anticonvulsants, each anticonvulsant medication and drug monitoring test combination is counted as a unique event (i.e., a patient on both phenytoin and valproic acid with at least a 180-days supply for each drug in the measurement year must separately show evidence of receiving drug serum concentration tests for each drug to be considered numerator-compliant for each drug). Drug serum concentration monitoring tests: drug serum concentration for phenobarbital; drug serum concentration for phenytoin; drug serum concentration for valproic acid; drug serum concentration for carbamaxepine.	denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator. **Denominator d:** The number of patients in the denominator who received a prescription for at least a 180-days supply for any anticonvulsant for phenytoin, phenobarbital, valproic acid, or carbamazepine during the measurement year. Each patient-drug combination is considered a unique event. *Note:* To count toward the denominator, patients must have a prescription for one of the four anticonvulsant medications listed during the measurement year for at least a 180-days supply.	Respite - UB-92 Revenue Codes (655) *OR* Other non-acute care facilities that do not use the UB-92 for billing (ICF, SNF, etc.).	
e. Annual monitoring: combined rate[8]	NCQA	Sum of the four numerators (a-d).	Sum of the four denominators (a-d).	See individual measure specifications.	See individual measure specifications.

(more)

[8] The measure "annual monitoring for patients on statins" has recently been retired from the NCQA measure set due to the inconsistency of the clinical guidelines around annual monitoring for statin use.

MEDICATION MANAGEMENT (continued)

Measure	IP Owner	Numerator	Denominator	Exclusions	Data Source
DRUGS TO BE AVOIDED IN THE ELDERLY **a. Patients who receive at least one drug to be avoided** **b. Patients who receive at least two different drugs to be avoided**	NCQA[2,4]	**Electronic Collection:** **Numerator a:** At least one prescription for any drug to be avoided in the elderly in the measurement year. A list of included drugs can be accessed at: www.ncqa.org/Programs/HEDIS/2006/Volume2/NDCLicense.htm. **Medical Record Collection**: Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator a:** Documentation in the medical record must include, at a minimum, a prescription for at least one drug to be avoided in the elderly in the measurement year. **Numerator b:** At least two different drugs to be avoided in the elderly in the measurement year. A list of included drugs can be accessed at: www.ncqa.org/Programs/HEDIS/2006/Volume2/NDCLicense.htm. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator b:** Documentation in the medical record must include at a minimum, prescriptions for at least two different drugs to be avoided in the elderly in the measurement year.	**Electronic collection:** **Denominator a:** All patients ages 65 years and older as of December 31 of the measurement year. **Medical Record Collection:** For medical record extraction, a sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator. **Denominator:** Patients ages 65 years and older as of December 31 of the measurement year.	NA	Electronic data (i.e., claims or encounter data for visits, laboratory tests and pharmacy) or medical record review.

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MENTAL HEALTH AND SUBSTANCE USE DISORDERS

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
MAJOR DEPRESSIVE DISORDER; DIAGNOSTIC EVALUATION	AMA PCPI[2,3]	Patients with documented evidence that they met the DSM–IV™ criteria [at least 5 elements (including 1) depressed mood or 2) loss of interest or pleasure) with symptom duration of two weeks or longer] during the visit in which the new diagnosis or recurrent episode was identified. ■ CPT II Code: 1040F DSM-IV™ criteria for MDD documented. ■ The criteria for a MDD episode includes five (or more) of nine specific symptoms which have been present during the same two-week period and represent a change from previous functioning; at least one of the symptoms is either 1) depressed mood or 2) loss of interest or pleasure: • Depressed mood; • Marked diminished interest/pleasure; • Significant weight loss or gain; • Insomnia or hypersomnia; • Psychomotor agitation/retardation; • Fatigue or lost of energy; • Feelings of worthlessness; • Diminished ability to concentrate; and • Recurrent suicidal ideation.	All patients aged ≥18 years with a new diagnosis or recurrent episode of MDD during the reporting year Patient selection: ICD-9-CM Codes for MDD: 296.20-296.24, 296.30-296.34 *AND* Documentation of new episode of MDD CPT II Code: 3093F Documentation of a new diagnosis or recurrent episode of MDD *AND* CPT Codes for patient visits: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *OR* CPT Codes for psychiatric visits: 90801, 90802 *AND* Patient's age is ≥18 years.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.

(more)

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
MAJOR DEPRESSIVE DISORDER: SUICIDE RISK ASSESSMENT[9]	AMA PCPI[2,3]	Patients who had a suicide risk assessment completed at each visit; CPT II Code: 3085F Suicide risk assessed.	All patients aged ≥18 years with a new diagnosis or recurrent episode of MDD during the reporting year. Patient selection: ICD-9-CM Codes for MDD: 296.20-296.24, 296.30-296.34 *AND* Documentation of new episode of MDD CPT II Code: 3093F Documentation of a new diagnosis or recurrent episode of MDD *AND* CPT Codes for patient visits: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404, 90862, 90805, 90807, 90809, 90811, 90813, 90815, 90804, 90806, 90808, 90810, 90812, 90814, 90845, 90847, 90849, 90853, 90857 *AND* Patient's age is ≥18 years.	Documentation that patient is in remission (no longer meeting DSM-IV™ criteria) *OR* CPT II Code 3092F-Major Depression Disorder, in Remission.	EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes.
NEW EPISODE OF DEPRESSION **a. Optimal Practitioner Contacts for Medication Management**	NCQA[2,4]	**Electronic Collection:** **Numerator a:** Optimal contacts for medication management: Three or more outpatient follow-up visits or intermediate treatment with a practitioner (at least one of which is a prescribing practitioner) within 84 days (i.e., within the 12-week acute treatment phase) after a new diagnosis of major depression. All three follow-up visits are expected to be for mental health. Two of the three follow-up visits must be face-to-face. Case management services should not be counted toward this measure.	**Denominator for rates a, b, c (electronic):** Patients 18 years and older as of April 30th of the measurement year diagnosed with a New Episode of Major Depressive Disorder during the Intake Period and treated with antidepressant medication. Step 1: Identify all patients with a diagnosis of depression who during the 12-month intake period had: ■ At least one principal diagnosis of major depression in any setting *OR*	Risk adjustment is not applied; although the measure is collected for the specific age cohort 18 years and older. See numerators and denominators above for inclusions and exclusions. Definitions are as follows: Intake Period: The 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year. Used to capture New Episodes of treatment. Index Episode Start Date: The earliest episode during the Intake Period with a qualifying diagnosis of major depression.	The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims or encounter data for mental health visits (inpatient *(more)*

[9] During harmonization discussion, the measure developer noted that the intent of this measure is to conform to the American Psychiatric Association's guidelines for suicide risk assessment. Future iterations of the measure will include a reference to the American Psychiatric Association guidelines.

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
NEW EPISODE OF DEPRESSION **a. Optimal Practitioner Contacts for Medication Management** *continued*		Identify all patients in the denominator population who had: ■ Three face-to-face follow-up office visits or intermediate treatment with a practitioner within 84 days (12 weeks) after the Index Episode Start Date, *OR* ■ Two face-to-face visits and one telephone visit with a mental health or non-mental health practitioner within 84 days (12 weeks) after the Index Episode Start Date. Do not count the Index Episode Start Date visit in cases where the patient had two visits with a secondary diagnosis of depression. Include the second visit with a secondary diagnosis of depression toward the optimal contacts rate. Emergency room visits do not count toward the numerator. Visits with mental health practitioners: To identify visits with mental health practitioners, use any of the codes listed below. Visits with non-mental health practitioners: To identify visits with non-mental health practitioners, use psychiatric visit codes listed below *OR* evaluation and management codes listed below in conjunction with a Mental Health Diagnosis Code or telephone visit codes in listed below in conjunction with a Mental Health Diagnosis Code. Codes to identify psychiatric visits: CPT Codes: 90801, 90802, 90804-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871, 90875, 90876; HCPCS: G0155, G0176,	■ At least two secondary diagnoses of major depression on different dates of service in any outpatient setting *OR* ■ At least one secondary diagnosis of major depression associated with any inpatient discharge. Codes to identify major depression: ICD-9 Codes: 296.2, 296.3, 298.0, 300.4, 309.1, 311; DRG Codes: 426* Prior depressive episodes: ICD-9 Codes: 296.2-296.9, 298.0, 300.4, 309.0, 309.1, 309.28, 311; DRG Codes: 426* (*exclude patients with this code if the Principal Diagnosis is ICD-9-CM Code 301.12). Step 2: Determine the Index Episode Start Date and test for negative diagnosis history. For each patient identified in step 1, determine the Index Episode Start Date by finding the date of the patient's earliest encounter during the Intake Period with a qualifying major depression diagnosis. Identify patients who were diagnosed with a New Episode of depression. Patients with a New Episode of depression are those who have a negative diagnosis history. The range of ICD-9-CM Diagnosis Codes for prior depressive episodes listed is more comprehensive to exclude patients diagnosed with any type of depression. Patients with any diagnosis of depression within the previous 120 days (4 months) of the Index Episode Start Date should be dropped from this denominator. Step 3: Identify patients receiving antidepressant medication therapy. Among patients identified in step 2, find those who filled a prescription for an	Index Prescription Date: The earliest prescription for antidepressants filled within a 44-day period, defined as 30 days prior to through 14 days on or after the Index Episode Start Date. Negative diagnosis history: A period of 120 days (4 months) on or before the Index Episode Start Date, during which time the patient had no claims/encounters containing either a principal or secondary diagnosis of depression. Negative medication history: A period of 90 days (3 months) prior to the Index Prescription Date, during which time the patient had no new or refill prescriptions for a listed antidepressant drug. New Episode: To qualify as a new episode, two criteria must be met: ■ A 120-day (4-month) negative diagnosis history on or before the Index Episode Start Date. ■ A 90-day (3-month) negative medication history on or before the Index Prescription Date. *Prescribing Practitioner:* A practitioner with prescribing privileges. *Treatment Days:* The actual number of calendar days covered with prescriptions within the specified 180-day measurement interval.	and ambulatory), procedures, and pharmacy. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
NEW EPISODE OF DEPRESSION **a. Optimal Practitioner Contacts for Medication Management** *continued*		G0177, H0002, H0004, H0031, H0034, H0036, H0036, H0037, H0039, H0040, H2000, H2010, H2011, H2013, H2020, M0064, S9484, S9485; UB-92 Codes: 0513, 0900, 0901, 0905-0907, 0909-0916, 0961. Evaluation and management codes: CPT codes: 99201-99205, 99211-99215, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401, 99404; *AND* one of the following ICD9-CM Codes: 290, 293-302, 306-316 Telephone visits: CPT Codes: 99371-99373; and one of the following ICD9-CM Codes: 290, 293-302, 306-316. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator a:** Optimal contacts for medication management (medical record) Three or more outpatient follow-up visits or intermediate treatment with a practitioner (at least one of which is a prescribing practitioner) within 84 days (i.e., within the 12-week acute treatment phase) after a new diagnosis of major depression. All three follow-up visits are expected to be for mental health. Two of the three follow-up visits must be face-to-face. Case management services should not be counted toward this measure.	antidepressant medication within 30 days before the Index Episode Start Date or 14 days on or after the Index Episode Start Date. Step 4: Identify the Index Prescription Date: Identify the earliest prescription up to 30 days before the Index Episode Start Date to 14 days on or after the Index Episode Start Date. Prescriptions may be up to 30 days before the Index Episode Start Date to account for patients having a recurrent episode who may be started on medication based on a phone encounter while awaiting a scheduled office visit. Similarly, prescriptions may be 14 days on or after the Index Episode Start Date to account for either clinical discretion in recommending a 2-week trial of self-help techniques prior to starting on medication or for patient delay in filling the initial prescription. Step 5: From the resulting patients from step 4, confirm the New Episode by testing for a negative medication history. Patients who have antidepressant prescriptions filled during the negative medication history period do not represent new treatment episodes and must be excluded. Step 6: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 245 days after the Index Episode Start Date treatment period. Codes to identify mental health inpatient services: DRG Codes: 424-432 except discharges with ICD-9 principal diagnosis of 317-319 ICD-9 CM Codes: 290, 293-302, 306-316 Codes to identify chemical dependency inpatient services: DRG Codes: 433, 521-523 ICD-9 CM Codes: 291-292, 303-305,		include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
NEW EPISODE OF DEPRESSION **a. Optimal Practitioner Contacts for Medication Management** *continued*		Identify all patients in the denominator population who had: ■ Three face-to-face follow-up office visits or intermediate treatment with a practitioner within 84 days (12 weeks) after the Index Episode Start Date, *OR* ■ Two face-to-face visits and one telephone visit with either a practitioner within 84 days (12 weeks) after the Index Episode Start Date. Do not count the Index Episode Start Date visit in cases where the patient had two visits with a secondary diagnosis of depression. Include the second visit with a secondary diagnosis of depression toward the optimal contacts rate. Emergency room visits do not count toward the numerator. Visits (in person or over the telephone) with non-mental health practitioners should be for a psychiatric visit or for a mental health diagnosis.	960-979 with a secondary diagnosis of chemical dependency. **Denominator for Numerators a, b, c** (medical record): A systematic sample of patients 18 years and older as of April 30 of the measurement year diagnosed with a New Episode of Major Depressive Disorder during the Intake Period and who were prescribed antidepressant medication. Step 1: Identify all patients with a diagnosis of depression who, during the 12-month Intake Period had: ■ At least one principal diagnosis of major depression in any setting *OR* ■ At least two secondary diagnoses of major depression on different dates of service in any outpatient setting *OR* ■ At least one secondary diagnosis of major depression associated with any inpatient discharge. Step 2: Determine the Index Episode Start Date and test for negative diagnosis history. For each patient identified in step 1, determine the Index Episode Start Date by finding the date of the patient's earliest encounter during the Intake Period with a qualifying major depression diagnosis. Identify patients who were diagnosed with a New Episode of depression. Patients with a New Episode of depression are those who have a negative diagnosis history. Patients with any diagnosis of		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
NEW EPISODE OF DEPRESSION **a. Optimal Practitioner Contacts for Medication Management** *continued*			depression within the previous 120 days (4 months) of the Index Episode Start Date should be dropped from this denominator. Step 3: Identify patients prescribed antidepressant medication therapy. Among patients identified in step 2, find those who have a prescription for an antidepressant medication within 30 days before the Index Episode Start Date or 14 days on or after the Index Episode Start Date. Step 4: Identify the Index Prescription Date. Identify the earliest written prescription up to 30 days before the Index Episode Start Date to 14 days on or after the Index Episode Start Date. Prescriptions may be up to 30 days before the Index Episode Start Date to account for patients having a recurrent episode who may be started on medication based on a phone encounter while awaiting a scheduled office visit. Similarly, written prescriptions may be 14 days on or after the Index Episode Start Date to account for either clinical discretion in recommending a 2-week trial of self-help techniques prior to starting on medication. Step 5: From the resulting patients from step 4, confirm the New Episode by testing for a negative medication history. Patients who have antidepressant prescriptions written during the negative medication history period do not represent new treatment episodes and must be excluded. Step 6: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 245 days after the Index Episode Start Date treatment period.		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Effective Acute Phase Treatment	NCQA[2,4]	**Numerator b:** Effective acute phase treatment (electronic): An 84-day (12-week) acute treatment of antidepressant medication. Identify all patients in the denominator population who filled a sufficient number of separate prescriptions/refills of antidepressant medication treatment to provide continuous treatment for at least 84 days. The continuous treatment definition allows gaps in medication treatment up to a total of 30 days during the 84-day period. Allowable medication changes or gaps include: ■ "Washout" period gaps to change medication ■ "Treatment" gaps to refill the same medication. Regardless of the number of gaps, the total gap days may be no more than 30 days. Any combination of gaps may be counted (e.g., two washout gaps, each 15 days, or two washout gaps of 10 days each and one treatment gap of 10 days). The total gap days may not exceed 30 days. To determine continuity of treatment during the 84-day period, sum the number of gap days to the number of treatment days for a maximum of 114 days (i.e., 84 treatment days + 30 gap days = 114 days). For all prescriptions filled within 114 days of the Index Prescription Date, count treatment days from the Index Prescription Date and continue to count until a total of 84 treatment days has been established. Patients whose gap days exceed 30 or who do not have 84 treatment days within 114 days after the Index Prescription Date are not counted in the numerator.	**Denominator for rates a, b, c** (electronic): Patients 18 years and older as of April 30th of the measurement year diagnosed with a New Episode of Major Depressive Disorder during the Intake Period and treated with antidepressant medication. Step 1: Identify all patients with a diagnosis of depression who, during the 12-month Intake Period had: ■ At least one principal diagnosis of major depression in any setting *OR* ■ At least two secondary diagnoses of major depression on different dates of service in any outpatient setting *OR* ■ At least one secondary diagnosis of major depression associated with any inpatient discharge. Codes to identify Major Depression: ICD-9 Codes: 296.2, 296.3, 298.0, 300.4, 309.1, 311; DRG Codes: 426* Prior Depressive Episodes: ICD-9 Codes: 296.2-296.9, 298.0, 300.4, 309.0, 309.1, 309.28, 311; DRG Codes: 426* (*exclude patients with this code if the principal diagnosis is ICD-9-CM Code 301.12). Step 2: Determine the Index Episode Start Date and test for negative diagnosis history. For each patient identified in step 1, determine the Index Episode Start Date by finding the date of the patient's earliest encounter during the Intake Period with a qualifying major depression diagnosis.	Risk adjustment is not applied; although the measure is collected for the specific age cohort 18 years and older. See numerators and denominators above for inclusions and exclusions. Definitions are as follows: Intake Period: The 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year. Used to capture New Episodes of treatment. Index Episode Start Date: The earliest episode during the Intake Period with a qualifying diagnosis of major depression. Index Prescription Date: The earliest prescription for antidepressants filled within a 44-day period, defined as 30 days prior to through 14 days on or after the Index Episode Start Date. Negative diagnosis history: A period of 120 days (4 months) on or before the Index Episode Start Date, during which time the patient had no claims/encounters containing either a principal or secondary diagnosis of depression. Negative medication history: A period of 90 days (3 months) prior to the Index Prescription Date, during which time the patient had no new or refill prescriptions for a listed antidepressant drug. New Episode: To qualify as a new episode, two criteria must be met:	The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims or encounter data for mental health visits (inpatient and ambulatory), procedures, and pharmacy. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Effective Acute Phase Treatment *continued*		Antidepressant medications prescriptions (NCQA will provide a comprehensive list of medications and NDC Codes on its web site) ■ Tricyclic antidepressants (TCA) and other cyclic antidepressants ■ Selective serotonin reuptake inhibitors (SSRI) ■ Monoamine oxidase inhibitors (MAOI) ■ Serotonin-norepinepherine reuptake inhibitors (SNRI) ■ Other antidepressants. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator b:** Effective acute phase treatment (medical record) An 84-day (12-week) acute treatment of anti-depressant medication. Identify all patients in the denominator population who have sufficient documentation in their medical record of a sufficient number of separate prescriptions/refills of antidepressant medication treatment to provide continuous treatment for at least 84 days. The continuous treatment definition allows gaps in medication treatment up to a total of 30 days during the 84-day period. Allowable medication changes or gaps include:	Identify patients who were diagnosed with a New Episode of depression. Patients with a New Episode of depression are those who have a negative diagnosis history. The range of ICD-9-CM Diagnosis Codes for prior depressive episodes listed is more comprehensive to exclude patients diagnosed with any type of depression. Patients with any diagnosis of depression within the previous 120 days (4 months) of the Index Episode Start Date should be dropped from this denominator. Step 3: Identify patients receiving antidepressant medication therapy. Among patients identified in step 2, find those who filled a prescription for an antidepressant medication within 30 days before the Index Episode Start Date or 14 days on or after the Index Episode Start Date. Step 4: Identify the Index Prescription Date. Identify the earliest prescription up to 30 days before the Index Episode Start Date to 14 days on or after the Index Episode Start Date. Prescriptions may be up to 30 days before the Index Episode Start Date to account for patients having a recur-rent episode who may be started on medication based on a phone encounter while awaiting a scheduled office visit. Similarly, prescriptions may be 14 days on or after the Index Episode Start Date to account for either clinical discretion in recommending a 2-week trial of self-help techniques prior to starting on medication or for patient delay in filling the initial prescription. Step 5: From the resulting patients from step 4, confirm the New Episode by testing for a negative	■ A 120-day (4-month) negative diagnosis history on or before the Index Episode Start Date. ■ A 90-day (3-month) negative medication history on or before the Index Prescription Date. Prescribing Practitioner: A practitioner with prescribing privileges. Treatment days: The actual number of calendar days covered with prescriptions within the specified 180-day measurement interval.	for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Effective Acute Phase Treatment *continued*		■ "Washout" period gaps to change medication ■ "Treatment" gaps to refill the same medication. Regardless of the number of gaps, the total gap days may be no more than 30 days. Any combination of gaps may be counted (e.g., two washout gaps, each 15 days, or two washout gaps of 10 days each and one treatment gap of 10 days). The total gap days may not exceed 30 days. To determine continuity of treatment during the 84-day period, sum the number of gap days to the number of treatment days for a maximum of 114 days (i.e., 84 treatment days + 30 gap days = 114 days). For all prescriptions prescribed within 114 days of the Index Prescription Date, count treatment days from the Index Prescription Date and continue to count until a total of 84 treatment days has been established. Patients whose gap days exceed 30 or who do not have 84 treatment days within 114 days after the Index Prescription Date are not counted in the numerator. Antidepressant medication prescriptions: (NCQA will provide a comprehensive list of medications and NDC Codes on its web site): ■ Tricyclic antidepressants (TCA) and other cyclic antidepressants ■ Selective serotonin reuptake inhibitors (SSRI) ■ Monoamine oxidase inhibitors (MAOI) ■ Serotonin-norepinepherine reuptake inhibitors (SNRI) ■ Other antidepressants.	Medication history: Patients who have antidepressant prescriptions filled during the negative medication history period do not represent new treatment episodes and must be excluded. Step 6: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 245 days after the Index Episode Start Date treatment period. Codes to identify mental health inpatient services: DRG Codes: 424-432 except discharges with ICD-9 principle diagnosis of 317-319 ICD-9 CM Codes: 290, 293-302, 306-316 Codes to identify Chemical Dependency Inpatient services: DRG Codes: 433, 521-523 ICD-9 CM Codes: 291-292, 303-305, 960-979 with a secondary diagnosis of chemical dependency. **Denominator for Numerators a, b, c** (medical record): A systematic sample of patients 18 years and older as of April 30 of the measurement year diagnosed with a New Episode of Major Depressive Disorder during the Intake Period and who were prescribed antidepressant medication. Step 1: Identify all patients with a diagnosis of depression who during the 12-month Intake Period had: ■ At least one principal diagnosis of major depression in any setting *OR* ■ At least two secondary diagnoses of major depression on different dates of service in any outpatient setting		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Effective Acute Phase Treatment *continued*			*OR* ■ At least one secondary diagnosis of major depression associated with any inpatient discharge. Step 2: Determine the Index Episode Start Date and test for negative diagnosis history. For each patient identified in step 1, determine the Index Episode Start Date by finding the date of the patient's earliest encounter during the Intake Period with a qualifying major depression diagnosis. Identify patients who were diagnosed with a New Episode of depression. Patients with a New Episode of depression are those who have a negative diagnosis history. Patients with any diagnosis of depression within the previous 120 days (4 months) of the Index Episode Start Date should be dropped from this denominator. Step 3: Identify patients prescribed antidepressant medication therapy. Among patients identified in step 2, find those who have a prescription for an antidepressant medication within 30 days before the Index Episode Start Date or 14 days on or after the Index Episode Start Date. Step 4: Identify the Index Prescription Date. Identify the earliest written prescription up to 30 days before the Index Episode Start Date to 14 days on or after the Index Episode Start Date. Prescriptions may be up to 30 days before the Index Episode Start Date to account for patients having a recurrent episode who may be started on medication based on a phone encounter while awaiting a scheduled office visit. Similarly, written		*(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
b. Effective Acute Phase Treatment *continued*			prescriptions may be 14 days on or after the Index Episode Start Date to account for either clinical discretion in recommending a 2-week trial of self-help techniques prior to starting on medication. Step 5: From the resulting patients from step 4, confirm the New Episode by testing for a negative medication history. Patients who have antidepressant prescriptions written during the negative medication history period do not represent new treatment episodes and must be excluded. Step 6: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 245 days after the Index Episode Start Date treatment period.		
c. Effective Continuation Phase Treatment	NCQA[2,4]	**Numerator c:** Effective continuation phase treatment (electronic): A 180-day treatment of antidepressant medication. Identify all patients in the denominator population who filled a sufficient number of separate prescriptions/refills of antidepressant medication treatment to provide continuous treatment for at least 180 days. The continuous treatment definition allows gaps in medication treatment up to a total of 51 days during the 180-day period. Allowable medication changes or gaps include: ■ "Washout" period gap to change medication ■ "Treatment" gaps to refill the same medication. Regardless of the number of gaps, the total gap days may be no more than 51 days. Any combination of gaps may be counted (e.g., two washout gaps, each 25 days or two washout gaps of 10 days	**Denominator for rates a, b, c** (electronic): Patients 18 years and older as of April 30 of the measurement year diagnosed with a New Episode of Major Depressive Disorder during the Intake Period and treated with antidepressant medication. Step 1: Identify all patients with a diagnosis of depression who during the 12-month Intake Period had: ■ At least one principal diagnosis of major depression in any setting *OR* ■ At least two secondary diagnoses of major depression on different dates of service in any outpatient setting *OR*	Risk adjustment is not applied; although the measure is collected for the specific age cohort 18 years and older. See numerators and denominators above for inclusions and exclusions. Definitions are as follows: Intake Period: The 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year. Used to capture New Episodes of treatment. Index Episode Start Date: The earliest episode during the Intake Period with a qualifying diagnosis of major depression. Index Prescription Date: The earliest prescription for antidepressants filled within a 44-day period, defined as 30 days prior to through 14 days on or after the Index Episode Start Date.	The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims or encounter data for mental health visits (inpatient and ambulatory), procedures, and pharmacy. The medical record option requires *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
c. Effective continuation phase treatment *continued*		each and one treatment gap of 10 days). Total gap days may not exceed 51 days. To determine continuity of treatment during the 180-day period, sum the number of allowed gap days to the number of treatment days for a maximum of 231 days (i.e., 180 treatment days + 51 gap days = 231 days); identify all prescriptions filled within the 231 days of the Index Prescription Date. Count treatment days from the Index Prescription Date and continue to count until a total of 180 treatment days has been established. Patients whose gap days exceed 51 or who do not have 180 treatment days within 231 days after the Index Prescription Date are not counted in the numerator. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator 3:** Effective continuation phase treatment (medical record). A 180-day treatment of antidepressant medication. Identify all patients in the denominator population who have sufficient documentation in their medical record of separate prescriptions/refills of antidepressant medication treatment to provide continuous treatment for at least 180 days.	■ At least one secondary diagnosis of major depression associated with any inpatient discharge. Codes to identify Major Depression: ICD-9 Codes: 296.2, 296.3, 298.0, 300.4, 309.1, 311; DRG Codes: 426.* Prior depressive episodes: ICD-9 Codes: 296.2-296.9, 298.0, 300.4, 309.0, 309.1, 309.28, 311; DRG Codes: 426* (*exclude patients with this code if the principal diagnosis is ICD-9-CM Code 301.12). Step 2: Determine the Index Episode Start Date and test for negative diagnosis history. For each patient identified in step 1, determine the Index Episode Start Date by finding the date of the patient's earliest encounter during the Intake Period with a qualifying major depression diagnosis. Identify patients who were diagnosed with a New Episode of depression. Patients with a New Episode of depression are those who have a negative diagnosis history. The range of ICD-9-CM Diagnosis Codes for prior depressive episodes listed is more comprehensive to exclude patients diagnosed with any type of depression. Patients with any diagnosis of depression within the previous 120 days (4 months) of the Index Episode Start Date should be dropped from this denominator. Step 3: Identify patients receiving antidepressant medication therapy. Among patients identified in step 2, find those who filled a prescription for an antidepressant medication within 30 days before the Index Episode Start Date or 14 days on or after the Index Episode Start Date.	Negative diagnosis history: A period of 120 days (4 months) on or before the Index Episode Start Date, during which time the patient had no claims/encounters containing either a principal or secondary diagnosis of depression. Negative medication history: A period of 90 days (3 months) prior to the Index Prescription Date, during which time the patient had no new or refill prescriptions for a listed antidepressant drug. New Episode: To qualify as a new episode, two criteria must be met: ■ A 120-day (4-month) negative diagnosis history on or before the Index Episode Start Date ■ A 90-day (3-month) negative medication history on or before the Index Prescription Date. Prescribing Practitioner: A practitioner with prescribing privileges. Treatment Days: The actual number of calendar days covered with prescriptions within the specified 180-day measurement interval.	manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
c. Effective continuation phase treatment *continued*		The continuous treatment definition allows gaps in medication treatment up to a total of 51 days during the 180-day period. Allowable medication changes or gaps include: ■ "Washout" period gap to change medication ■ "Treatment" gaps to refill the same medication. Regardless of the number of gaps, the total gap days may be no more than 51 days. Any combination of gaps may be counted (e.g., two washout gaps, each 25 days or two washout gaps of 10 days each and one treatment gap of 10 days). Total gap days may not exceed 51 days. To determine continuity of treatment during the 180-day period, sum the number of allowed gap days to the number of treatment days for a maximum of 231 days (i.e., 180 treatment days + 51 gap days = 231 days); identify all prescriptions filled within the 231 days of the Index Prescription Date. Count treatment days from the Index Prescription Date and continue to count until a total of 180 treatment days has been established. Patients whose gap days exceed 51 or who do not have 180 treatment days within 231 days after the Index Prescription Date are not counted in the numerator.	Step 4: Identify the Index Prescription Date. Identify the earliest prescription up to 30 days before the Index Episode Start Date to 14 days on or after the Index Episode Start Date. Prescriptions may be up to 30 days before the Index Episode Start Date to account for patients having a recurrent episode who may be started on medication based on a phone encounter while awaiting a scheduled office visit. Similarly, prescriptions may be 14 days on or after the Index Episode Start Date to account for either clinical discretion in recommending a 2-week trial of self-help techniques prior to starting on medication or for patient delay in filling the initial prescription. Step 5: From the resulting patients from step 4, confirm the New Episode by testing for a negative medication history. Patients who have antidepressant prescriptions filled during the negative medication history period do not represent new treatment episodes and must be excluded. Step 6: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 245 days after the Index Episode Start Date treatment period. Codes to identify mental health inpatient services: DRG Codes: 424-432 except discharges with ICD-9 principal diagnosis of 317-319; ICD-9 CM Codes: 290, 293-302, 306-316; Codes to identify chemical dependency inpatient services: DRG Codes: 433, 521-523; ICD-9 CM Codes: 291-292, 303-305, 960-979 with a secondary diagnosis of chemical dependency.		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
c. Effective continuation phase treatment *continued*			**Denominator for Numerators a, b, c** (medical record): A systematic sample of patients 18 years and older as of April 30th of the measurement year diagnosed with a New Episode of Major Depressive Disorder during the Intake Period and who were prescribed antidepressant medication. Step 1: Identify all patients with a diagnosis of depression who, during the 12-month Intake Period had: ■ At least one principal diagnosis of major depression in any setting *OR* ■ At least two secondary diagnoses of major depression on different dates of service in any outpatient setting *OR* ■ At least one secondary diagnosis of major depression associated with any inpatient discharge. Step 2: Determine the Index Episode Start Date and test for negative diagnosis history. For each patient identified in step 1, determine the Index Episode Start Date by finding the date of the patient's earliest encounter during the Intake Period with a qualifying major depression diagnosis. Identify patients who were diagnosed with a New Episode of depression. Patients with a New Episode of depression are those who have a negative diagnosis history. Patients with any diagnosis of depression within the previous 120 days (4 months) of the Index Episode Start Date should be dropped from this denominator.		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
c. Effective continuation phase treatment *continued*			Step 3: Identify patients prescribed antidepressant medication therapy. Among patients identified in step 2, find those who have a prescription for an antidepressant medication within 30 days before the Index Episode Start Date or 14 days on or after the Index Episode Start Date. Step 4: Identify the Index Prescription Date. Identify the earliest written prescription up to 30 days before the Index Episode Start Date to 14 days on or after the Index Episode Start Date. Prescriptions may be up to 30 days before the Index Episode Start Date to account for patients having a recurrent episode who may be started on medication based on a phone encounter while awaiting a scheduled office visit. Similarly, written prescriptions may be 14 days on or after the Index Episode Start Date to account for either clinical discretion in recommending a 2-week trial of self-help techniques prior to starting on medication. Step 5: From the resulting patients from step 4, confirm the New Episode by testing for a negative medication history. Patients who have antidepressant prescriptions written during the negative medication history period do not represent new treatment episodes and must be excluded. Step 6: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 245 days after the Index Episode Start Date treatment period.		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DIAGNOSIS OF ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) IN PRIMARY CARE FOR SCHOOL-AGE CHILDREN AND ADOLESCENTS	ICSI	Number of medical records of newly diagnosed attention deficit hyperactivity disorder (ADHD) patients with documentation of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) or Diagnostic and Statistical Manual for Primary Care (DSM-PC) criteria being addressed.* *Documented is defined as any evidence in the medical record that DSM-IV or DSM-PC criteria were addressed. DSM-IV or DSM-PC criteria include evaluation for: ■ Symptoms ■ Onset ■ Duration ■ Pervasiveness ■ Impairment. *Note:* The supporting ICSI clinical practice guideline provides a list of symptoms and specifies that six or more of the symptoms must be present for at least 6 months to a degree that is maladaptive and inconsistent with developmental level in order to qualify as ADHD.	Total number of medical records of newly diagnosed ADHD patients reviewed.* *ADHD is defined as International Classification of Diseases, 9th Revision (ICD-9) Codes of 314.00 or 314.01. Newly diagnosed is defined as documented ADHD in past 6 months and no documentation of ADHD Codes in the previous 6 to 12 months.	None.	Medical record (with administrative to identify denominator population).
MANAGEMENT OF ATTENTION DEFICIT HYPERACTIVITY DISORDER IN PRIMARY CARE FOR SCHOOL-AGE CHILDREN AND ADOLESCENTS	ICSI	Number of medical records of attention deficit hyperactivity disorder (ADHD) patients on first-line medication with documentation of a follow-up visit twice a year. *Documented is defined as any evidence in the medical record that a follow-up visit occurred in the past 12 months. A follow-up visit for ADHD includes documentation of the following twice a year: height, weight, a discussion of medication, a discussion of school progress, and a care plan should be identified.	Total number of ADHD patients on first-line medication whose medical records are reviewed. ADHD is defined as International Classification of Diseases, 9th Revision (ICD-9) Codes of 314.00 or 314.01. Diagnosed is defined as documented ADHD in the past 6 to 12 months. First-line medications include: methylphenidate (Ritalin), dextroamphetamine (Dexedrine), and atomoxetine (Strattera).	None.	Medical record (with administrative to identify denominator population).

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ATTENTION DEFICIT HYPERACTIVITY DISORDER: FOLLOW-UP CARE FOR CHILDREN PRESCRIBED ATTENTION DEFICIT/ HYPERACTIVITY MEDICATION (INITIATION AND CONTINUATION AND MAINTENANCE PHASES)	NCQA[2,4]	**Rate 1: Electronic Collection-Initiation Phase** Electronic Collection-Initiation Phase: Patients with at least one ambulatory setting follow-up visit with a practitioner with prescribing authority within 30 days after the Index Prescription Start Date. Use the codes below to identify the follow-up visit, this visit must be face-to-face with a practitioner. Do not count the Index Prescription Start Date visit as the initiation follow-up visit. Emergency room visits do not count toward the numerator. Codes to identify initiation follow-up visit: CPT Codes: 90801, 90802, 90804-90815, 90845, 90847, 90849, 90853, 90857, 90862, 90875, 90876, 96100, 96110, 96111, 96115, 96116, 96118, 96150-96154, 99078, 99201-99205, 99211-99215, 99241-99245, 99341-99350, 99354-99355, 99383-99384, 99393-99394, 99401-99404 HCPCS: G0155, G0176, G0177, H0002, H0004, H0031, H0034, H0036, H0037, H0039, H0040, H2000, H2010, H2011, H2013-H2020, M0064, S9484, S9485 UB-92 Revenue Codes: Psychiatric visit: 0510, 0513, 0515, 0517, 0519-0523, 0529, 0900, 0902, 0903, 0905, 0907, 0909, 0910, 0914-0916, 0918, 0919, 0961, 0982, 0983, 0988 - require UB-92 Type of Bill Code: 13X, 71X, 73X, 76X. **Rate 2: Medical Record Collection-Initiation Phase** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not	**Rate 1: Electronic Collection-Initiation Phase** Children 6-12 years of age with an ambulatory ADHD prescription dispensed. The following steps should be followed to identify the eligible population: Step 1: Identify all children 6 years of age as of March 1 of the year prior to the measurement year to 12 years as of February 28 of the measurement year who were dispensed an ADHD medication during the 12-month Intake Period. Use the ADHD medication list below to identify the medications to be included. Step 2: For each child identified in Step 1; test each ADHD prescription for a negative medication history. The Index Prescription Episode Start Date is the dispensing date of the earliest ADHD prescription in the Intake Period with a negative medication history. Step 3: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 30 days after the Index Prescription Start Date. ADHD medication list: ■ Methylphenidate—short-acting, intermediate-acting, extended release ■ Dextroamphetamine—short-acting, extended release ■ Mixed-salts amphetamine—short-acting, extended release ■ Dexmethylphenidate ■ Atomoxetine ■ Methamphetamine HCL	See numerator and denominator descriptions above. Patients diagnosed with narcolepsy (ICD-9-CM Code: 347) should be excluded from the denominators.	The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims or encounter data for visits, and pharmacy. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. Those practices *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ATTENTION DEFICIT HYPERACTIVITY DISORDER: FOLLOW-UP CARE FOR CHILDREN PRESCRIBED ATTENTION DEFICIT/ HYPERACTIVITY MEDICATION (INITIATION AND CONTINUATION AND MAINTENANCE PHASES) *continued*		dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Rate 2: Medical Record Collection-Initiation Phase:** Patients with documentation of at least one ambulatory setting follow-up visit with a practitioner with prescribing authority within 30 days after the Index Prescription Start Date. Do not count the Index Prescription Start Date visit as the initiation follow-up visit. Emergency room visits do not count toward the numerator. **Rate 3: Electronic Collection-Continuation and Maintenance (C&M) Phase** Electronic Collection-Continuation and Maintenance C&M Phase: Patients who were compliant for the Initiation Phase *AND* had at least two follow-up visits with a practitioner from 31 through 300 days after the Index Prescription Start Date. Use the codes below to identify follow-up visits; one of these visits may be conducted on the telephone with either a non-mental health or mental health practitioner. Do not count the Initiation Phase follow-up visit toward C&M follow-up visits. Emergency visits do not count toward the numerator. Codes to identify initiation follow-up visit: CPT Codes: 90801, 90802, 90804-90815, 90845, 90847, 90849, 90853, 90857, 90862, 90875, 90876, 96100, 96110, 96111, 96115, 96150-96154, 99078, 99201-99205, 99211-99215, 99241-99245, 99341-99350, 99354-99355, 99383-99384, 99393-99394, 99401-99404	A list of NDC Codes is available on NCQA's web site www.ncqa.org. **Rate 2: Medical Record Collection-Initiation Phase:** Children 6-12 years of age with an ambulatory ADHD prescription dispensed. The following steps should be followed to identify the eligible population: Step 1: Identify all children 6 years of age as of March 1 of the year prior to the measurement year to 12 years as of February 28 of the measurement year who were dispensed an ADHD medication during the 12-month Intake Period. Step 2: For each child identified in Step 1; test each ADHD prescription date in the Intake Period for a negative medication history. The Index Prescription Episode Start Date is the prescription date of the earliest ADHD prescription in the Intake Period with a negative medication history. Step 3: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 30 days after the Index Prescription Start Date. **Electronic Collection – C&M Phase:** Children 6-12 years of age who during the 12-month Intake Period had at least one dispensing event for an ADHD medication (drug list above). Follow the steps below to identify the eligible population for the C&M Phase. Step 1: Identify all patients who meet the eligible patient population criteria for the Initiation Phase rate.		that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ATTENTION DEFICIT HYPERACTIVITY DISORDER: FOLLOW-UP CARE FOR CHILDREN PRESCRIBED ATTENTION DEFICIT/ HYPERACTIVITY MEDICATION (INITIATION AND CONTINUATION AND MAINTENANCE PHASES) *continued*		UB-92 Revenue Codes: Psychiatric visit: 0510, 0513, 0515, 0517, 0519-0523, 0529, 0900, 0902, 0903, 0905, 0907, 0909, 0910, 0914-0916, 0918, 0919, 0961, 0982, 0983, 0988 - require UB-92 Type of Bill Code: 13X, 71X, 73X, 76X Telephone visits: 99371-99373. **Rate 4: Medical Record Collection-C&M Phase** Medical Record Collection: Continuation and Maintenance (C&M) Phase Patients who were compliant for the Initiation Phase *AND* had at least two follow-up visits with a practitioner from 31 through 300 days after the Index Prescription Start Date. One of these visits may be conducted on the telephone with either a non-mental health or mental health practitioner. Do not count the Initiation Phase follow-up visit toward C&M follow-up visits. Emergency visits do not count toward the numerator.	Step 2: For each patient identified in Step 1, the continuous medication treatment definition allows gaps in medication treatment up to a total of 90 days during the 300-day (10 month) period. This period spans the Initiation Phase (1 month) and the C&M Phase (9 months). Allowable medication changes or gaps include: ■ "Washout" period gaps to change medication ■ "Treatment" gaps to refill the same medication ■ "Drug holidays" from stimulant medication. Regardless of the number of gaps, the total gap may be no more than 90 days. Any combination of gaps may be counted (e.g., 1 washout gap of 14 days and numerous weekend drug holidays). Step 3: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 300 days after the Index Prescription Start Date. **Medical Record Collection-C&M Phase** Children 6 - 12 years of age who during the 12-month Intake Period had at least one dispensing event for an ADHD medication (drug list above). Follow the steps below to identify the eligible population for the C&M Phase. Step 1: Identify all patients who meet the eligible patient population criteria for the Initiation Phase rate. Step 2: For each patient identified in Step 1, the continuous medication treatment definition allows gaps in medication treatment up to a total of 90 days during the 300-day (10 month) period.		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ATTENTION DEFICIT HYPERACTIVITY DISORDER: FOLLOW-UP CARE FOR CHILDREN PRESCRIBED ATTENTION DEFICIT/ HYPERACTIVITY MEDICATION (INITIATION AND CONTINUATION AND MAINTENANCE PHASES) *continued*			This period spans the Initiation Phase (1 month) and the C&M Phase (9 months). Allowable medication changes or gaps include: ■ "Washout" period gaps to change medication ■ "Treatment" gaps to refill the same medication ■ "Drug holidays" from stimulant medication. Regardless of the number of gaps, the total gap may be no more than 90 days. Any combination of gaps may be counted (e.g., 1 washout gap of 14 days and numerous weekend drug holidays). Step 3: Exclude patients who had an acute mental health or substance abuse inpatient stay during the 300 days after the Index Prescription Start Date.		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BIPOLAR DISORDER AND MAJOR DEPRESSION: ASSESSMENT FOR MANIC OR HYPOMANIC BEHAVIORS	STABLE[10]	Documentation of an assessment that considers the presence or absence of current and/or prior symptoms or behaviors of mania or hypomania. Sources of documentation may include the following: ■ Documentation of presence or absence of the symptoms/behaviors associated with mania/hypomania (Reference List of Symptoms/Behaviors of Mania or Hypomania included in data collection form) *OR* ■ Use of a bipolar disorder screening or assessment tool: ● Clinical Global Impression - Bipolar ● MDQ: Mood Disorder Questionnaire ● BSDS: Bipolar Spectrum Diagnostic Scale ● YMRS: Young Mania Rating Scale ● BDSS: Brief Bipolar Disorder Symptom Scale ● Hypomanic Personality Scale ● Self Report Mania Inventory ● Altman Self Report Mania Scale ● Bech-Rafaelsen Mania Rating Scale	Patients 18 years of age or older with an initial diagnosis or new presentation/episode of depression *AND* Documentation of a diagnosis of depression; to include at least one of the following: ■ Codes 296.2X; 296.3X. 300.4 or 311 (ICD9CM or DSM-IV-TR) documented in body of chart, such as a pre-printed form completed by a clinician and/or codes documented in chart notes/forms. ■ Diagnosis or impression or "working diagnosis" documented in chart indicating depression. ■ Use of a screening/assessment tool for depression with a score or conclusion that patient is depressed and documentation that this information is used to establish or substantiate the diagnosis *AND* Documentation of treatment for depression; to include at least one of the following: Antidepressant pharmacotherapy (Reference List of Antidepressant Medications included in data collection form)	None. "New diagnosis" or a "new episode" is defined as cases where the patient has not been involved in active treatment for 6 months. Active treatment includes being hospitalized or under the outpatient care of a physician.	Measure was developed for and tested using medical chart review. *Note:* Measure denominator lends itself to administrative database identification through the use of patient age qualifiers and the codes specified in the denominator with the addition of pharmacy billing codes for antidepressant prescription therapy and/or psychotherapy. *(more)*

[10] The STABLE Project is a physician-led quality improvement initiative to develop evidence-based clinical performance measures for bipolar disorder. The STABLE Project owns the measures; however, the co-chairs and National Coordinatng Council members declared that all work products of the STABLE Project are NOT to be proprietary. The STABLE Project measures the development process to produce the measures, and any related resource tools are to be fully transparent and made available in the public domain. The STABLE Project has been provided with sponsoring funds from AstraZeneca; however, no representative of AstraZeneca has been present at or involved in any STABLE meeting, including any meetings involving co-chairs of the Project. AstraZeneca has had no involvement with or influence on the development, testing, or data analysis related to the STABLE Project. Likewise, the STABLE Project operates under an Agreement that the STABLE clinical performance measures will NOT be owned by AstraZeneca and will not be "branded" in any manner by AstraZeneca. The STABLE Project co-chairs, medical advisor, and members of the STABLE National Coordinating Council developed the measures. Technical assistance and project management services were provided by EPI-Q, Inc., a clinical consulting company. The STABLE Project co-chairs, medical advisor, and members of the STABLE National Coordinating Council will maintain the measures using a process to review the clinical literature, revisions, or new editions of relevant clinical guidelines, and any new medical breakthroughs (medical device, new technology, and/or pharmacology) that are supported by well-developed clinical trials. The review and maintenance process will be conducted as the former information becomes available or in a period not to exceed three years, whichever occurs first. Additionally, it is the goal of the STABLE Project co-chairs and STABLE NCC members to join with a permanent entity in maintaining the measures, providing that entity will contractually agree to maintain the measures as non-proprietary; non-branded; and scientific according to the objectives of the STABLE Project.

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BIPOLAR DISORDER AND MAJOR DEPRESSION: ASSESSMENT FOR MANIC OR HYPOMANIC BEHAVIORS *continued*		*OR* Other scale used and documented at site *AND* Timeframe for chart documentation of the assessment for mania/hypomania must be present prior to, or concurrent with, the visit where the treatment plan is documented as being initiated.	*AND/OR* Psychotherapy for depression; provided at practice site or through referral.		This will be considered in Phase II of continued development/ maintenance.
BIPOLAR DISORDER AND MAJOR DEPRESSION: APPRAISAL FOR ALCOHOL OR CHEMICAL SUBSTANCE USE	STABLE[10]	Documented assessment for use of alcohol and chemical substance use; to include at least one of the following: ■ Clinician documentation regarding presence or absence of alcohol and chemical substance use ■ Patient completed history/assessment form that addresses alcohol and chemical substance use that is documented as being acknowledged by clinician performing the assessment ■ Use of screening tools that address alcohol and chemical substance use *AND* Timeframe for chart documentation of the assessment for alcohol/chemical substance use must be present prior to, or concurrent with, the visit where the treatment plan is documented as being initiated.	Unipolar Depression Patients 18 years of age or older with an initial diagnosis or new presentation/episode of depression *AND* Documentation of a diagnosis of depression; to include at least one of the following: Codes 296.2X; 296.3X. 300.4 or 311 (ICD-9-CM or DSM-IV-TR) documented in body of chart, such as a pre-printed form completed by a clinician and/or codes documented in chart notes/forms such as a problem list *OR* Diagnosis or impression or working diagnosis documented in chart indicating depression *OR* Use of a screening/assessment tool for depression with a score or conclusion that patient is depressed and documentation that this information is used to establish or substantiate the diagnosis.	None. "New diagnosis" or a "new episode" is defined as cases where the patient has not been involved in active treatment for 6 months. Active treatment includes being hospitalized or under the outpatient care of a physician.	Measure was developed for and tested using medical chart review. *Note:* Measure denominator lends itself to administrative database identification through the use of patient age qualifiers and the codes specified in the denominator with the addition of pharmacy billing codes for relevant pharmacotherapy. *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BIPOLAR DISORDER AND MAJOR DEPRESSION: APPRAISAL FOR ALCOHOL OR CHEMICAL SUBSTANCE USE *continued*			Bipolar Disorder Patients 18 years of age or older with an initial or new episode of bipolar disorder *AND* Documentation of a diagnosis of bipolar disorder; to include at least one of the following: ■ Codes 296.0X; 296.1X; 296.4X; 296.5X; 296.6X; 296.7; 296.80; 296.81; 296.82; 296.89; 301.13 documented in body of chart, such as a pre-printed form completed by a clinician and/or codes documented in chart notes/forms *OR* ■ Diagnosis or impression or "working diagnosis" documented in chart indicating bipolar disorder *OR* ■ Use of a screening/assessment tool for bipolar disorder with a score or conclusion that patient has bipolar disorder and documentation that this information is used to establish or substantiate the diagnosis.		This will be considered in Phase II of continued development/ maintenance.
BIPOLAR DISORDER: APPRAISAL FOR RISK OF SUICIDE	STABLE[10]	Documentation of an assessment for risk of suicide; to include at least one of the following[11]: ■ Documented clinician evaluation of the presence or absence of suicidal ideation, intention or plans ■ Documented reference to comments the patient made that relate to the presence or absence of thoughts of suicide/death ■ Documented reference to use, or presence in the chart of, a screening tool or patient assessment	Patients 18 years of age or older with an initial or new episode of bipolar disorder *AND* Documentation of a diagnosis of bipolar disorder; to include at least one of the following: ■ ICD Codes 296.0X; 296.1X; 296.4X; 296.5X; 296.6X; 296.7; 296.80; 296.81; 296.82; 296.89; 301.13 documented in body of chart, such as	None. "New diagnosis" or a "new episode" is defined as cases where the patient has not been involved in active treatment for 6 months. Active treatment includes being hospitalized or under the outpatient care of a physician.	Measure was developed for and tested using medical chart review. *Note:* Measure denominator lends itself to administrative *(more)*

[11] During harmonization discussion, the measure developer noted that the intent of this measure is to conform to the American Psychiatric Association's guidelines for suicide risk assessment. Future iterations of the measure will include a reference to the American Psychiatric Association's guidelines.

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BIPOLAR DISORDER: APPRAISAL FOR RISK OF SUICIDE *continued*		form that addresses suicide (e.g., PHQ-9; Beck Hopelessness Scale; Beck Scale for Suicide) *AND* Timeframe for chart documentation of the assessment for risk of suicide must be present on the date of the initial assessment/evaluation visit.	a pre-printed form completed by a clinician and/or codes documented in chart notes/forms *OR* ■ Diagnosis or impression or "working diagnosis" documented in chart indicating bipolar disorder *OR* ■ Use of a screening/assessment tool for bipolar disorder with a score or conclusion that patient has bipolar disorder and documentation that this information is used to establish or substantiate the diagnosis.		database identification through the use of patient age qualifiers and the codes specified in the denominator with the addition of pharmacy billing codes for relevant pharmacotherapy. This will be considered in Phase II of continued development/ maintenance.
BIPOLAR DISORDER: LEVEL-OF-FUNCTION EVALUATION	STABLE[10]	Documentation of monitoring the patient's level-of-functioning in one of the following ways: ■ Patient self-report documented by clinician in record *OR* ■ Clinician documented review of patient-completed monitoring form/diary/tool *OR* ■ Documentation in patient chart of the use of ONE level-of-functioning monitoring tool. Examples are as follows: • SOFAS: Social and Occupational Functioning Assessment Scale	Patients 18 years of age or older with an initial or new episode of bipolar disorder *AND* Documentation of a diagnosis of bipolar disorder; to include at least one of the following: ■ ICD Codes 296.0X; 296.1X; 296.4X; 296.5X; 296.6X; 296.7; 296.80; 296.81; 296.82; 296.89; 301.13 documented in body of chart, such as a pre-printed form completed by a clinician and/or codes documented in chart notes/forms ■ Diagnosis or impression or "working diagnosis" documented in chart indicating bipolar disorder	None. "New diagnosis" or a "new episode" is defined as cases where the patient has not been involved in active treatment for 6 months. Active treatment includes being hospitalized or under the outpatient care of a physician.	Measure was developed for and tested using medical chart review. *Note:* Measure denominator lends itself to administrative database identification through the use of patient age

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BIPOLAR DISORDER: LEVEL-OF-FUNCTION EVALUATION *continued*		• GARF: Global Assessment of Relationship Functioning • GAF: Global Assessment of Functioning • WASA: Workload and Social Adjustment Assessment • PDS: Progressive Deterioration Scale (functional impairment; activities of daily living) • PHQ-9: Question 2 (How difficult has it been for you . . .) • SF 12 or SF 36 *AND* Timeframe for numerator chart documentation Documentation of assessment of level-of-functions at time of initial assessment and within 12 weeks of initiating treatment for bipolar disorder. *Note:* While the acute phase of treatment varies per individual, it is during this period that the clinician attempts to closely monitor the patient progress and has the opportunity to interact with the patient to assess level-of-functioning. This acute phase has been defined by the Project's content experts as having the possibility of lasting through the first 3 months of treatment/therapy; thus the 12-week period.	■ Use of a screening/assessment tool for bipolar disorder with a score or conclusion that patient has bipolar disorder and documentation that this information is used to establish or substantiate the diagnosis *AND* Documentation of treatment for bipolar disorder with pharmacotherapy, mood stabilizing agent, and/or an antipsychotic agent.		qualifiers and the codes specified in the denominator with the addition of pharmacy billing codes for relevant pharmacotherapy. This will be considered in Phase II of continued development/ maintenance.

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BIPOLAR DISORDER: ASSESSMENT FOR DIABETES	STABLE[10]	Assessment for diabetes must include documentation of one of the following: ■ Reference in chart that test was ordered and results or information about results was obtained *OR* ■ Lab results filed in chart or available in patient's electronic medical record Reference: Tests used to screen/assess for diabetes: Preferred: Fasting plasma glucose; non-fasting plasma glucose; glucose tolerance also accepted: glycosylated hemoglobin (Hb A1c; glycated hemoglobin) Random glucose *AND* Timeframe: Test results/information from test conducted within 16 weeks after the initiation of a second-generation atypical antipsychotic agent *OR* Measurement exclusion from compliance issues. Numerator criteria not applicable and exclusion from compliance as stated below: 1. Documentation by physician that test was not clinically indicated for this patient *OR* 2. Documentation that test was requested but patient failed to comply with request to obtain test.	**Denominator:** Patients 18 years of age or older with an initial or new episode of bipolar disorder *AND* Documentation of a diagnosis of bipolar disorder; to include at least one of the following: ■ Codes 296.0X; 296.1X; 296.4X; 296.5X; 296.6X; 296.7; 296.80; 296.81; 296.82; 296.89; 301.13 documented in body of chart, such as a pre-printed form completed by a clinician and/or codes documented in chart notes/forms *OR* ■ Diagnosis or impression or "working diagnosis" documented in chart indicating bipolar disorder *OR* ■ Use of a screening/assessment tool for bipolar disorder with a score or conclusion that patient has bipolar disorder and documentation that this information is used to establish or substantiate the diagnosis *AND* Documentation of treatment with an atypical antipsychotic agent. (See reference list below.) *Note:* It is not the intent to indicate preferred pharmacotherapy. The reference list is inclusive of those atypical antipsychotic medications that are reasonably construed to be appropriate in accordance with current guidelines. (Reference list of medications also included in data collection form.)	None. New diagnosis" or a "new episode" is defined as cases where the patient has not been involved in active treatment for 6 months. Active treatment includes being hospitalized or under the outpatient care of a physician.	Measure was developed for and tested using medical chart review. *Note:* Measure denominator lends itself to administrative database identification through the use of patient age qualifiers and the codes specified in the denominator with the addition of pharmacy billing codes for relevant pharmacotherapy. Measure numerator lends itself to administrative database identification for health plans where patient records indicating a billing code for the various types of diabetes tests may be identified. *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BIPOLAR DISORDER: ASSESSMENT FOR DIABETES *continued*			Atypical antipsychotic agents: ■ Aripiprazole ■ Quetiapine ■ Clozapine ■ Risperidone ■ Olanzapine ■ Ziprasidone ■ Olanzapine-fluoxetine (combination)		This will be considered in Phase II of continued development/ maintenance.
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **a. Initiation of Alcohol and Other Drug Dependence Treatment**	NCQA[2,4] WC	**METHOD 1: Electronic Data Collection** **a. Electronic Collection**-Initiation of AOD Dependence Treatment: Initiation of AOD treatment can occur: If the Index Episode was an inpatient discharge, the inpatient stay is considered initiation of treatment, or if the Index Episode was a detoxification, ED visit or outpatient visit, the patient must have a subsequent service within 14 days of the Index Episode Start Date to be considered initiated. ED and detoxification visits count only toward the denominator and should not be included as the initiation visit. Step 1: Identify all patients in the denominator population whose Index Episode Start Date was an inpatient discharge with a primary or secondary AOD diagnosis. This visit counts as the initiation event. Step 2: Identify all patients in the denominator whose Index Episode Start Date was an outpatient visit, detoxification visit or emergency department visit.	**a and b: Electronic Collection:** All patients who meet the following criteria and stratified by age group according to the age classifications below: ■ 13 years and older as of December 31 of the measurement year ■ Adolescent Age Band: 13-17 year-olds ■ Adult Age Bands: 18-25 years old, 26-24 years old, 35-64 years old, 65+ years old ■ Total. The following steps should be followed to identify the eligible population which is the denominator for this measure: Step 1: Identify all patients 13 years and older who: ■ Had an AOD outpatient claim/encounter or intermediate claim/encounter between January 1 and November 15 of the measurement year *OR* ■ Had a detoxification or ED visit between January 1 and November 15 of the measurement year	Adjustment variables: No risk adjustment is applied although the measure is stratified by age. The following definitions apply: Index Episode Start Date: either the discharge date of the earliest inpatient encounter or the service date of the earliest intermediate, emergence department (ED), or outpatient encounter between January 1 and November 15 of the measurement year with a qualifying diagnosis of AOD dependence. Intake Period: January 1 through November 15 of the measurement year. To ensure adequate opportunities for care to be initiated within 14 days of a new episode of care, and two subsequent visits occur within an additional 30 days after initiation (inclusive), the last 45 days of the measurement year are not included in the Intake Period. Negative diagnosis history: A period of 60 days prior to the Index Episode Start Date,	The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics and claims or encounter data for medical and chemical dependency visits. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **a. Initiation of Alcohol and Other Drug Dependence Treatment** *continued*		Step 3: Use the codes below to determine if the patients in step 2 had an additional outpatient visit or inpatient admission with any AOD diagnosis within 14 days of the Index Episode Start Date (inclusive). Step 4: Exclude from the denominator patients whose initiation service was an inpatient stay with a discharge date after December 1. **METHOD 2: Medical Record Collection** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on AOD encounters may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **a: Medical Record Collection:** Initiation of AOD dependence treatment: The number of patients with documentation that initiation of AOD treatment occurred through any of the following mechanisms. If the Index Episode was an inpatient discharge, the inpatient stay is considered initiation of treatment, or if the Index Episode was a detoxification, ED visit or outpatient visit, the patient must have a subsequent service within 14 days of the Index Episode Start Date to be considered initiated. ED and detoxification visits count only toward the denominator and should not be included as the initiation visit.	*OR* ■ Had an inpatient discharge between January 1 and November 15 of the measurement year. Outpatient visits: Use the following codes to identify intermediate and outpatient services with a principal or secondary diagnosis of AOD dependence: ■ CPT Codes: 90801, 90802, 90804-90815, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870-90871, 90875, 90876, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99420. ■ HCPCS: G0155, G1076, G0177, H0001, H0002, H0004-H0007, H0015, H0016, H0020, H0031, H0034-H0037H0039, H0040, H2000, H2001, H2010-H2020, H2035, H2036, M0064, S9480, S9484, S9485, T1006, T1012. ■ ICD-9-CM Codes: 291-292, 303.00-303.02, 303.90-303.92, 304.00-304.02, 304.10-304.12, 304.20-304.22, 304.30-304.32, 304.40-304.42, 304.50-304.52, 304.60-304.62, 304.70-304.72, 304.80-304.82, 304.90-304.92, 305.00-305.02, 305.20-305.22, 305.30-305.32, 305.40-305.42, 305.50-305.52, 305.60-305.62, 305.70-305.72, 305.80-305.82, 305.90-305.92, 535.3, 571.1. Detoxification and ED visits: Use the following codes to identify detoxification and ED visits with a principal or secondary diagnosis of AOD dependence. If the ED visit resulted in an inpatient stay, include the patient in the inpatient category.	during which the patient had no claims/encounters with any diagnosis of AOD dependence. If the Index Episode Start Date was an inpatient visit, use the admission date to determine the 60-day negative diagnosis history. New Episode: To quality as a New Episode, the following criterion must be met: a 60-day negative diagnosis history prior to the Index Episode Start Date. If the Index Episode Start Date was an inpatient visit, use the admission date to determine the 60-day negative diagnosis history. Inpatient facility code: The place of service or facility code, indicating that care was provided at an inpatient facility.	written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **a. Initiation of Alcohol and Other Drug Dependence Treatment** *continued*		Step 1: Identify all patients in the denominator population whose Index Episode Start Date was an inpatient discharge with a primary or secondary AOD diagnosis. This visit counts as the initiation event. Step 2: Identify all patients in the denominator whose Index Episode Start Date was an outpatient visit, detoxification visit or emergency department visit. Step 3: Determine if the patients in step 2 had an additional outpatient visit or inpatient admission with any AOD diagnosis within 14 days of the Index Episode Start Date (inclusive). To determine if the 14-day criterion is met for inpatient stays, use the admission date, not the discharge date. Step 4: Exclude from the denominator patients whose initiation service was an inpatient stay with a discharge date after December 1.	■ CPT Codes: 99281-99285 with an ICD-9-CM Code from above ■ HCPCS: H0008-H0014, S9475 with an ICD-9—CM Code from above ■ UB-92 Revenue Codes: 0450, 0451, 0452, 0459 with an ICD-9-CM Code from above ■ ICD-9 Procedure Codes: 94.62, 94.63, 94.65, 94.66, 94.68, 94.69 Inpatient services: Use the following codes to determine if inpatient services with a principal or secondary diagnosis of AOD dependence: ■ DRGs: 433, 521-523 ■ ICD-9-CM Principal Diagnosis Codes: 291-292, 303.00-303.02, 303.90-303.92, 304.00-304.02, 304.10-304.12, 304.20-304.22, 304.30-304.32, 304.40-304.42, 304.50-304.52, 304.60-304.62, 304.70-304.72, 304.80-304.82, 304.90-304.92, 305.00-305.02, 305.20-305.22, 305.30-305.32, 305.40-305.42, 305.50-305.52, 305.60-305.62, 305.70-305.72, 305.80-305.82, 305.90-305.92, 535.3, 571.1 with an inpatient facility code. Step 2: For each patient identified in step 1, determine the Index Episode Start Date by identifying the date of the patient's earliest encounter during the measurement year (e.g., outpatient, detoxification or ED visit date, inpatient discharge date) with any qualifying AOD dependence diagnosis (see ICD-9-CM Principal Diagnosis list above). Step 3: Determine if the Index Episode Start Date is a New Episode. Patients with a New Episode of		*(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **a. Initiation of Alcohol and Other Drug Dependence Treatment** *continued*			AOD dependence have a negative diagnosis history of 60 days without an AOD diagnosis. For patients with an inpatient visit, use the admission date to determine negative diagnosis history. **a and b: Medical Record Collection:** All patients with documentation of meeting the following criteria and stratified by age group according to the age classifications below: ■ 13 years and older as of December 31 of the measurement year ■ Adolescent Age Band: 13-17 year-olds ■ Adult Age Bands: 18-25 years old, 26-24 years old, 35-64 years old, 65+ years old ■ Total. The following steps should be followed to identify the eligible population which is the denominator for this measure: Step 1: Identify all patients 13 years and older who: ■ Had an outpatient claim/encounter or intermediate AOD claim/encounter between January 1 and November 15 of the measurement year *OR* ■ Had a detoxification or ED visit between January 1 and November 15 of the measurement year *OR* ■ Had an inpatient discharge between January 1 and November 15 of the measurement year.		

(more)

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **a. Initiation of Alcohol and Other Drug Dependence Treatment** *continued*			Step 2: For each patient identified in step 1, determine the Index Episode Start Date by identifying the date of the patient's earliest encounter during the measurement year (e.g., outpatient, detoxification or ED visit date, inpatient discharge date) with any qualifying AOD dependence diagnosis. Step 3: Determine if the Index Episode Start Date is a New Episode. Patients with a New Episode of AOD dependence have a negative diagnosis history of 60 days without an AOD diagnosis. For patients with an inpatient visit, use the admission date to determine negative diagnosis history.		
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **b. Engagement of Alcohol and Other Drug Dependence Treatment**	NCQA[2,4] WC	**b: Electronic Collection:** Engagement of AOD Treatment: Identify patients who had an initiation of AOD treatment visit and two or more services with AOD dependence diagnosis within 30 days after the date of the initiation visit (inclusive). Use the codes below to identify engagement treatment: For patients who initiated treatment via inpatient stay, 30 days starts at the patient's inpatient discharge date. To determine if the 30-day criterion is met for engagement inpatient stays, count days to the next outpatient service or the admission date of the subsequent inpatient stay, not the discharge date ED and detoxification visits count only toward the denominators and should not be included as an engagement visit.	**a and b: Electronic Collection:** All patients who meet the following criteria, and stratified by age group according to the age classifications below: ■ 13 years and older as of December 31 of the measurement year ■ Adolescent Age Band: 13-17 year-olds ■ Adult Age Bands: 18-25 years old, 26-24 years old, 35-64 years old, 65+ years old ■ Total. The following steps should be followed to identify the eligible population which is the denominator for this measure: Step 1: Identify all patients 13 years and older who: ■ Had an AOD outpatient claim/encounter or intermediate claim/encounter between January 1 and November 15 of the measurement year	Adjustment variables: No risk adjustment is applied although the measure is stratified by age. The following definitions apply: Index Episode Start Date: Either the discharge date of the earliest inpatient encounter or the service date of the earliest intermediate, emergence department (ED), or outpatient encounter between January 1 and November 15 of the measurement year with a qualifying diagnosis of AOD dependence. Intake Period: January 1 through November 15 of the measurement year. To ensure adequate opportunities for care to be initiated within 14 days of a new episode of care, and two subsequent visits occur within an additional 30 days after initiation (inclusive), the last 45 days of the measurement year are not included in the Intake Period.	The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics and claims or encounter data for medical and chemical dependency visits. The medical record option requires manual or electronically coded data for *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **b. Engagement of Alcohol and Other Drug Dependence Treatment** *continued*		**METHOD 2: Medical Record Collection** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on AOD encounters may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **b: Medical Record Collection:** Engagement of AOD Treatment: Identify patients who had documentation of an initiation of AOD treatment visit and two or more services with AOD dependence diagnosis within 30 days after the date of the initiation visit (inclusive). For patients who initiated treatment via inpatient stay, 30 days starts at the patient's inpatient discharge date. To determine if the 30-day criterion is met for engagement inpatient stays, count days to the next outpatient service or the admission date of the subsequent inpatient stay, not the discharge date ED and detoxification visits count only toward the denominator and should not be included as an engagement visit.	*OR* ■ Had a detoxification or ED visit between January 1 and November 15 of the measurement year *OR* ■ Had an inpatient discharge between January 1 and November 15 of the measurement year. Outpatient visits: Use the following codes to identify intermediate and outpatient services with a principal or secondary diagnosis of AOD dependence: ■ CPT Codes: 90801, 90802, 90804-90815, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870-90871, 90875, 90876, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99420 ■ HCPCS: G0155, G1076, G0177, H0001, H0002, H0004-H0007, H0015, H0016, H0020, H0031, H0034-H0037H0039, H0040, H2000, H2001, H2010-H2020, H2035, H2036, M0064, S9480, S9484, S9485, T1006, T1012 ■ ICD-9-CM Codes: 291-292, 303.00-303.02, 303.90-303.92, 304.00-304.02, 304.10-304.12, 304.20-304.22, 304.30-304.32, 304.40-304.42, 304.50-304.52, 304.60-304.62, 304.70-304.72, 304.80-304.82, 304.90-304.92, 305.00-305.02, 305.20-305.22, 305.30-305.32, 305.40-305.42, 305.50-305.52, 305.60-305.62, 305.70-305.72, 305.80-305.82, 305.90-305.92, 535.3, 571.1.	Negative diagnosis history: A period of 60 days prior to the Index Episode Start Date, during which the patient had no claims/encounters with any diagnosis of AOD dependence. If the Index Episode Start Date was an inpatient visit, use the admission date to determine the 60-day negative diagnosis history. New Episode: To quality as a New Episode, the following criterion must be met: a 60-day negative diagnosis history prior to the Index Episode Start Date. If the Index Episode Start Date was an inpatient visit, use the admission date to determine the 60-day negative diagnosis history. Inpatient facility code: The place of service or facility code, indicating that care was provided at an inpatient facility.	visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **b. Engagement of Alcohol and Other Drug Dependence Treatment** *continued*			Detoxification and ED visits: Use the following codes to identify detoxification and ED visits with a principal or secondary diagnosis of AOD dependence. If the ED visit resulted in an inpatient stay, include the patient in the inpatient category: ■ CPT Codes: 99281-99285 with an ICD-9-CM Code from above ■ HCPCS: H0008-H0014, S9475 with an ICD-9-CM Code from above ■ UB-92 Revenue Codes: 0450, 0451, 0452, 0459 with an ICD-9-CM Code from above ■ ICD-9 Procedure Codes: 94.62, 94.63, 94.65, 94.66, 94.68, 94.69. Inpatient services: Use the following codes to determine if inpatient services with a principal or secondary diagnosis of AOD dependence: ■ DRGs: 433, 521-523 ■ ICD-9-CM Principal Diagnosis Codes: 291-292, 303-304, 305.0, 305.2-305.9, 535.3, 571.1 with an inpatient facility code. Step 2: For each patient identified in step 1, determine the Index Episode Start Date by identifying the date of the patient's earliest encounter during the measurement year (e.g., outpatient, detoxification or ED visit date, inpatient discharge date) with any qualifying AOD dependence diagnosis (see ICD-9-CM Principal Diagnosis list above).		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **b. Engagement of Alcohol and Other Drug Dependence Treatment** *continued*			Step 3: Determine if the Index Episode Start Date is a New Episode. Patients with a New Episode of AOD dependence have a negative diagnosis history of 60 days without an AOD diagnosis. For patients with an inpatient visit, use the admission date to determine negative diagnosis history. **a and b: Medical Record Collection:** All patients with documentation of meeting the following criteria, and stratified by age group according to the age classifications below: ■ 13 years and older as of December 31 of the measurement year ■ Adolescent Age Band: 13–17 year-olds ■ Adult Age Bands: 18–25 years old, 26-24 years old, 35-64 years old, 65+ years old ■ Total. The following steps should be followed to identify the eligible population which is the denominator for this measure: Step 1: Identify all patients 13 years and older who: ■ Had an outpatient claim/encounter or intermediate AOD claim/encounter between January 1 and November 15 of the measurement year *OR* ■ Had a detoxification or ED visit between January 1 and November 15 of the measurement year		

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MENTAL HEALTH AND SUBSTANCE USE DISORDERS (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
INITIATION AND ENGAGEMENT OF ALCOHOL AND OTHER DRUG DEPENDENCE TREATMENT **b. Engagement of Alcohol and Other Drug Dependence Treatment** *continued*			*OR* ■ Had an inpatient discharge between January 1 and November 15 of the measurement year. Step 2: For each patient identified in step 1, determine the Index Episode Start Date by identifying the date of the patient's earliest encounter during the measurement year (e.g., outpatient, detoxification or ED visit date, inpatient discharge date) with any qualifying AOD dependence diagnosis. Step 3: Determine if the Index Episode Start Date is a New Episode. Patients with a New Episode of AOD dependence have a negative diagnosis history of 60 days without an AOD diagnosis. For patients with an inpatient visit, use the admission date to determine negative diagnosis history.		

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

OBESITY

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BODY MASS INDEX IN ADULTS >18 YEARS OF AGE	NYC-DHMH	Adults >18 years old with BMI documented in the past 24 months.	Total number of patients >18 years old seen in the measurement period.	None.	Medical record.
BODY MASS INDEX 2 THROUGH 18 YEARS OF AGE	NICHQ	Number of children 2 through 18 years of age who came in for a well child visit in the measurement period month and who were classified based on BMI percentile for age and gender.	Number of children 2 through 18 years of age, with a well child visit in the measurement period month.	None.	Medical record.

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

PRENATAL CARE

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
SCREENING FOR HUMAN IMMUNO-DEFICIENCY VIRUS (HIV)	AMA PCPI[2,3]	Patients who were screened for HIV infection during the first or second prenatal care visit. CPT HIV-1: 87390 CPT HIV-2: 87391, 87534-87539 LOINC Codes: 14092-1, 24012-7, 29893-5, 31201-7, 5221-7, 5222-5, 7917-8, 7918-6.	All patients who gave birth during a 12-month period, seen for continuing prenatal care. ICD-9 Codes for pregnancy: V22.0-V23.9.	Documentation of medical reason(s) for not screening for HIV during the first or second prenatal care visit (e.g., patient has known HIV). Documentation of patient reason(s) for not screening for HIV during the first or second prenatal care visit.	EHRS, retrospective paper medical records, prospective flowsheet, administrative claims data.* *CPT Category II Codes in development.
ANTI-D IMMUNE GLOBULIN	AMA PCPI[2,3]	Patients who received anti-D immunoglobulin at 26-30 weeks gestation. CPT Codes: 90384, 90385, 90386.	All patients who are D (Rh) negative and unsensitized who gave birth during a 12-month period, seen for continuing prenatal care. ICD-9 Codes for pregnancy: V22.0-V23.9.	Documentation of medical reason(s) for patient not receiving anti-D immune globulin at 26-30 weeks gestation. Documentation of patient reason(s) for patient not receiving anti-D immune globulin at 26-30 weeks gestation.	EHRS, retrospective paper medical records, prospective flowsheet, administrative claims data.* *CPT Category II Codes in development.
BLOOD GROUPS (ABO), D (RH) TYPE	AMA PCPI[2,3]	Patients whose blood group (ABO) and D (Rh) type have been determined by the second prenatal care visit. CPT ABO: 86900 CPT Rh (D): 86901 LOINC Code: 34530-6 *OR* Physician documentation of prior laboratory results of blood group (ABO) and D (Rh) type.	All patients who gave birth during a 12-month period, seen for continuing prenatal care. ICD-9 Codes for pregnancy: V22.0-V23.9.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative claims data.* *CPT Category II Codes in development.

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

PRENATAL CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BLOOD GROUP ANTIBODY TESTING	AMA PCPI[2,3]	Patients who received blood group screening during the first or second prenatal care visit. CPT Codes: 86850 LOINC Code: 890-4.	All patients who gave birth during a 12-month period, seen for continuing prenatal care. ICD-9 Codes for pregnancy: V22.0-V23.9.	None.	EHRS, retrospective paper medical records, prospective flowsheet, administrative claims data.* *CPT Category II Codes in development.

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PREVENTION, IMMUNIZATION, AND SCREENING - TOBACCO USE

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
MEASURE PAIR: **a. Tobacco use prevention for infants, children, and adolescents**	ICSI	Number of patients' charts audited whose current tobacco status is documented in the medical record.	Total number of patients' charts audited.	Inclusions: Total number of patient charts audited. Exclusions: None. The measures applies to all patients visiting the practice, regardless of age, who have any indication on their charts that they are or may be users of tobacco, or in the case of children that they are regularly exposed to tobacco smoke.	Medical record.
b. Tobacco use cessation for infants, children, and adolescents	ICSI	Number of tobacco users advised to quit or whose readiness to quit was assessed at the latest visit.	Total number of tobacco users audited.	Inclusions: Total number of patient charts audited. Exclusions: None. The measure applies to all patients visiting the practice, regardless of age, who have any indication on their charts that they are or may be users of tobacco, or in the case of children that they are regularly exposed to tobacco smoke.	Medical record.

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PREVENTION, IMMUNIZATION, AND SCREENING - TOBACCO USE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
SMOKING CESSATION: MEDICAL ASSISTANCE **a. Advising smokers to quit** **b. Discussing smoking cessation medications** **c. Discussing smoking cessation strategies**	NCQA[2,4]	**Numerator a:** Advising smokers to quit: The number of patients in the denominator who responded to the survey and indicated that they had received advice to quit smoking from a doctor or other health provider during the measurement year. Patient choices must be as follows to be included in the numerator: Q: In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health care provider? A: "1 visit" or "2-4 visits" or "5-9 visits" or "10 or **more** visits" must be chosen from the options of "None" or "1 visit" or "2-4 visits" or "5-9 visits" or "10 or **more** visits" or "I had no visits in the last 12 months." **Numerator b:** Discussing smoking cessation medications: The number of patients in the denominator who responded to the survey and indicated that their doctor or other health provider recommended or discussed medications to assist with quitting smoking during the measurement year. Patient choices must be as follows to be included in the numerator: Q: On how many visits was medication recommended or discussed to assist you with quitting smoking (e.g., nicotine gum, patch, nasal spray, inhaler, prescription medicine)? A: "1 visit" or "2-4 visits" or "5-9 visits" or "10 or **more** visits" must be chosen from the options of "None" or "1 visit" or "2-4 visits" or "5-9 visits" or	**Denominator:** The number of patients 18 and older who responded to the survey and indicated that they were current smokers and had one or more visits during the measurement year. Patient choices must be as follows to be included in the denominator: Q: Do you now smoke cigarettes every day, some days, or not at all? A: "Every day" or "Some days" must be chosen from the options of "Every day," "Some days," "Not at all," or "Don't know." Q: In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health professional? A: "1 visit" or "2-4 visits" or "5-9 visits" or "10 or **more** visits" must be chosen from the options of "None" or "1 visit" or "2-4 visits" or "5-9 visits" or "10 or **more** visits."	Exclusions: Patients who responded "I had no visits in the last 12 months" and who smoke cigarettes "not at all" are excluded.	Patient survey.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - TOBACCO USE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
SMOKING CESSATION: MEDICAL ASSISTANCE **a. Advising smokers to quit** **b. Discussing smoking cessation medications** **c. Discussing smoking cessation strategies** *continued*		"10 or **more** visits" or "I had no visits in the last 12 months." **Numerator c:** Discussing smoking cessation strategies: The number of patients in the denominator who responded to the survey and indicated that their doctor or health care provider recommended or discussed methods and strategies other than medication to assist with quitting smoking during the measurement year. Patient choices must be as follows to be included in the numerator: Q: On how many visits did your doctor or health provider discuss methods and strategies (other than medication) to assist you with quitting smoking? A: "1 visit" or "2-4 visits" or "5-9 visits" or "10 or **more** visits" must be chosen from the options of "None" or "1 visit" or "2-4 visits" or "5-9 visits" or "10 or **more** visits" or "I had no visits in the last 12 months."			

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Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

PREVENTION, IMMUNIZATION, AND SCREENING - TOBACCO USE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
MEASURE PAIR: **a. Tobacco use assessment**	AMA PCPI[2,3]	Patients who were queried about tobacco use one or more times *OR* CPT II Codes: 1000F Tobacco use assessed *OR* report one of the following codes: 1034F Current tobacco smoker 1035F Current smokeless tobacco user (e.g., chew, snuff) 1036F Current tobacco non-user.	All patients ≥18 years of age at the beginning of the two-year measurement period. Patient selection: CPT Codes for patient visits: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* Patient's age is ≥18 years.	None.	Electronic health record system (EHRS), administrative data using CPT II Codes, paper medical record, prospective flowsheet.
b. Tobacco cessation intervention	AMA-PCPI[2,3]	Patients identified as tobacco users who received cessation intervention. Cessation intervention may include smoking cessation counseling (e.g., advise to quit, referral for counseling) and/or pharmacologic therapy. CPT II Codes: 4000F: Tobacco use cessation intervention, counseling; *OR* 4001F: Tobacco use cessation intervention, pharmacologic therapy.	All patients ≥18 years of age identified as tobacco users at the beginning of the two-year measurement period. Patient selection: CPT Codes for patient visits: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99385-99387, 99395-99397, 99401-99404 *AND* ICD-9-CM Codes for tobacco user: 305.1 *OR* CPT II Codes: 1034F Current tobacco smoker; 1035F Current smokeless tobacco use (e.g., chew, snuff); 1036F Current tobacco non-user *OR* Individual medical record review must be completed to identify those patients who are tobacco users *AND* Patient's age is ≥18 years.	None.	Electronic health record system (EHRS), administrative data using CPT II Codes, paper medical record, prospective flowsheet.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - GENERAL PREVENTION

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
PHYSICAL ACTIVITY IN OLDER ADULTS **a. Discussing physical activity** **b. Advising physical activity**	NCQA[2,4]	Survey Questions: ■ In the last 12 months, did you talk with a doctor or other health provider about your level of exercise or physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise. • Yes, Go to next Question • No, Go to next Question • I had no visits in the last 12 months, Go to Question X. ■ In the last 12 months, did a doctor or other health provider advise you to start, increase, or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day, or to maintain your current exercise program: Yes/No **Numerator a:** Discussing physical activity: The number of patients in the denominator who responded "yes" to the question, "In the last 12 months, did you talk with a doctor or other health provider about your level of exercise or physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise."	**Denominator a:** Discussing physical activity: The number of patients 65 years and older as of December 31 of the measurement year who responded "yes" or "no" to the question "In the last 12 months, did you talk with a doctor or other health provider about your level of exercise or physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise." **Denominator b:** Advising physical activity: The number of patients 65 years and older as of December 31 of the measurement year who responded "yes" or "no" to the question, "In the last 12 months, did a doctor or other health provider advise you to start, increase or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day or to maintain your current exercise program."	None. There are very few people for whom exercise and physical activity are contraindicated (for example, people with symptomatic aortic stenosis may be advised against strenuous physical activity[12]; aortic stenosis affects about 3% to 5% of the elderly over 75; only half are symptomatic). The National Center for Physical Activity and Disability also recommends that people with disabilities exercise, since they are less active, and has developed a guide[13] advising disabled people to talk to a doctor before starting an exercise program and to discuss any possible effects of medications on exercising. Therefore this measure is also relevant to patients with disabilities. Exclusions may be considered in provider level settings who care exclusively for patients with severe limitations in activities of daily living. It is expected that only a very small percentage of community-dwelling respondents for whom questions on exercise and physical activity may potentially be less relevant, due to serious limitations and difficulty in being able to conduct activities of daily living (e.g., bathing, dressing, eating, getting in and out of chairs, walking, using the toilet) or other severe disabilities. National statistics[14] suggest that the	Patient survey.

(more)

[12] Otto CM, Lind BK, Kitzm, DW, et al., for the Cardiovascular Health Study, Association of aortic valve sclerosis with cardiovascular mortality and morbidity in the elderly, *N Engl J Med,* 1999;341:142-147.

[13] National Center of Physical Activity and Disability, General Exercise Guidelines. Available at www.ncpad.org/exercise/fact_sheet.php?sheet=15. Last accessed August 2006.

[14] Centers for Disease Control and Prevention, *Functional Limitation by Sex, Race – 1983–1996 [10-year age groups],* National Health Interview Survey.

PREVENTION, IMMUNIZATION, AND SCREENING - GENERAL PREVENTION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
PHYSICAL ACTIVITY IN OLDER ADULTS **a. Discussing physical activity** **b. Advising physical activity** *continued*		**Numerator b:** Advising physical activity: The number of patients in the denominator who responded "yes" to the question, "In the last 12 months, did a doctor or other health provider advise you to start, increase or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day or to maintain your current exercise program."		majority of the elderly (83%) have no limitations, and only 6% indicate they need help with activities of daily living.	
URINARY INCONTINENCE MANAGEMENT IN OLDER ADULTS **a. Discussing urinary incontinence** **b. Receiving urinary incontinence treatment**	NCQA[2,4]	**Numerator a:** Discussing urinary incontinence: The number of patients in denominator a who indicated they discussed their urine leakage problem with their current provider. Patient choices must be as follows to be included in the numerator: Q: "In the last six months, have you talked with your current doctor or other health care provider about your urine leakage problem?" A: "Yes" must be chosen from the options of: "Yes" or "No" or "I did not see a doctor or health provider in the last six months." **Numerator b:** Receiving urinary incontinence Treatment: The number of patients in denominator b who indicated they received treatment for their current urine leakage problem. Member choices must be as follows to be included in the numerator:	**Denominator a:** Discussing Urinary Incontinence: The number of patients 65 years and older who responded to the survey indicating they had a urine leakage problem in the last 6 months. Patient choices must be as follows to be included in the numerator: Q: "Many people experience problems with urinary incontinence, the leakage of urine. In the last six months, have you accidentally leaked urine?" A: "Yes" must be chosen from the options of: "Yes" or "No." Q: "How much of a problem, if any, was the urine leakage for you?" A: "A big problem" or "A small problem" must be chosen from the options of: "A big problem" or "A small problem" or "Not a problem." **Denominator b:** Receiving urinary incontinence treatment: The number of patients 65 years and older who responded to the survey indicating they had a urine leakage problem in the last 6 months	Exclusions: Patients who did not have a doctor's visit in the last year or who reported they did not have a problem with UI, are excluded.	Patient survey.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - GENERAL PREVENTION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
URINARY INCONTINENCE MANAGEMENT IN OLDER ADULTS **a. Discussing urinary incontinence** **b. Receiving urinary incontinence treatment** *continued*		Q: "There are many ways to treat urinary incontinence including bladder training, exercises, medication, and surgery. Have you received these or any other treatments for your current urine leakage problem?" A: "Yes" must be chosen from the options of: "Yes" or "No."	and discussed their urine leakage problem with their current provider. Member choices must be as follows to be included in the numerator: Q: "Many people experience problems with urinary incontinence, the leakage of urine. In the last six months, have you accidentally leaked urine?" A: "Yes" must be chosen from the options of: "Yes" or "No." Q: "How much of a problem, if any, was the urine leakage for you?" A: "A big problem" or "A small problem" must be chosen from the options of: "A big problem" or "A small problem" or "Not a problem." Q: "In the last six months, have you talked with your doctor or other health provider about your current urine leakage problem?" A: "Yes" must be chosen from the options of: "Yes" or "No" or "I did not see a doctor or health provider in the last six months."		

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
BREAST CANCER SCREENING	NCQA[2,4]	**Electronic Collection:** One or more mammograms during the measurement year or the year prior to the measurement year. (CPT Codes: 76083, 76090-76092; ICD-9-CM Codes 87.36, 87.37; V-Codes: V76.11, V76.12; UB-92 Codes: 0403; HCPCS G0202) **Medical Record Collection**: Numerator: One or more mammograms during the measurement year or the year prior to the measurement year. Documentation in the medical record must include both of the following: a note indicating the date the mammogram was performed and the result or finding. Electronic Health Record (EHR) users may opt to use record-based methodology or the electronic data collection methodology described above. EHR users may opt to follow the medical record specifications but produce data on 100% of their denominator population instead of a sample.	**Electronic Collection:** Women 42-69 years as of December 31 of the measurement year. Report two age stratifications and an overall rate: ■ 42-51 ■ 52-69 ■ Total. *Note:* Given the measurement look-back period, women 40-69 will be captured in this measure. **Medical Record Collection:** Women 42-69 years as of December 31 of the measurement year. Report two age stratifications and an overall rate: ■ 42-51 ■ 52-69 ■ Total. *Note:* Given the measurement look-back period, women 40-69 will be captured in this measure. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.	Exclusions: Exclude women who had a bilateral mastectomy and for whom administrative data does not indicate that a mammogram was performed. Look for evidence of bilateral mastectomy as far back as possible in the patient's history, through either administrative data or medical record review (exclusionary evidence in the medical record must include a note indicating a bilateral mastectomy). If there is evidence of two separate mastectomies, this patient may be excluded from the measure. The bilateral mastectomy must have occurred by December 31 of the measurement year. Codes to identify exclusions for breast cancer screening: (for Bilateral: ICD-9-CM Codes: 85.42, 85.44, 85.46, 85.48; CPT Codes: 19180.50 or 19180 w/modifier 09950*, 19200.50 or 19200 w/modifier code 09950*, 19220.50 or 19220 w/modifier 09950,* 19240.50 or 19240 w/ modifier 09950*). (For Unilateral codes (need two separate occurrences on two different dates of service): ICD-9-CM Codes: 85.41, 85.43, 85.45, 85.47; CPT Codes 19180, 19200, 19220, 19240). *.50 and 09950 modifier codes indicate the procedure was bilateral and performed during the same operative session.	Electronic data (i.e., claims or encounter data for visits, diagnoses and procedures) or medical record review.

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care—Part 1 (continued)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CERVICAL CANCER SCREENING	NCQA[2,4]	**Electronic Collection:** One or more Pap tests during the measurement year or the two years prior to the measurement year. A woman had a Pap test if a submitted claim/encounter contains any one of the following codes: CPT: 88141-88145, 88147, 88148, 88150, 88152-88155, 88164-88167, 88174-88175; LOINC: 10524-7, 18500-9, 19762-4, 19764-0, 19765-7, 19766-5, 19774-9, 33717-0; ICD-9-CM 91.46; V Codes: V72.32, V76.2; UB-92: 0923; HCPCS: G0101, G0123, G0124, G0141, G0143-G0145, G0147, G0148, P3000, P3001, Q0091. **Medical Record Collection:** Numerator: One or more Pap tests during the measurement year or the two years prior to the measurement year. Documentation in the medical record must include both of the following:· ■ A note indicating the date the test was performed ■ The result or finding.	**Electronic Collection:** Women 24–64 years of age during the measurement year. *Note:* Given the measurement look-back period, women 21-64 will be captured in this measure. **Medical Record Collection:** Denominator: A systematic sample of women 24–64 years during the measurement year. *Note:* Given the measurement look-back period, women 21-64 will be captured in this measure. Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective, or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.	Women who had a hysterectomy and who have no residual cervix and for whom the data do not indicate that a Pap test was performed. Look for evidence of a hysterectomy as far back as possible in the patient's history, through either administrative data or medical record review (exclusionary evidence in the medical record must include a note indicating a hysterectomy with no residual cervix. Documentation of "complete hysterectomy," "total hysterectomy," "total abdominal hysterectomy," or "radical hysterectomy" meets the criteria for hysterectomy with no residual cervix. Documentation of "hysterectomy" alone does not meet the criteria because it does not indicate the cervix has been removed). The hysterectomy must have occurred by December 31 of the measurement year. Use any of the following codes or descriptions of codes in the medical record, listed below to identify allowable exclusions: Surgical codes for hysterectomy: CPT: 51925, 56308, 58150, 58152, 58200, 58210, 58240, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290-58294, 58550, 58551, 58552-58554, 58951, 58953-58954, 58956, 59135; ICD-9-CM: 68.4-68.8, 618.5; V Codes: V67.01, V76.47.	Electronic data (i.e., claims or encounter data for visits, diagnoses laboratory and procedures) or medical record review.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHLAMYDIA SCREENING IN WOMEN	NCQA[2,4]	**Electronic Collection:** At least one Chlamydia test during the measurement year as documented through administrative data. A woman is considered as having a test if she had a claim/encounter with a service date during the measurement year with one or more of the following codes to identify Chlamydia screening: CPT: 87110, 87270, 87320, 87490, 87491, 87492, 87810 LOINC: Chlamydia trachomatis tests: 4993-2, 6349-5, 6354-5, 6355-2, 6356-0, 6357-8, 14470-9, 14471-7, 14463-4, 14464-2, 14467-5, 14474-1, 14509-4, 14510-2, 14513-6, 16600-9, 16601-7, 16602-5, 20993-2, 21189-6, 21190-4, 21191-2, 21192-0, 21613-5, 23838-6, 31771-9, 31772-7, 31775-0, 31777-6. LOINC: 42931-6, 6349-5, 43406 Chlamydia species tests: 557-9, 560-3; LOINC: Chlamydia tracomatis and Neiserria gonorrhoeae tests: 36902-5, 36903-3. **Medical Record Collection**: Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. Documentation in the medical record of at least one Chlamydia test during the measurement year. A woman is considered as having a test if there is documentation of a Chlamydia	**Electronic Collection:** Women 16-25 years of age (reported in stratifications of 16-20, 21-25 and overall) as of December 31 of the measurement year who are sexually active. Two methods are provided to identify sexually active women: pharmacy data and claims/encounter data. Use both methods to identify the eligible population, although a patient must appear in only one method to be eligible for the measure. ■ Pharmacy data: Patients dispensed prescription contraceptives (oral contraceptives, IUD, diaphragm or other prescribed contraceptive) during the measurement year ■ Claims/encounter data: Patients who had at least one encounter during the measurement year with any of the diagnosis or procedure codes listed below: CPT Codes: 11975-11977, 57022, 57170, 58300, 58301, 58600, 58605, 58611, 58615, 58970, 58974, 58976, 59000, 59001, 59012, 59015, 59020, 59025, 59030, 59050, 59051, 59070, 59072, 59074, 59076, 59100, 59120, 59121, 59130, 59135, 59136, 59140, 59150, 59151, 59160, 59200, 59300, 59320, 59325, 59350, 59400, 59409, 59410, 59412, 59414, 59425, 59426, 59430, 59510, 59514, 59515, 59525, 59610, 59612, 59614, 59618, 59620, 59622, 59812, 59820, 59821, 59830, 59840, 59841, 59850-59852, 59855-59857, 59866, 59870, 59871, 59897, 59898, 59899, 76801, 76802, 76805, 76810-76812, 76815-76821, 76825-76828, 76941, 76945-76946, 80055, 81025, 82105, 82106, 82143, 82731, 83632, 83661-83664,	Exclusions: Patients should be excluded who had a pregnancy test during the measurement year followed within seven days (inclusive) by either a prescription for Accutane (isotretinion) or an x-ray. This exclusion does not apply to patients who qualify for the denominator based on services other than the pregnancy test alone. The following codes and descriptions of codes are provided to identify these services: Pregnancy test CPT: 81025, 84702, 84703 LOINC: 2106-3, 2107-1, 2110-5, 2111-3, 2112-1, 2113-9, 2114-7, 2115-4, 2118-8, 2119-6, 19080-1, 19180-9, 20415-6, 20994-0, 21198-7, 25372-4, 25373-2, 34670-0 UB-92: 0925 AND ONE OF THE FOLLOWING Diagnostic Radiology: CPT: 70010-76499; UB-92: 032X *OR* Prescription for Accutane (isotretinion).	Electronic data (i.e., claims or encounter data for visits, diagnoses, laboratory, pharmacy, and procedures) or medical record review.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHLAMYDIA SCREENING IN WOMEN *continued*		trachomatis or species test with a service date during the measurement year. Documentation in the medical record must include both of the following: ■ A note indicating the date Chlamydia test was performed *AND* ■ The result or finding.	84163, 84702-84703, 86592-86593, 86631-86632, 87110, 87164, 87166, 87270, 87320, 87490-87492, 87590-87592, 87620-87622, 87800, 87801, 87810, 87850, 88141-88143, 88147, 88148, 88150, 88152-88155, 88164-88167, 88174-88175, 88235, 88267, 88269 LOINC Codes: 42316-0, 42481-2, 42931-6, 43406-8 Pregnancy tests: 2106-3, 2107-1, 2110-5, 2111-3, 2112-1, 2113-9, 2114-7, 2115-4, 2118-8, 2119-6, 19080-1, 19180-9, 20415-6, 20994-0, 21198-7, 25372-4, 25373-2, 34670-0 Alpha-fetoprotein tests: 1832-5, 1834-1, 15019-3, 19171-8, 19176-7, 19177-5, 31993-9 Fibrinonectin tests: 20403-2, 20404-0 Syphilis tests: 660-1, 5291-0, 5292-8, 5392-6, 5393-4, 5394-2, 6561-5, 6562-3, 8041-6, 11084-1, 11597-2, 17723-8, 17724-6, 17725-3, 17726-1, 17727-9, 17728-7, 17729-5, 20507-0, 20508-8, 22461-8, 22462-6, 22587-0, 22590-4, 22592-0, 22594-6, 24110-9, 24312-1, 26009-1, 31147-2, 34382-2 Chlamydia trachomatis tests: 4993-2, 6349-5, 6354-5, 6355-2, 6356-0, 6357-8, 14470-9, 14471-7, 14463-4, 14464-2, 14467-5, 14474-1, 14509-4, 14510-2, 14513-6, 16600-9, 16601-7, 16602-5, 20993-2, 21189-6, 21190-4, 21191-2, 21192-0, 21613-5, 23838-6, 31771-9, 31772-7, 31775-0, 31777-6 Chlamydia species tests: 557-9, 560-3, Neiserria gonorrhoeae tests: 688-2, 690-8, 691-6, 692-4, 693-2, 698-1, 5028-6, 6487-3, 6488-1, 6489-9,		

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHLAMYDIA SCREENING IN WOMEN *continued*			21414-8, 21415-5, 21416-3, 23908-7, 24111-7, 29311-8, 31905-3, 31906-1, 32198-4, 32199-2, 32705-6 Chlamydia trachmatis and Neiserria gonorrhoeae tests: 36902-5, 36903-3 HPV tests: 6510-2, 6511-0, 6514-4, 6516-9, 7975-6, 10705-2, 11083-3, 11481-9, 12222-6, 12223-4, 14499-8, 14500-3, 14502-9, 14503-7, 14504-5, 14506-0, 16280-0, 17398-9, 17399-7, 17400-3, 17401-1, 17402-9, 17403-7, 17404-5, 17405-2, 17406-0, 17407-8, 17408-6, 17409-4, 17410-2, 17411-0, 17412-8, 21440-3, 21441-1, 30167-1, 38372-9 Pap tests: 10524-7, 18500-9, 19762-4, 19764-0, 19765-7, 19766-5, 19774-9, 33717-0 Amniotic fluid cytogenetics tests: 33773-3, 34493-7, 34656-9, 34718-7, 35457-1 Obstetric panel: 24364-2 ICD-9 Codes: 69.01, 69.51, 69.52, 69.7, 97.24, 97.91, 97.7372-75, 042, 054.10, 054.11, 054.12, 054.19, 078.1, 078.88, 079.4, 079.51-079.53, 079.88, 079.98, 091.0-098.0, 098.10, 098.11, 098.15-098.19, 098.2, 098.30, 098.31, 098.35-098.39, 098.4-099.9, 131, 614-616, 622.3, 623.4, 626.7, 628, 630-677, 795.0, 996.32 V Codes: V01.6, V02.7, V02.8, V08, V15.7V22-V28, V45.5, V61.5, V61.6, V61.7, V72.3, V72.4, V74.5, V73.88, V73.98, V76.2 UB92 Revenue Codes: 0112, 0122, 0132, 0142, 0152, 0720-22, 0724, 0729, 923, 925		

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHLAMYDIA SCREENING IN WOMEN *continued*			HCPCS: G0101, G0122, G0124, G0141, G0143-0145, G0147, G0148, H1000, H1003-1005, P3000, P3001, Q0091, S0199, S4981, S8055. **Medical Record Collection:** EHR users may opt to use this methodology or the electronic data collection methodology described above. EHR users who have information on drugs prescribed and not dispensed may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Denominator:** A systematic sample of women 16-25 years of age (reported in stratifications of 16-20, 21-25 and overall) as of December 31 of the measurement year who are sexually active. Two methods are provided to identify sexually active women: prescriptions and diagnoses. Use both methods to identify the eligible population, although a patient must appear in only one method to be eligible for the measure. ■ Prescriptions: Documentation of patients prescribed contraceptives (oral contraceptives, IUD, diaphragm or other prescribed contraceptive) during the measurement year ■ Diagnoses: Documentation of patients who had at least one encounter during the measurement year with any of the diagnoses or procedures listed below: ● Pregnancy tests, alpha-fetoprotein tests, Fibrinonectin tests, syphilis tests, Chlamydia trachomatis test, Chlamydia species tests, Neiserria gonorrhoeae tests, Chlamydia		

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHLAMYDIA SCREENING IN WOMEN *continued*			trachomatis and Neiserria gonorrhoeae tests, HPV tests, Pap tests, amniotic fluid cytogenetics tests, obstetric panel. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.		
COLORECTAL CANCER SCREENING	NCQA[2,4]	**Electronic Collection:** One or more screenings for colorectal cancer. Appropriate screenings are defined by any one of the four criteria below: ■ Fecal occult blood test (FOBT) during the measurement year ■ Flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year ■ Double contrast barium enema (DCBE) during the measurement year or the four years prior to the measurement year ■ Colonoscopy during the measurement year or the nine years prior to the measurement year.	**Administrative Data:** Patients 51-80 years of age during the measurement year. *Note:* Given the measurement look-back period, adults 50-80 will be captured in this measure. **Medical Record Data**: EHR users may opt to use this methodology or the electronic data collection methodology described above. EHR users may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Denominator:** A systematic sample of patients 51-80 years of age during the measurement year. *Note:* Given the measurement look-back period, adults 50-80 will be captured in this measure.	Exclusions: Patients with a diagnosis of colorectal cancer or total colectomy. Look for evidence of colorectal cancer or total colectomy as far back as possible in the patient's history, through either administrative data or medical record review. Exclusionary evidence in the medical record must include a note indicating a diagnosis of colorectal cancer or total colectomy, which must have occurred by December 31 of the measurement year. Use the following codes or descriptions of the codes to identify allowable exclusions: Malignant neoplasm of colon and other specified sites of colon and large intestine	Electronic data (i.e., claims or encounter data for visits, diagnoses, laboratory, and procedures) or medical record review.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
COLORECTAL CANCER SCREENING *continued*		A patient had an appropriate screening if a submitted claim/encounter contains any one of the following codes: ■ Fecal occult blood test (FOBT) CPT Codes: 82270,82274; LOINC: 2335-8, 12503-9, 12504-7, 14563-1, 14564-9, 14565-6, 27396-1, 27401-9, 27925-7, 27926-5, 29771-3; HCPCS: G0107, G0328; ICD-9-CM V76.51 ■ flexible sigmoidoscopy CPT Codes 45330, 45331, 45332, 45333, 45334, 45335, 45337, 45338, 45339, 45340, 45341, 45342, 45345; HCPCS: G0104 ■ ICD-9-CM: 45.24, 45.42 ■ Double contrast barium enema (DCBE) CPT Code: 74280 ■ Colonoscopy CPT Codes: 44388, 44389, 44390, 44391, 44392, 44393, 44394, 44397, 45355, 45378, 45379, 45380, 45381, 45382, 45383, 45384, 45385, 45386, 45387, 45391, 45392; HCPCS: G0105, G0121 ■ ICD-9-CM: 45.22, 45.23, 45.25, 45.43. **Medical Record Collection:** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. One or more screenings for colorectal cancer. Appropriate screenings are defined by any one of the four criteria below:		ICD-9-CM Codes: 153.X, 154.0, 154.1, 197.5, V10.05 Total colectomy CPT Codes: 44150-44153, 44155-44156, 44210-44212; ICD-9-CM Codes: 45.8.	

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
COLORECTAL CANCER SCREENING *continued*		■ Fecal occult blood test (FOBT; both guaiac and immunochemical FOBT is acceptable) during the measurement year ■ Flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year ■ Double contrast barium enema (DCBE) during the measurement year or the four years prior to the measurement year. Air contrast enema is a clinical synonym ■ Colonoscopy during the measurement year or the nine years prior to the measurement year. Documentation in the medical record must include both of the following: ■ A note indicating the date the colorectal cancer screening was performed ■ For a notation in the progress notes, the result or finding (this ensures the screening was performed and not merely ordered). For a notation in the medical history, a result is not required. Documentation in the medical history pertains to screenings that occurred in the past, and it is assumed that the result was negative (a positive result would have been noted as such). A notation in the medical history must include a date reference that meets the timeline outlined in the specifications.			

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - SCREENING (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
FALL RISK MANAGEMENT IN OLDER ADULTS **a. Discussing fall risk** **b. Managing fall risk**	NCQA[2,4]	**Numerator a:** Discussing fall risk: The number of patients in the denominator a who responded "yes" to the question, "A fall is when your body goes to the ground without being pushed. In the past 12 months, did your doctor or other health provider talk with you about falling or problems with balance or walking?"—**Q1** **Numerator b:** Managing fall risk: The number of patients in the denominator b who responded "yes" to the question, "Has your doctor or other health provider done these or anything else to help prevent falls or treat problems with balance or walking?" Some examples of things they might do include: ■ Suggest that you use a cane or walker ■ Check your BP lying or standing ■ Suggest that you do an exercise or physical therapy program ■ Suggest a vision or hearing testing.	**Denominator a:** Discussing fall risk: All patients 75 years and older as of December 31 of the measurement year, *AND* patients 65 years to 74 years as of December 31 of the measurement year who responded "yes" to either of the questions, "Did you fall in the past 12 months?" —**Q2** *OR* "yes" to the question, "In the past 12 months, have you had problems with balance or walking?" —**Q3** *AND* who indicated they were seen by a provider during the measurement year. **Denominator b:** Managing fall risk: Patients 65 years and older as of December 31 of the measurement year who responded "yes" to either of the questions, "Did you fall in the past 12 months?" —**Q2** *OR* "yes" to the question, "In the past 12 months, have you had problems with balance or walking?" —**Q3** *AND* who indicated they were seen by a provider during the measurement year.	None.	Patient survey.
OSTEOPOROSIS TESTING IN OLDER WOMEN	NCQA[2,4]	**Numerator:** The number of patients in the denominator who responded "yes" to the question, "Have you ever had a bone density test to check for osteoporosis, sometimes thought of as 'brittle bones'? This test may have been done to your back, hip, wrist, heel, or finger."	**Denominator:** Women 65 and older as of December 31 of the measurement year who answered "yes" or "no" to the question, "Have you ever had a bone density test to check for osteoporosis, sometimes thought of as 'brittle bones'? This test may have been done to your back, hip, wrist, heel, or finger."	None.	Patient survey.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - IMMUNIZATION

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHILDHOOD IMMUNIZATION STATUS	NCQA[2,4]	**Electronic Collection:** For all antigens, count any of the following: ■ evidence of the antigen, or documented history of the illness, or a seropositive test result. For combination vaccinations that require more than one antigen (i.e., DTaP and MMR), find evidence of all of the antigens. DTaP/DT: An initial DTaP vaccination followed by at least three DTaP, DT, or individual diphtheria and tetanus shots on or before the child's second birthday. Any vaccination administered prior to 42 days after birth cannot be counted. In states where the law allows an exception to a child who receives a pertussis vaccination, the child is compliant if he or she has four diphtheria and four tetanus vaccinations IPV: At least three polio vaccinations (IPV) with different dates of service on or before the child's second birthday. IPV administered prior to 42 days after birth cannot be counted MMR: At least one measles, mumps, and rubella (MMR) vaccination, with a date of service falling on or between the child's second birthday HiB: Three H influenza type B (HiB) vaccinations, with different dates of service on or before the child's second birthday. HiB administered prior to 42 days after birth cannot be counted *Note:* Because use of one particular type of HiB vaccine requires only three doses, the measure requires meeting the minimum possible standard	**Electronic Collection:** Children who turn two years of age during the measurement year. **Medical Record Collection**: Denominator: A systematic sample drawn from children who turn two years of age during the measurement year. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. The measure developer recommends that in most settings office visit claims (see list of codes) or other codified encounter data should be used to identify patients who have had at least one office visit in the prior (12) months from which a purposeful sample (random, consecutive retrospective or prospective from a specific date) can then be chosen for the denominator. In other uses of the measure, insurer level claims (pooled or single insurer) data can be used to identify the denominator.	Exclusions: Children who had a contraindication for a specific vaccine should be excluded from the denominator for all antigen rates and the combination rates. The denominator for all rates must be the same. In excluding contraindicated children, this may only be done for those children where the administrative data does not indicate that the contraindicated immunization was rendered. The exclusion must have occurred by the patient's second birthday. Contraindications should be looked for as far back as possible in the patient's history. The following may be used to identify allowable exclusions: Immunization: Any particular vaccine Contraindication: Anaphylactic reaction to the vaccine or its components ICD-9: 999.4 Immunization: DTaP Contraindication: Encephalopathy ICD-9: 323.5 (must include E948.4 or E948.5 or E948.6 to identify the vaccine) Immunization: VZV and MMR Contraindication: Immunodeficiency, including genetic (congenital) immunodeficiency syndromes ICD-9: 279 Immunization: VZV and MMR Contraindication: HIV-infected or household contact with HIV infection ICD-9: infection V08, symptomatic 042	NCQA

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - IMMUNIZATION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHILDHOOD IMMUNIZATION STATUS *continued*		of three doses, rather than the recommended four doses Hepatitis B: Three hepatitis B vaccinations, with different dates of service on or before the child's second birthday VZV: At least one chicken pox vaccination (VZV), with a date of service falling on or between the child's first and second birthdays Pneumococcal conjugate: At least four pneumococcal conjugate vaccinations on or before the child's second birthday Combination 2 (DtaP, IPV, MMR, HiB, hepatitis B, VZV): Children who received four DTaP/DT vaccinations; three IPV vaccinations; one MMR vaccination; three HiB vaccinations; three hepatitis B; and one VZV vaccination Combination 3 (DtaP, IPV, MMR, HiB, hepatitis B, VZV, pneumococcal conjugate): Children who received all of the antigens listed in Combination 2 and four pneumococcal conjugate vaccinations DTaP: CPT: 90698, 90700, 90721, 90723; ICD-9: 99.39 Diphtheria and tetanus: CPT: 90702 Diphtheria: CPT: 90719; ICD-9: V02.4,* 032,* 99.36 Tetanus: CPT: 90703; ICD-9: 037,* 99.38 Pertussis: ICD-9: 033,* 99.37 IPV: CPT: 90698, 90713, 90723; ICD-9: V12.02,* 045,* 99.41, 138 MMR: CPT: 90707, 90710; ICD-9: 99.48 Measles: CPT: 90705, 90708; ICD-9: 055,* 99.45		Immunization: VZV and MMR Contraindication: Cancer of lymphoreticular or histiocytic tissue: ICD-9: 200-202 Immunization: VZV and MMR Contraindication: Multiple myeloma: ICD-9: 203 Immunization: VZV and MMR Contraindication: Leukemia: ICD-9: 204-208 Immunization: IPV contraindication: Anaphylactic reaction to streptomycin, polymyxin B or neomycin Immunization: HiB contraindication: None Immunization: Hepatitis B Contraindication: Anaphylactic reaction to common baker's yeast Immunization: VZV and MMR Contraindication: Anaphylactic reaction to neomycin Immunization: Pneumococcal conjugate Contraindication: None.	

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - IMMUNIZATION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHILDHOOD IMMUNIZATION STATUS *continued*		Mumps: CPT: 90704, 90709; ICD-9: 072,* 99.46 Rubella: CPT: 90706, 90708, 90709; ICD-9: 056,* 99.47 HiB: CPT: 90645, 90646, 90647, 90648, 90698, 90720, 90721, 90748; ICD-9: 041.5,* 038.41.* 320.0,* 482.2* Hepatitis B*: CPT: 90723, 90740, 90744, 90747, 90748; ICD-9: V02.61,* 070.2,* 070.3*; HCPCS: G0010, Q3021, Q3023 VZV: CPT: 90710, 90716; ICD-9: 052,* 053* Pneuomococcal conjugate: CPT: 90669; HCPCS: G0009. *Indicates evidence of the disease. A patient who has evidence of the disease during the numerator event time is compliant for the antigen. **Medical Record Collection**: Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described above. EHR users may opt to follow the medical record specifications below but produce data on 100% of their denominator population instead of a sample. **Numerator:** For all antigens, count any of the following: ■ Evidence of the antigen or combination vaccine, *OR* ■ Documented history of the illness *OR* ■ A seropositive test result.			

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PREVENTION, IMMUNIZATION, AND SCREENING - IMMUNIZATION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CHILDHOOD IMMUNIZATION STATUS *continued*		For combination vaccinations that require more than one antigen (i.e., MMR), find evidence of all of the antigens. For immunization information obtained from the medical record, count patients where there is evidence that the antigen was rendered from: ■ A note indicating the name of the specific antigen and the date of the immunization *OR* ■ A certificate of immunization prepared by an authorized health care provider or agency including the specific dates and types of immunizations administered. For documented history of illness or a seropositive test result, find a note indicating the date of the event. The event must have occurred by the patient's second birthday. Notes in the medical record indicating that the patient received the immunization "at delivery" or "in the hospital" may be counted toward the numerator. This applies only to immunizations that do not have minimum age restrictions (e.g., prior to 42 days after birth). A note that the "patient is up-to-date" with all immunizations that does not list the dates of all immunizations and the names of the immunization agents does not constitute sufficient evidence of immunization for this measure.			

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PREVENTION, IMMUNIZATION, AND SCREENING - IMMUNIZATION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
FLU SHOTS FOR ADULTS AGES 50 TO 64	NCQA[2,4]	The number of patients in the denominator who responded, "Yes" to the question "Have you had a flu shot since September 1, YYYY?"	The number of patients 50-64 years who responded "Yes" or "No" to the question "Have you had a flu shot since September 1, YYYY?"	No exclusions listed.	Patient survey.
FLU SHOTS FOR OLDER ADULTS	NCQA[2,4]	The number of patients in the denominator who responded "Yes" to the question, "Have you had a flu shot since September 1, YYYY?"	The number of patients 65 years or older who responded "Yes" or "No" to the question, "Have you had a flu shot since September 1, YYYY?"	None.	Patient survey.
INFLUENZA IMMUNIZATION	AMA PCPI[2,3]	Patients who received influenza vaccination from September through February of the year prior to the measurement period. ICD-9-CM Codes for need vaccine: V04.81 *OR* CPT Procedure Codes for adult influenza vaccine: 90656, 90658, 90660 *OR* CPT II Code 4037F-Influenza immunization ordered or administered *OR* HCPCS Code: G0008 *OR* Medical record includes documentation of patient report of having received the vaccination.	All patients ≥50 years of age at the beginning of the one-year measurement period. Patient selection: CPT Codes for patient visits: 99201-99205, 99212-99215, 99241-99245, 99354-99355, 99386-99387, 99396-99397, 99401-99404, 90471-90474 *AND* Patient's age is ≥50 years at the beginning of the one-year measurement period.	**Denominator exclusions:** Documentation of medical reason(s) for not receiving an influenza vaccination. CPT II Code w/modifier: 4037F 1P *OR* Egg allergy: ICD-9-CM Codes: 693.1, V15.03, 995.68 *OR* Adverse reaction to influenza vaccine: 995.0 and E949.6, 995.1 and E949.6, 995.2 and E949.6 *OR* Documentation of patient reason(s) (e.g., economic, social, religious) for not receiving an influenza vaccination: CPT II Code w/modifier: 4037F 2P *OR* Documentation of system reason(s) for not administering an influenza vaccination (e.g., vaccine shortage): CPT II Code w/modifier: 4037F 3P.	EHRS, paper medical records, administrative data using CPT II Codes or prospective flowsheet.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - IMMUNIZATION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
PNEUMOCOCCAL VACCINE NEEDED FOR ALL ADULTS AGED 65 YEARS OR OLDER	RHI	Adults aged 65 to 67 years who have not received a pneumococcal vaccine. Pneumococcal Vac Polyvalent CPT Codes: 90471 Immunization Admin 90472 Immunization Admin, Each Add 90732 Pneumococcal Vaccine HCPCS: G0009 Admin Pneumococcal Vaccine	Adults aged 65 to 67.	Inclusion criteria: Patients must be between 65 and 67 years old and eligible to receive services during the past two years. Exclusion criteria: None (Claims data does not currently include clinical information).	This measure uses data from one or more health plans to derive information at the physician level. Set of procedure codes (e.g., CPT, HCPCS) for an influenza vaccine. Only the presence or absence of the relevant codes is evaluated. Administrative medical (inpatient and outpatient) and pharmacy claims data. Eligibility data from health plan. At least two years of historical claims data are requested.
PNEUMONIA VACCINATION STATUS FOR OLDER ADULTS	NCQA[2,4]	The number of patients in the denominator who responded "Yes" to the question "Have you **ever** had a pneumonia shot? This shot is usually given only once or twice in the person's lifetime and is different from the flu shot. It is also called the pneumococcal vaccine."	The number of patients 65 years and older as of January 1 of the measurement year who responded, "Yes" or "No" to the question "Have you **ever** had a pneumonia shot? This shot is usually given only once or twice in the person's lifetime and is different from the flu shot. It is also called the pneumococcal vaccine."	None given.	Patient survey.

(more)

PREVENTION, IMMUNIZATION, AND SCREENING - IMMUNIZATION (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
PNEUMONIA VACCINATION	CMS/NCQA[2,4]	Patients who have **ever** received a pneumococcal vaccination: CPT Procedure Code for adult pneumococcal vaccination: 90732; HCDCS Code: G0009.	All patients ≥65 years of age in the measurement year.	Exclusions: ■ Previous anaphylactic reaction to the vaccine or any of its components ■ Other medical reason(s) documented by the practitioner for not receiving a pneumococcal vaccination: ICD-9-CM Exclusion Codes for PC-8 Pneumonia Vaccination: 995.0 and E949.6, 995.1 and E949.6, 995.2 and E949.6 ■ Patient reason(s) (e.g., economic, social, religious).	Paper medical record, flowsheet, EHRS.

Appendix B
Members

CONSUMER COUNCIL

AARP
AFL-CIO
Alliance for Retired Americans
American Federation of Teachers Healthcare
American Hospice Foundation
Childbirth Connection
Consumer Coalition for Quality Health Care
Consumers Advancing Patient Safety
Consumers' Checkbook
Coordinating Center
Health Care for All
International Association of Machinists
March of Dimes
National Breast Cancer Coalition
National Citizen's Coalition for Nursing Home Reform
National Coalition for Cancer Survivorship
National Consumers League
National Partnership for Women & Families
Service Employees Industrial Union

HEALTH PROFESSIONAL, PROVIDER, AND HEALTH PLAN COUNCIL

Academy of Managed Care Pharmacy
Administrators for the Professions
Adventist HealthCare
Advocate Health Partners
Aetna
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American Academy of Hospice and Palliative Medicine
American Academy of Ophthalmology
American Academy of Orthopaedic Surgeons
American Academy of Pediatrics
American Association of Ambulatory Surgery Centers
American Association of Nurse Anesthetists
American Chiropractic Association
American College of Cardiology
American College of Chest Physicians
American College of Gastroenterology
American College of Obstetricians and Gynecologists
American College of Physicians
American College of Radiology
American College of Rheumatology
American College of Surgeons
American Geriatrics Society
American Heart Association
American Hospital Association
American Medical Association
American Medical Group Association
American Nurses Association
American Optometric Association
American Organization of Nurse Executives
American Osteopathic Association
American Society for Gastrointestinal Endoscopy
American Society for Therapeutic Radiology and Oncology
American Society of Anesthesiologists
American Society of Breast Surgeons
American Society of Clinical Oncology
American Society of Colon and Rectal Surgeons
American Society of Health-System Pharmacists

American Society of Hematology
American Society of Interventional Pain Physicians
American Society of Plastic Surgeons
American Thoracic Society
America's Health Insurance Plans
AmSurg Corporation
Aramark Healthcare
Ascension Health
Association for Behavioral Health and Wellness
Atlantic Health
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BJC HealthCare
Blue Cross Blue Shield Association
Boca Raton Community Hospital
Bon Secours Health System
Bronson Healthcare Group
Calgary Health Region - Quality Improvement and Health Information
Carolinas Medical Center
Catholic Health Association of the United States
Catholic Health Initiatives
Catholic Healthcare Partners
Cedars-Sinai Medical Center
Central Baptist Hospital
Chesapeake Bay ENT
Child Health Corporation of America
Children's Hospitals and Clinics of Minnesota
CHRISTUS Health
CIGNA Healthcare
Clark Consulting
College of American Pathologists
Community Health Accreditation Program
Community Health Plan of Washington
Condell Health Network
Connecticut Hospital Association
Council of Medical Specialty Societies
DaVita
Detroit Medical Center
Duke University Health System
Emergency Department Practice Management Association
Evanston Northwestern Healthcare
Exeter Health Resources
Federation of American Hospitals
Florida Hospital Medical Center
Gentiva Health Services
Good Samaritan Hospital
Greater New York Hospital Association
Hackensack University Medical Center
HCA, Inc.
Health Management Associates
Healthcare Leadership Council
HealthHelp
HealthPartners
HealthSouth Corporation
Henry Ford Health System
Highmark, Inc.
HIP Health Plans
Hoag Hospital
Horizon Blue Cross Blue Shield of New Jersey
Hospice and Palliative Nurses Association
Hospital for Special Surgery
HRDIA
Hudson Health Plan
Illinois Hospital Association
Infusion Nurses Society
INTEGRIS Health
Intermountain Healthcare
John Muir Health
Johns Hopkins Health System
Kaiser Permanente
KU Med at the University of Kansas Medical Center
Lake Forest Hospital
Los Angeles County - Department of Health Services
Mayo Foundation
MedQuest Associates
MedStar Health
Memorial Health University Medical Center
Memorial Hermann Healthcare System
Memorial-Sloan Kettering Cancer Center
Mercy Medical Center
Meridian Health System
Milliman Care Guidelines
Munson Medical Center
National Association for Home Care and Hospice
National Association of Chain Drug Stores
National Association of Children's Hospitals and Related Institutions
National Association of Public Hospitals and Health Systems
National Consensus Project for Quality Palliative Care
National Consortium of Breast Centers
National Hospice and Palliative Care Organization
National Rural Health Association
Nebraska Heart Hospital
Nemours Foundation
New York-Presbyterian Hospital and Health System
North Carolina Baptist Hospital
North Mississippi Medical Center
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North Texas Specialty Physicians
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Oakwood Healthcare System
Palmetto Health Alliance
Park Nicollet Health Services
Partners HealthCare System, Inc.
Pharmacy Quality Alliance
Planetree
Premier, Inc.

Presbyterian Healthcare Services
Providence Health System
Robert Wood Johnson Health Network
Robert Wood Johnson Hospital - Hamilton
Robert Wood Johnson University Hospital - New Brunswick
Rockford Health System
Sentara Norfolk General Hospital
Sisters of Mercy Health System
Society of Critical Care Medicine
Society of Thoracic Surgeons
Sodexho Healthcare Services
St. Mary's Hospital
Stamford Health System
State Associations of Addiction Services
State University of New York - College of Optometry
Sutter Health
Tampa General Hospital
Tenet Healthcare
Texas Health Resources
The Methodist Hospital
Thomas Jefferson University Hospital
Triad Hospitals
Trinity Health
UAB Health Systems
UnitedHealth Group
University Health Systems of Eastern Carolina
University Hospitals of Cleveland
University of California-Davis Medical Group
University of Michigan Hospitals and Health Centers
University of Pennsylvania Health System
University of Texas-MD Anderson Cancer Center
US Department of Defense - Health Affairs
UW Health
Vail Valley Medical Center
Vanguard Health Management
Veterans Health Administration
VHA, Inc.
Virtua Health
Washington State Hospital Association
Waukesha Elmbrook Health Care
WellPoint
WellStar Health System
Yale New Haven Health System

PURCHASER COUNCIL

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Centers for Medicare & Medicaid Services
District of Columbia Department of Health
Employer Health Care Alliance Cooperative
Employers' Coalition on Health
Florida Health Care Coalition
General Motors
Greater Detroit Area Health Council
HealthCare 21
KPMG LLP
Leapfrog Group
Lehigh Valley Business Conference on Health
Maine Health Management Coalition
National Association of Health Data Organizations
National Association of State Medicaid Directors
National Business Coalition on Health
National Business Group on Health
New Jersey Health Care Quality Institute
Pacific Business Group on Health
Schaller Anderson
St. Louis Business Health Coalition
Washington State Health Care Authority

RESEARCH AND QUALITY IMPROVEMENT COUNCIL

Abbott Laboratories
ABIM Foundation
Abiomed
ACC/AHA Task Force on Performance Measures
Accreditation Association for Ambulatory Health Care - Institute for Quality Improvement
ACS/MIDAS+
Advanced Medical Technology Association
AGA Institute
Agency for Healthcare Research and Quality
American Academy of Nursing
American Association of Colleges of Nursing
American Board of Medical Specialties
American College of Emergency Physicians
American College of Medical Quality
American Data Network
American Health Quality Association
American Medical Association - Physician Consortium for Performance Improvement
American Medical Informatics Association
American Pharmacists Association Foundation
American Psychiatric Association for Research and Education
American Society for Quality - Health Care Division
Amgen, Inc.
Association for the Advancement of Wound Care
Association for Professionals in Infection Control and Epidemiology
Association of American Medical Colleges
AstraZeneca
AYR Consulting Group
Battelle Memorial Institute
Baxter
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Cancer Care Ontario

Cardinal Health, Inc.
CareScience
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Centers for Disease Control and Prevention
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Cook Group Incorporated
Coral Initiative, LLC
CRG Medical
Delmarva Foundation
Dialog Medical
Disease Management Association of America
ECRI Institute
eHealth Initiative
Eli Lilly and Company
excelleRx
Florida Initiative for Children's Healthcare Quality
Forum of End Stage Renal Disease Networks
GlaxoSmithKline
Health Alliance of Mid-America
Health Care Compliance Strategies
Health Grades
Health Resources and Services Administration
Health Services Advisory Group
Healthcare Association of New York State
Hospira
Illinois Department of Public Health
Infectious Diseases Society of America
Institute for Clinical Systems Improvement
Institute for Safe Medication Practices
Integrated Healthcare Association
Integrated Resources for the Middlesex Area
Iowa Foundation for Medical Care
Iowa Healthcare Collaborative
IPRO
Jefferson Health System, Office of Health Policy and Clinical Outcomes
Johnson & Johnson Health Care Systems
Kidney Care Partners
Long Term Care Institute
Loyola University Health System - Center for Clinical Effectiveness
Lumetra
Maine Quality Forum
McKesson Corporation
MedAssets
MedMined
MEDRAD, Inc.
MHA Keystone Center for Patient Safety and Quality
Minnesota Community Measurement
National Academy for State Health Policy
National Association for Healthcare Quality
National Committee for Quality Assurance
National Institutes of Health
National Minority Quality Forum
National Patient Safety Foundation
National Research Corporation
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New Jersey Hospital Association
New York University College of Nursing
North Carolina Center for Hospital Quality and Patient Safety
Northeast Health Care Quality Foundation
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Online Users for Computer-assisted Healthcare
Onmicare, Inc.
Partnership for Prevention
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Pennsylvania Patient Safety Authority
Pfizer
PhRMA
Press, Ganey Associates
Professional Research Consultants, Inc.
Renal Physicians Association
Research!America
Rhode Island Department of Health
Roswell Park Cancer Institute
sanofi-aventis
Schering-Plough
Society for Healthcare Epidemiology of America
Society of Hospital Medicine
Solucient
State of New Jersey Department of Health and Senior Services
Substance Abuse and Mental Health Services Administration
Texas Medical Institute of Technology
The Joint Commission
The Lewin Group
Thomson Healthcare
Uniform Data System for Medical Rehabilitation
United Hospital Fund
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Appendix D
Commentary

Introduction

In August 2005, the National Quality Forum (NQF) initiated a project to achieve consensus on an initial set of physician-focused ambulatory care measures under a grant from the Robert Wood Johnson Foundation. As with other NQF consensus projects, a Steering Committee (appendix C) representing key healthcare constituencies—including consumers, providers, purchasers, and research and quality improvement organizations—was convened. Technical Advisory Panels (TAPs) (appendix C) also were formed to assist NQF staff with measure evaluations, advise the Steering Committee on the technical aspects of the measures, and make recommendations to the Steering Committee. This appendix summarizes the deliberations of the Steering Committee and the TAPs.

Approach to Measure Evaluation

NQF's work relating to ambulatory care proceeded in phases. In Phase 1, NQF convened a workshop of its Members in May 2004 to identify 10 priority areas for ambulatory care quality measurement and reporting. The 10 areas identified through this process were heart disease, diabetes, hypertension, obesity, asthma, prevention, depression, medication management, patient experience with care, and coordination of care.

In Phase 2, NQF endorsed an initial set of 42 "physician-focused" ambulatory care consensus standards in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.*[1] These measures address only 5 of the 10 priority areas identified at the NQF workshop (heart disease, prevention, hypertension, depression, and asthma), plus two others (bone conditions and prenatal care).[2]

This appendix summarizes the deliberations of Phase 3 that address the priority areas identified in this report.[3]

In the future, measures of patient experience with care, measures for special settings of care, ambulatory measures for specialty providers, a disparities-sensitive set, and composite measures will be considered.

Identifying Candidate Standards

More than 800 candidate consensus standards initially were identified for all priority areas through several strategies:

- open solicitation of measures through NQF's "Call for Measures." From April 4, 2005, through June 18, 2005, the "Call for Measures" was distributed through the following avenues:
  - posted on NQF's web site, *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set,*
  - e-mailed to NQF Members,
  - e-mailed to all ambulatory care project committee and TAP members,
  - e-mailed to more than 1,300 individuals who had asked to be kept apprised of NQF activities, and
  - mailed to more than 120 professional organizations and societies;
- the review of community-level measures from the Agency for Healthcare Research and Quality's (AHRQ's) Prevention Quality Indicators (PQIs) that had been deferred from Phase 2;
- the identification of candidate consensus standards and sources based on a research paper commissioned by NQF, *Current State of Quality Measurement for Seventeen Priority Areas in Primary Care: A Background Paper for the National Quality Forum,* by Patrick S. Romano, M.D., M.P.H., et al. Romano and his colleagues identified 806 unique indicators from 29 sponsoring organizations;
- the review of NQF-endorsed™ measures and other related, ongoing NQF consensus work to identify ambulatory care measures within these other efforts;
- an active search of additional candidate consensus standards from AHRQ's National Quality Measures Clearinghouse, and literature searches;
- passive receipt of candidate consensus standards suggested by others (e.g., NQF member organizations); and
- the re-evaluation of measures that were considered during the consensus process for *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.*

[1] National Quality Forum (NQF), *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set – A Consensus Report,* Washington DC: NQF; 2006.

[2] At the request of the Centers for Medicare & Medicaid Services for an initial "starter" set, Phase 2 was conducted under "expedited consensus," meaning a "Call for Measures" was not conducted. The Board approved this process with the direction that "head-to-head" comparisons for measures in all 10 priority areas be conducted during Phase 3.

[3] Fifteen of the bone and joint condition measures were considered in November 2007.

Purpose

The Steering Committee recommended the following purpose statement for this set of measures:

> The purpose of this set of ambulatory care consensus standards is to improve the quality of ambulatory care—via accountability and public reporting—by standardizing quality measurement in ambulatory care settings, including physician offices, clinics, emergency rooms, and health centers.

After a review period, the Steering Committee recommended that the purpose statement be changed as follows:

> The purpose of this set of ambulatory care consensus standards is to improve the quality of ambulatory care—via accountability and public reporting—by standardizing quality measurement *that describes the practice-level performance* in ambulatory care settings, including physician offices, clinics, emergency rooms, and health centers.

Scope

The Steering Committee identified several criteria to define the scope of the measure set. This set of ambulatory care measures includes those that are:

- suitable for physician practice-level accountability;
- include the performance of a multi-disciplinary team of healthcare providers for which the physician ultimately is accountable;
- derived from all data sources;
- fully developed and precisely specified; and
- fully open source.[4]

The Steering Committee noted that the measures apply to all providers within a physician practice, and a reviewer suggested that it should be included as a scope criterion that the measures reflect the performance of a multidisciplinary team of healthcare providers for which the physician is ultimately responsible.

Screening Criteria for Each Priority Area

The Steering Committee also established screening criteria in each priority area to focus the evaluation and TAP consideration on those candidate consensus standards that meet the purpose and goals of the measure set.

Evaluation of Candidate Standards

NQF staff prepared detailed measure evaluations using standard criteria established in NQF's *National Framework for Healthcare Quality Measurement and Reporting* and *A Comprehensive Framework for Hospital Care Performance Evaluation.* Information for the measure evaluations was obtained from the measure developers, the literature review, and independent research. TAPs for each priority area provided a preliminary review of the measure evaluations prepared by NQF staff and

[4] On January 29, 2003, the NQF Board of Directors adopted a policy that NQF will endorse only fully open source measures. Open source is defined by NQF as being "fully disclosed" (i.e., data elements, measure algorithm, if applicable, and risk-adjustment methods/data elements/algorithms are fully described and disclosed; if calculation requires database-dependent coefficients that change frequently, the existence of such coefficients shall be disclosed and the general frequency with which they change shall be disclosed, but the precise numerical value need not be disclosed).

made recommendations to the Steering Committee based on the perceived strengths and weaknesses of each measure, as well as technical reasons why the measure should or should not be recommended.

Additionally, the Steering Committee requested that each TAP make recommendations regarding:

- level of analysis;
- accountability/ability to influence process or outcome;
- clarity and completeness of specifications, including definitions and coding;
- possible perverse incentives/unintended consequences;
- consideration of all data sources;
- some inference about data burden; and
- when no testing data are provided by the developer, an assessment of the "face validity" and feasibility of the data source.

The TAPs met in person and through conference calls to review the candidate consensus standards in each priority area. The TAP comments and recommendations were included in each measure evaluation.

Standardized Grading for TAP Recommendations

In September 2005, the NQF Board established an Ad Hoc Advisory Committee on Evidence and Performance Measure Grading to review a draft evidence-grading instrument. The purpose of the instrument is to standardize TAPs' consideration of evidence supporting candidate voluntary consensus standards, thereby further increasing the transparency and reproducibility of the evaluative process. Following review of scores of such schema, the Committee recommended a unique NQF evidence-grading tool to be piloted during part of the ambulatory care project. The draft evidence-grading tool focuses on a standardized grading system for TAP recommendations:

A: The NQF TAP strongly recommends this measure advance.

B: The NQF TAP recommends this measure advance, but with reservation.

C: The NQF TAP makes no recommendation for or against this measure.

D: The NQF TAP recommends against advancing this measure.

I: The NQF TAP concludes that the evidence is insufficient to recommend for or against this measure.

To expedite the evaluation process, several TAPs elected to initially review similar measures to determine the best candidate from the group. The "best" measure was then thoroughly evaluated and graded. In determining the best measure of a group, the TAPs also considered whether there was any marginally increased value of a different measure compared to a currently endorsed consensus standard. The TAPs often elected not to further grade measures that did not meet their initial evaluation for "best" or that were not considered to be an improvement over an endorsed measure.

Recommendation of Individual Measures

The Steering Committee considered the candidate consensus standards in each priority area; comments and recommendations from the TAPs formed the basis of the deliberations.

Criteria for Recommending Measures

The Steering Committee established several potential inclusion criteria in addition to the standardized measure evaluation criteria (importance, scientific acceptability, usability, and feasibility).

Focus on Physician Practice Performance

The Steering Committee determined that the primary focus regarding the quality and performance of ambulatory care at this time is at the physician practice level; therefore, it a priori did not consider measures that focused exclusively on community-level or health plan-level measures for this set.

Level of Analysis

Initially, the Steering Committee directed the TAPs to make recommendations on the appropriate level of analysis for each measure. The Committee, however, ultimately set aside the TAP recommendations on level of analysis and recommended all measures for all levels of analysis, including the individual practitioner level.

Priorities

The Steering Committee identified the following priorities for this set:

- physician practice-level measures;
- measures that address vulnerable populations;
- measures addressing all relevant populations;
- consideration of possible perverse incentives or unintended consequences;
- clarity and completeness of specifications;
- measures that have been pilot tested/already in use; and
- measures addressing high variation, including over/underuse.

The Steering Committee determined that the following principles also should guide its recommendations of measures:

- The focus of the measures is primarily accountability, as a driver of quality improvement.
- The focus should be on the unit of analysis—for example, physician practice level, rather than the data source.
- Measures should be feasible, scientifically accurate, and reflect an aspect of care substantially influenced by the physician practice.

The Steering Committee also evaluated previously endorsed measures from *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set* along with similar new candidate measures. The Steering Committee established several criteria to evaluate whether continuation of endorsement would be recommended based on

feedback from NQF Members during previous review and voting:

- identification of fundamental implementation issues that impact usefulness;
- need for parsimony of measures within the sets and avoidance of redundancy;
- change in the clinical evidence or rationale for a measure; and
- preference for outcome measures voiced by several stakeholder groups.

Implementation Issues

During its deliberations, the Steering Committee repeatedly considered issues that may influence the implementation of these measures at the physician practice level:

- Sample size. The Steering Committee acknowledged the concerns regarding potentially small sample sizes and statistical significance and noted that sample size is more of a concern with some measures than others; the Committee was aware of sample size concerns in making its recommendations.
- Physician attribution. The Committee noted that physician attribution may be challenging for some measures.
- Expected performance. The Committee agreed that 100 percent performance may not be appropriate for many measures.
- Physician-determined exclusions. The Committee discussed concerns that exclusions that allow too much latitude may be less valuable, even though such exclusions allow some accommodation for patient population differences.
- Sociodemographic differences. The Committee recognized that some physicians may have more challenging patient populations that impact performance. It noted that some of these differences may be handled with physician-determined exclusions, but consideration should be given to potential influences of the patient characteristics in interpreting results.

Ultimately, the Steering Committee decided that these implementation issues should be determined by the organization conducting the measurement program. The Steering Committee also noted that the TAP for implementation should consider these issues in greater detail and provide recommendations.

The Steering Committee also discussed measures being used in the Centers for Medicare & Medicaid Service's (CMS's) Physicians Voluntary Reporting Program (PVRP) using newly created "G-codes" for data collection. The Steering Committee accepted CMS's assertion that the PVRP measures are intended to provide an alternate data collection vehicle for endorsed measures and do not represent new measures.

Priority Area: Asthma/Respiratory Illness

Following are the area-specific screening criteria determined by the Committee for this priority area:

- Respiratory illnesses include allergic rhinitis, chronic obstructive pulmonary disease (COPD), bronchitis, the common cold, pharyngitis, pneumonia, sinusitis, and upper respiratory infection.

- Any candidate consensus measure that addresses asthma for all patients (adult and pediatric populations) is preferable, when appropriate.
- As previously noted, all measures that address areas for which NQF has a "competing" project (e.g., pediatric asthma) should be excluded from consideration for this project.

In general, the Steering Committee agreed with the Asthma/Respiratory Illness TAP rationale for recommending and excluding measures. In addition to the Steering Committee's guidance, the Asthma/Respiratory Illness TAP used the following criteria for recommending measures:

- For large practices and health plans, administrative data are preferred; otherwise medical record review, when feasible, is more accurate.
- The National Asthma Education and Prevention Program was the accepted authority on practice guidelines for asthma care.
- Asthma measures should consider exclusions for COPD and other related illnesses, where appropriate.
- Measures that had a strong relation to outcomes and that were considered actionable were preferred.
- Measures addressing both adults and children were preferred over measures with a restricted population, where appropriate. Similarly, measures for which the population was restricted only to Medicaid participants were not recommended.

Asthma/Respiratory Illness TAP members generally excluded measures for one or more of the following reasons:

- Poorly specified measures were not recommended.
- Measures addressing patient education were thought to be clinically relevant; however, Asthma/Respiratory Illness TAP members thought that this information was more accurately obtained from patient surveys.
- Community-level measures were considered not appropriate as performance measures for public reporting, since the measures do not indicate an accountable body and are not adjusted for prevalence.
- Measures for which the ideal performance was not 100 percent were considered confusing and not appropriate for public reporting.
- Measures for which the evidence supporting the practice was weak were not recommended.

Measures Recommended

Ten of 49 candidate consensus standards were recommended for the set.

- **Asthma assessment: percentage of patients who were evaluated during at least one office visit for the frequency (numeric) of daytime and nocturnal asthma symptoms (AMA PCPI)**

  Data source: EHRS, retrospective record review, prospective flowsheet

The Steering Committee accepted the Asthma/Respiratory Illness TAP recommendation to include this previously endorsed measure. Steering Committee members agreed that a regular assessment of asthma symptoms is critical to formulating therapy.

- **Management plan for people with asthma: percentage of patients for whom there is documentation that a written asthma management plan was provided either to the patient or the patient's caregiver OR, at a minimum, specific written instructions on under what conditions the patient's doctor should be contacted or the patient should go to the emergency room (IPRO)**

  Data source: retrospective record review (sampled)

The Steering Committee agreed with the Asthma/Respiratory Illness TAP recommendation, because documentation of environmental asthma triggers is an important element of care. The Steering Committee expressed some concern that the data may not be reliably recorded in a chart.

The measure developer agreed to rename the measure "management plan for people with asthma," as recommended during the comment period.

- **Use of appropriate medications for people with asthma: percentage of patients who were identified as having persistent asthma during the year prior to the measurement year and who were dispensed a prescription for either an inhaled corticosteroid or acceptable alternative medication during the measurement year (NCQA)**

  Data source: administrative and pharmacy data

The Steering Committee members agreed with the Asthma/Respiratory Illness TAP recommendation that this previously endorsed measure should be included in the set. The measure had undergone some changes since it was endorsed in Phase 2. The measure denominator now includes patients in the previous and current measurement year to increase the likelihood that the population has persistent asthma. This change alleviated one of the initial Steering Committee concerns raised about the measure.

- **Asthma: pharmacologic therapy—percentage of all patients with mild, moderate, or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment (AMA PCPI)**

  Data source: EHRS, retrospective record review, prospective flowsheet

This measure evaluates the physician's documented assessment of severity of asthma symptoms (which is often missing) and appropriate treatment. Steering Committee members recommended that this previously endorsed measure remain in the set even though the Asthma/Respiratory Illness TAP recommended replacing this measure with the IPRO measure for persistent asthma treatment. Although the IPRO measure was more clearly specified, Steering Committee members decided that it did not present a significant improvement upon this previously endorsed measure.

- **Inappropriate antibiotic treatment for adults with acute bronchitis: percentage of patients who were diagnosed with bronchitis and were dispensed an antibiotic on or within three days after the Episode Date (NCQA)**

  Data source: administrative data

The Steering Committee agreed with the Asthma/Respiratory Illness TAP recommendation to include this measure in the set because it complements the other antibiotic measures.

- **Appropriate treatment for children with upper respiratory infection (URI): percentage of children who were given a diagnosis of URI and were not dispensed an antibiotic prescription on or three days after the episode date (NCQA)**

  Data source: administrative data

This measure evaluates the inappropriate use of antibiotics in children with colds. The Committee believed this measure to be a good driver of quality improvement that would assess the ability of the physician to educate parents and families in the appropriate use of antibiotics.

- **COPD assessment of oxygen saturation: percentage of patients with COPD with documentation of oxygen saturation assessed at least annually (AMA PCPI)**

  Data source: EHRS, retrospective record review, prospective flowsheet

- **COPD long-term oxygen therapy: percentage of patients with COPD with documentation in the medical record of oxygen therapy prescribed (AMA PCPI)**

  Data source: EHRS, retrospective record review, prospective flowsheet

The Steering Committee agreed with the Asthma/Respiratory Illness TAP recommendation to include these two measures as paired measures, because they align with current guidelines. The TAP did not recommend *COPD long-term oxygen therapy: percentage of patients with COPD with documentation in the medical record of oxygen therapy prescribed* as a good measure alone and recommended it only if paired with *COPD assessment of oxygen saturation: percentage of patients with COPD with documentation of oxygen saturation assessed at least annually.* The TAP and the Committee noted that data collection for all four COPD measures at the same time may reduce burden.

The measure developer noted that the measures were both intended "to assess patients with previous documentation, but one was during the measurement period and the other was not limited to the measurement period, which changes the intent" and requested that the measures not be paired. The Steering Committee altered its recommendation to not pair the two measures, but it did not recommend that *COPD long-term oxygen therapy: percentage of patients with COPD with documentation in the medical record of oxygen therapy prescribed* go forward alone.

- **Chronic obstructive pulmonary disease (COPD) spirometry evaluation: percentage of patients with COPD who had a spirometry evaluation documented (AMA PCPI)**

  Data source: EHRS, retrospective record review, prospective flowsheet

The Steering Committee agreed with the Asthma/Respiratory Illness TAP recommendation to include this measure because, if the patient has COPD, then spirometry should be recorded in the medical record somewhere in the patient's history, but not limited to the past two years.

- **COPD inhaled bronchodilator therapy: percentage of patients with COPD who were prescribed an inhaled bronchodilator prescribed (AMA PCPI)**

  Data source: EHRS, retrospective record review, prospective flowsheet

The Steering Committee agreed with the Asthma/Respiratory Illness TAP recommendation to include this measure, because COPD patients should be on short-acting beta agonists.

- **Appropriate testing for children with pharyngitis: percentage of patients who were diagnosed with pharyngitis, prescribed an antibiotic, and who received a group A streptococcus test for the episode (NCQA)**

  Data source: administrative data

The Committee noted that this measure promotes the use of testing for *Streptococcal* pharyngitis prior to prescribing antibiotics and helps discourage unnecessary antibiotic therapy. The Steering Committee agreed with the Asthma/Respiratory Illness TAP recommendation to include this measure in the set.

Measures Not Recommended

The Steering Committee did not recommend several measures that were recommended by the Asthma/Respiratory Illness TAP.

- **Long-term control agent indicator (IPRO)**

Asthma/Respiratory Illness TAP members recommended the replacement of the previously endorsed AMA PCPI persistent asthma treatment measure with the IPRO persistent asthma treatment measure. Asthma/Respiratory Illness TAP members found the IPRO measure specifications to be more clearly defined. Also, the denominator of the chart-based IPRO measure aligns with the included population for the NCQA measure, which uses administrative data. The IPRO measure would capture more patients with persistent asthma than the AMA PCPI measure. Asthma/Respiratory Illness TAP members believed that this was a significant improvement on the AMA PCPI measure and that its similarity to the endorsed NCQA measure would encourage standardization of data elements.

The Steering Committee rejected the Asthma/Respiratory Illness TAP recommendation. Steering Committee members thought that the IPRO measure's complex denominator population would be difficult to identify by medical record review. The Steering Committee decided that the IPRO measure did not significantly improve upon the AMA PCPI measure for asthma treatment endorsed in Phase 2.

- **General trigger history indicator (IPRO)**

A measure of asthma triggers was recommended by the Asthma/Respiratory Illness TAP but not by the Steering Committee. Steering Committee members felt that the evidence base for this measure was weak.

- **Community-acquired bacterial pneumonia empiric antibiotic (AMA PCPI)**

Steering Committee members did not support the Asthma/Respiratory Illness TAP recommendation of this measure. While some Committee members agreed that there should be an appropriate-use antibiotic measure, other members noted that there were issues with the exclusions in these measures.

- **Community-acquired bacterial pneumonia chest radiograph (AMA PCPI)**

Steering Committee members did not support the Asthma/Respiratory Illness TAP recommendation of this measure. Although this practice may be appropriate for inpatient care, the evidence base for pneumonia radiograph on ambulatory care patients is less robust. Also, in ambulatory care settings, patients are often accurately diagnosed with pneumonia without a chest x-ray and are subsequently treated with antibiotics; thus, physicians should not be rewarded for unnecessarily using x-rays.

- **Pharmacologic therapy for asthma (long-term control therapy by category of medication, severity classification, and age range) (AMA PCPI)**

A measure of the "distribution of long-term control therapy by medication, severity classification, and age range" for asthma patients was not recommended for

accountability by either the Asthma/Respiratory Illness TAP or the Committee.

Priority Area: Bone and Joint Conditions

The Bone and Joint Disease TAP considered 30 measures, including 2 endorsed measures from a universe of 55 measures. The candidate consensus standards reviewed were identified after application of the priority area-specific inclusion and exclusion criteria. The Steering Committee provided guidance to the TAP that measures for the following should be included: osteoporosis, osteoarthritis, rheumatoid arthritis, low back pain/back pain (ambulatory only, not surgical intervention), and falls prevention/screening, including nutrition counseling for bone health (e.g., calcium intake). The Steering Committee excluded fractures, preventive measures already considered (falls prevention, osteoporosis testing, general nutrition counseling), inpatient surgical care (particularly hip), and rehabilitation measures.

The candidate consensus standards for low back pain comprise the measures used in NCQA's Back Pain Recognition Program. The Steering Committee considered the measures only, not the implementation as the Recognition Program, or the scoring methodology for the composite measure used in the Recognition Program. The measure developer initially required that the 15 measures be considered as a group that could not be separated into individual elements, but ultimately the Steering Committee recommended that the measures go forward as individual measures, after the measure developer removed the requirement that the group of measures not be separated.

Measures Recommended

Nineteen candidate consensus standards were recommended:

- **Osteoarthritis: functional and pain assessment: percentage of patients with osteoarthritis who were assessed for function and pain (AMA PCPI)**
- **Osteoarthritis: assessment for use of anti-inflammatory or analgesic over-the-counter (OTC) medications: percentage of patient visits with assessment for use of anti-inflammatory or analgesic OTC medications (AMA PCPI)**

  Data source: medical record, electronic medical record

These two measures were endorsed in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-Focused Performance Measure Set.* The TAP and Steering Committee noted that they are part of a sequence of process steps measured as elements of quality care for individuals with osteoarthritis. On the recommendation of the Steering Committee, the measure developer "tightened" the specifications to indicate the range of acceptable clinical practices that meet the measures and are also clinically meaningful.

- **Low back pain (LBP): use of imaging studies: percentage of patients with new low back pain who received an imaging study (plain x-ray, MRI, CT scan) conducted on the Episode Start Date or in the 28 days following the Episode Start Date (NCQA)**

  Data source: administrative, medical record, electronic medical record

The TAP and Steering Committee recognized the strong evidence indicating that overutilization of imaging studies is correlated with overutilization of surgery for back problems. They noted that it is challenging to precisely define the appropriate population for imaging studies, but that for some part of the population, imaging is warranted. They also noted that "attribution" of accountability for ordering the studies may be a problem at the provider level, since some patients may seek care in an emergency or specialty setting and receive imaging studies through that source.

- **LBP: initial assessment—percentage of patients with a diagnosis of back pain who have medical record documentation of all of the following on the date of the initial visit to the physician (NCQA)**

  Data source: medical record

- **LBP: physical exam—percentage of patients with documentation of a physical examination on the date of the initial visit with the physician (NCQA)**

  Data source: medical record

- **LBP: mental health assessment—percentage of patients with a diagnosis of back pain for whom documentation of a mental health assessment is present in the medical record prior to intervention or when pain lasts more than six weeks (NCQA)**

  Data source: medical record

- **LBP: appropriate imaging for acute back pain—percentage of patients with a diagnosis of back pain for whom the physician ordered imaging studies during the six weeks after pain onset, in the absence of "red flags" (NCQA)**

  Data source: medical record

The TAP noted that imaging rates are correlated with surgical rates and increased use of interventions in all areas and may also lead to unnecessary work loss. A comment from a reviewer that the measure would be more appropriately named Inappropriate Imaging was referred to the measure developer for consideration.

- **LBP: repeat imaging studies—percentage of patients who received inappropriate repeat imaging studies in the absence of red flags or progressive symptoms (NCQA)**

  Data source: medical record

- **LBP: advice for normal activities—percentage of patients with medical record documentation that a physician advised them to maintain or resume normal activities (NCQA)**

  Data source: medical record

The TAP noted that advice for normal activities should also address remaining at work.

- **LBP: advice against bed rest—percentage of patients with medical record documentation that a physician advised them against bed rest lasting four days or longer (NCQA)**

  Data source: medical record

- **LBP: recommendation for exercise—percentage of patients with back pain lasting more than 12 weeks, with documentation of physician advice for supervised exercise (NCQA)**

  Data source: medical record

The TAP noted that even though the evidence is strongest for exercise after 12 weeks, the recommendation could be made earlier.

- **LBP: appropriate use of epidural steroid injections—percentage of patients with back pain who have received an epidural steroid injection in the absence of radicular pain AND those patients with**

radicular pain who received an epidural steroid injection without image guidance (NCQA)

Data source: medical record

A comment from a reviewer that the measure would be more appropriately named Inappropriate Epidural Steroid Use was referred to the measure developer for consideration.

- **LBP: surgical timing—percentage of patients without documentation of red flags who had surgery within the first six weeks of back pain onset (NCQA)**

  Data source: medical record

- **LBP: patient reassessment—percentage of patients with documentation that the physician conducted reassessment of both pain and functional status (NCQA)**

  Data source: medical record

- **LBP: shared decisionmaking—percentage of patients with whom a physician or other clinician reviewed the range of treatment options, including alternatives to surgery prior to surgery. To demonstrate shared decisionmaking, there must be documentation in the patient record of a discussion between the physician and the patient that includes treatment choices, including alternatives to surgery, and risks and benefits (NCQA)**

  Data source: medical record

The TAP acknowledged that informed consent does not address shared decisionmaking, because for patients not progressing to surgery, there is no consent form. The measure developer reported that field-testing showed current low levels of performance. Also, the general patient education measure includes many of the shared decisionmaking components, such as discussion of risks and benefits.

- **LBP: patient education—physician provides patients with educational materials that review the natural history of the disease and treatment options, including alternatives to surgery, the risks and benefits and the evidence (NCQA)**

  Data source: medical record

- **LBP: postsurgical outcomes—the physician has a system to examine postsurgical outcomes that includes tracking specific complications of back surgery (NCQA)**

  Data source: electronic or paper tracking system, electronic or paper report summarizing postsurgical complications data and plan for improvement

The TAP suggested rewording the measure to be "postprocedural" for any intervention rather than postsurgical. There are often complications with epidural injections that would not be captured in the current wording.

- **LBP: evaluation of patient experience—to demonstrate that the physician has mechanisms to evaluate patient experience there must be evidence of an ongoing system for obtaining feedback about patient experience with care, and a process for analyzing the data and a plan for improving patient experience (NCQA)**

  Data source: patient survey instrument

- **Osteoporosis management in women who had a fracture: percentage of women 65 years and older who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat or prevent osteoporosis in the six months after the date of fracture (NCQA)**

  Data source: administrative, medical record, electronic medical record

The Steering Committee and TAP recommended this measure because of the importance of appropriately managing

osteoporosis, particularly for high-risk women (e.g., those who have already had a fracture). They did note, however, that at the physician level it may be difficult to identify the accountable provider, particularly since fracture treatment is separated from primary care treatment. They also noted that there is an important coordination of care element to this measure.

- **Arthritis: disease modifying antirheumatic drug (DMARD) therapy in rheumatoid arthritis—assesses whether patients diagnosed with rheumatoid arthritis who have had at least one ambulatory prescription dispensed for a DMARD (NCQA)**

  Data source: administrative, medical record, electronic medical record

The TAP and Steering Committee noted that the evidence is strong that early and consistent disease modifying antirheumatic drug (DMARD) therapy is important in delaying the progression of rheumatoid arthritis. They noted that because DMARD may not be appropriate for all patients, without exclusions, the expected performance on this measure would not be 100 percent, and that this concept should be conveyed with the performance information. The measure currently is in use.

Measures Not Recommended

While candidate consensus standards not recommended, for the most part, were considered to be clinically appropriate, technical and measurement issues precluded the TAP and Steering Committee from recommending them for accountability purposes. In discussing many of the measures, TAP members noted the need for definition of terms and definition of practices to be conducted in order to meet the consensus standard. Although some of the measures not recommended were found to be technically solid, endorsed measures already were in place or another similar measure was recommended. TAP members commented that while there is some association between smoking and poor outcomes and LBP, and while surgical outcomes are affected by smoking status, there is no evidence that getting people to stop smoking improves LBP outcomes. Some TAP members commented that a cessation measure may not be supported by the evidence as a measure quality of LBP care, although it is supported as an overall quality measure.

Research Recommendations

The following areas for research were identified by the TAP or Steering Committee:

- increase understanding the risk profiles of various DMARDs in order to establish performance measures;
- increase understanding how the osteoarthritis measures could be applied to a broader population, for example, the osteoarthritis medication management measures; and
- continue research on appropriate utilization related to management of low blood pressure and how to reconcile appropriate care with patient expectations.

Priority Area: Diabetes

Initially, NQF staff identified 34 potential candidate consensus standards for TAP review. The TAP recommended 12 measures to the Steering Committee, and the Steering Committee ultimately recommended 10 measures.

The area-specific screening criteria determined by the Steering Committee for diabetes were as follows:

- include previously endorsed measures for accountability;
- include pediatric measures;
- include Veteran's Health Administration measures;
- include measures that identify disparities; and
- exclude previously endorsed measures for quality improvement only and community-level measures (may consider quality improvement-only measures as potentially suitable for accountability).

Measures Recommended

Ten candidate measures were recommended for the set:

- **Eye exam: percentage of adult patients with diabetes aged 18-75 years who received a dilated eye exam or seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist or imaging validated to match diagnosis from these photos during the reporting year, or during the prior year, if patient is at low risk* for retinopathy (Alliance/NCQA)**

  ***Patient is considered low risk if the following criterion is met: has no evidence of retinopathy in the prior year**

  Data source: medical record, administrative

The Diabetes TAP had some reservations about this measure, because the result is not totally under the physician's control (e.g., if the ophthalmologist/optometrist does not provide an eligible record or the patient does not follow through with a referral to see an eye specialist). The TAP suggested that the measure could be modified to reflect what is under the primary physician's control, such as ordering/referring for the eye exam and follow-up to request the results. However, even though it had concerns about the measure, the TAP agreed that taking the eye exam measure out of the set would be detrimental to diabetes care, and the Steering Committee accepted the TAP's recommendation to include the measure.

The Steering Committee considered comments from a reviewer citing evidence for more frequent eye examinations. The Committee ultimately did not change its recommendation but requested that the measure developer thoroughly review the current literature when updating this measure.

- **Foot exam: percentage of adult patients with diabetes aged 18-75 years who received a foot exam (visual inspection, sensory exam with monofilament, or pulse exam) (Alliance/NCQA)**

  Data source: medical record, administrative

The Steering Committee agreed with the TAP's recommendation for this measure. The Diabetes TAP noted that there is an enormous public health advantage of conducting foot exams for vulnerable patients. Unlike some of the other measures, conducting foot exams is totally under the physician's control and is fairly easy to accomplish in the office/clinic setting.

- **Hemoglobin A1c management: percentage of adult patients with diabetes aged 18-75 years with most recent A1c level greater than 9.0% (poor control) (Alliance/NCQA)**

  Data source: medical record, administrative

The Steering Committee agreed with the Diabetes TAP's assessment that HbA1c testing is necessary to guide treatment and to evaluate how a patient is responding to treatment.

- **Hemoglobin A1c testing: percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year (Alliance/NCQA)**

  Data source: medical record, administrative

The Steering Committee concurred with the Diabetes TAP's recommendation for this measure. The TAP noted the strong evidence in clinical trials for glycemic control. TAP members expressed some concern with this measure because it is an outcome measure without risk adjustment; however, they agreed it was less of a concern than one with a more aggressive target value (i.e., <7 percent).

- **HbA1c test for pediatric patients: percentage of pediatric patients with diabetes with a HbA1c test in a 12-month measurement period (NCQA)**

  Data source: medical record, administrative

The Steering Committee concurred with the Diabetes TAP's recommendation for this measure.

- **Blood pressure management: percentage of patients with diabetes aged 18-75 years with most recent blood pressure <140/80 mm Hg (Alliance/NCQA)**

  Data source: medical record, administrative

Although ultimately the Steering Committee members accepted the Diabetes TAP's recommendation for this measure, they identified a concern in recommending a measure with a different target value than is provided in a HEDIS plan measure or in current guidelines from *The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure* (JNC 7). The TAP agreed there is strong evidence linking lower blood pressure with reduced cardiovascular events; however, the TAP believed that there are several important considerations that preclude inclusion in a set of measures for public accountability:

- Outcome measures need risk adjustment (case-mix adjustment, stratification, clinically valid exclusions) to account for other factors besides the care received that can affect the outcome.
- Although measures should be consistent with guidelines, it is important to note that guidelines allow for individualization of specified goals/target values and exclude patients who have contraindications or adverse effects.
- In the absence of risk adjustment, less aggressive target values should be used in measures for public accountability.
- Unintended consequences of reporting unadjusted measures for accountability or pay for performance could be avoidance of more difficult cases, increased adverse effects related to aggressive treatment, and increased cost with use of additional or newer medications.

Furthermore, the TAP noted that evidence-based data from trials cannot (and some argue, should not) be achieved in many practice situations, and several studies support this position.[5,6]

[5] Roumie CL, Elasy TA, Greevy R, et al., Improving blood pressure control through provider education, provider alerts, and patient education: a cluster randomized trial, *Ann Intern Med,* 2006;145(3):165-175.

[6] O'Connor PJ, Desai J, Solberg LI, et al., Randomized trial of quality improvement intervention to improve diabetes care in primary care settings, *Diabetes Care,* 2005;28(8):1890-1897.

The Steering Committee revisited the concern about differing blood pressure target values compared to the heart disease measures after several reviewers expressed concern about including non-aligned target values for different conditions. During harmonization discussions with measure developers, it was determined that alignment is not possible at this time due to lack of consensus among providers, particularly clinicians caring for patients with diabetes and clinicians caring for those with heart disease, regarding the appropriate target value(s). The Steering Committee acknowledged the discomfort of including measures with different targets in the set, but also noted that the alternative of not including outcome measures would be more problematic.

- **Urine protein screening: percentage of adult diabetes patients aged 18-75 with at least one test for microalbumin during the measurement year; or who had evidence of medical attention for existing nephropathy (diagnosis of nephropathy or documentation of microalbuminuria or albuminuria) (Alliance/NCQA)**

  Data source: medical record, administrative

The Steering Committee agreed with the Diabetes TAP's view that the microalbuminuria test is a good screening tool and, as a single test, is superior to a creatinine test for screening. The TAP noted that although a yearly test may not be optimal, it is a useful measure because it is an early detection tool and easy to document.

- **Lipid profile: percentage of patients with diabetes aged 18-75 years with at least one lipid profile (or all component tests) (Alliance/NCQA)**

  Data source: medical record, administrative

The Diabetes TAP recognized that although the evidence for improved outcomes is for the LDL levels achieved, not the testing, testing is needed in order to treat. Comments by both the TAP and the Steering Committee indicated that because control measures implicitly include testing, for a more parsimonious set of measures the testing measures could be eliminated. The Steering Committee agreed with the TAP's recommendation to include this measure.

Paired Measures

- **Lipid management: low density lipoprotein cholesterol (LDL-C) <130—percentage of patients with diabetes aged 18-75 with most recent LDL-C <130 mg/dl (Alliance/NCQA)**
- **Lipid management: LDL-C <100—percentage of patients with diabetes 18-75 years of age whose most recent LDL-C test result during the measurement year was <100 mg/dl (Alliance/NCQA)**

  Data source: medical record, administrative

The Diabetes TAP had recommended the measure for LDL <130, but had not reached consensus on recommending the previously endorsed measure for LDL <100 because of the same concerns about unadjusted outcome measures noted earlier regarding the blood pressure measure. TAP members agreed that there is strong evidence that lower LDL values are associated with reduced cardiovascular events, but the greatest benefit is seen when high levels are reduced below 130. They did request that if the Steering Committee recommended both measures, that the measures be paired so that a more complete picture of provider performance could be presented. One Steering Committee member expressed some concern that all measures must reach 100 percent to receive credit, but not all measures are designed to be 100 percent (i.e., outcome measures). The Steering Committee acknowledged the important issues the TAP and Committee

members raised about outcome measures, but ultimately recommended both LDL control measures and agreed to pair them.

Measures Not Recommended

The Steering Committee agreed with the Diabetes TAP not to recommend 24 other candidate measures for accountability for a variety of reasons:

- technical issues with specifications, particularly involving the pediatric measures;
- outcome measures without appropriate adjustment;
- concerns about the outcome components in the candidate composite measure; and
- measures not identified as being the best among a group of measures or not identified as better than a currently endorsed measure.

The Steering Committee expressed the desire to include a measure of good glycemic control, but recognized that the problems identified by the TAP for the measure "Percentage of patients with diabetes with A1c less than 7 percent" to be compelling (i.e., potential for unintended consequences with an unadjusted outcome measure for public accountability; avoidance of difficult patients; adverse consequences of aggressive treatment; and measures are not the same as guidelines). The American Diabetes Association notes that "Less stringent treatment goals may be appropriate for patients with a history of severe hypoglycemia, patients with limited life expectancies, very young children or older adults, and individuals with comorbid conditions. (E)"[7]

Research Recommendations

In addition to its review and evaluation of candidate measures, the Committee recommended general research priorities formulated and advanced by the Diabetes TAP. These research recommendations represent areas for further investigation, development, and consensus in three areas: measures, methodology, and policy.

Research recommendations for the development of new measures:

- composite measures;
- patient safety measures, including medication reconciliation;
- coordination of care among providers and continuity across settings;
- prevention measures;
- aspirin measure for prevention of cardiovascular disease;
- patient education, self-management, patient activation;
- efficiency;
- prepregnancy counseling;
- weight management in prediabetes; and
- gestational diabetes.

Research recommendations for measurement methodology:

- standardizing risk-adjustment methodology;
- continuous versus dichotomous measures;
- how to measure patient-centered care;

[7] American Diabetes Association. Standards of medical care in diabetes—2006. *Diabetes Care.* 2006;29(Suppl 1):S11. E - Expert consensus or clinical experience.

- understand the reason(s) some measures plateau;
- approaches to test/research a good foot examination measure;
- impact of diabetes drugs used for other conditions on denominators identified by drugs;
- cultural diversity considerations;
- gender differences; and
- limits on improvement.

Research recommendations for policy include:

- quality improvement (QI) measure endorsement by NQF;
- selection criteria for QI versus public reporting versus pay-for-performance environments; and
- strengthening of patient-centeredness.

Priority Area: Heart Disease

Initially, NQF staff identified 82 candidate measures for heart disease. The Steering Committee agreed to the following screening criteria for this priority area:

- measures in all three heart conditions (heart attack, heart failure [HF], and atrial fibrillation);
- measures of outpatient follow-up after hospitalization; and
- lipid screening for patients at risk for heart disease.

Initially, the Steering Committee reaffirmed that the emergency room is an ambulatory care site and decided not to exclude measures of emergency room and/or hospital care that are part of admission for acute myocardial infarction (AMI) or HF. However, at its July 2006 meeting, the Committee decided that measures of emergency room care that are part of a hospital admission were out of scope for the ambulatory care project. After applying the scope and screening criteria to the universe of potential measures, the Heart Disease TAP evaluated 62 measures, including a number of previously endorsed measures relating to coronary artery disease (CAD) and HF.

Measures Recommended

Nineteen of 62 candidate measures were recommended for the set.

Coronary Artery Disease (CAD)

Eleven measures of CAD were recommended:

- **CAD: symptom and activity assessment—percentage of patients with CAD who were evaluated for both level of activity and anginal symptoms during one or more office visits (AMA PCIP and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

The Steering Committee accepted the Heart Disease TAP recommendation to include this previously endorsed measure. The Committee agreed that this measure examines an important process of care.

- **CAD: ACE inhibitor (ACEI)/angiotensin receptor blocker (ARB) therapy—percentage of patients with CAD who also have diabetes and/or left ventricular systolic dysfunction (LVSD) who were prescribed ACEI or ARB therapy (AMA PCPI and ACC/AHA)**

Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

The TAP did not recommend for or against this measure; however, the Steering Committee believed that this measure examined an important process of care and that a significant opportunity for improvement exists.

- **CAD: antiplatelet therapy—percentage of patients with CAD who were prescribed antiplatelet therapy (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

The Committee agreed with the Heart Disease TAP to recommend this previously endorsed measure for accountability and public reporting.

- **Ischemic vascular disease (IVD): use of aspirin or another antithrombotic—percentage of IVD patients who have documentation of use of aspirin or another antithrombotic during the 12-month measurement period (NCQA)**

  Data source: physicians may use administrative data systems to identify eligible patients; administrative data sources include medical encounters, medical claims, and ambulatory pharmacy records

The Committee and TAP recommended this measure for accountability and public reporting to replace a currently endorsed measure because it is technically as good as the endorsed measure and includes a broader population.

- **CAD: beta blocker therapy—prior myocardial infarction (MI): percentage of patients with prior MI at any time who were prescribed beta blocker therapy (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

The Committee agreed with the Heart Disease TAP to recommend this previously endorsed measure for accountability and public reporting.

- **AMI: persistence of beta blocker treatment after a heart attack—percentage of patients whose days' supply of beta blockers dispensed is >=135 days in the 180 days following discharge (NCQA)**

  Data source: visit and pharmacy encounter data or claims; electronic data may be supplemented with medical record data

The TAP did not recommend for or against this measure. The Steering Committee felt that this measure made the important step from evaluating intent to use (prescription) to evaluating actual use; it recognized the TAP's concern that physicians influence (but do not control) use, but believed that this measure represented a step in an important direction.

- **CAD: beta blocker treatment after a heart attack—percentage of IVD patients who have a claim indicating beta blocker therapy or who received an ambulatory prescription for beta blockers rendered within seven days after discharge (NCQA)**

  Data source: visit and pharmacy encounter data or claims; electronic data may be supplemented with medical record data

The TAP recommended against this measure because of the limited opportunity for improvement. However, the Steering Committee noted there are populations for which treatment may be suboptimal. Moreover, the Committee felt it was important not to retire this measure in order to ensure that gains would be maintained and that potential equity gaps might be closed.

- **IVD: blood pressure control—percentage of IVD patients who at their most recent blood pressure reading during the 12-month measurement period had a blood pressure result of <140/90 mm Hg (NCQA)**

  Data source: visit and pharmacy encounter data or claims; electronic data may be supplemented with medical record data

The TAP did not recommend for or against this measure. The Steering Committee recommended this outcome measure advance and noted that a BP of <140/90 is consistent with the ACC/AHA guidelines for prevention of heart attack and death in patients with atherosclerotic cardiovascular disease.[8] Additionally, recognizing that these patients are a diverse group with different targets, the Steering Committee felt that there would be significant health gains achieved if all patients attained the target of 140/90.

- **CAD—drug therapy for lowering LDL cholesterol: percentage of patients with CAD who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines) (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

Although the TAP and Steering Committee initially recommended against this measure, they reconsidered it after a reviewer pointed out that it is in widespread use, most notably as part of the DOQ-IT project and the AQA Alliance starter set (see discussion under measures not recommended). The Steering Committee agreed that the reasons for including this measure were compelling and recommended that the measure be added to the group of measures for heart disease.

- **IVD: complete lipid profile and LDL control <100—percentage of IVD patients with a full lipid profile completed during the 12-month measurement period with date of each component of the profile documented; LDL-C<100 (NCQA)**

  Data source: physicians may use administrative data systems to identify eligible patients; administrative data sources include medical encounters, medical claims, and ambulatory pharmacy records

The Committee agreed with the TAP that this measure is a superior measure for examining lipid testing and control and thus recommended the measure for accountability and public reporting. It noted that replacing several previously endorsed lipid measures with this one measure achieves greater parsimony and reduces redundancy in the set.

- **CAD: optimally managed modifiable risk factors—percentage of members who have optimally managed modifiable risk factors (LDL, tobacco non-use, blood pressure control, aspirin usage) (HealthPartners)**

  Data source: administrative data, medical record

The Committee agreed with the TAP that a composite measure that assesses optimally managed modifiable risk factors for CAD patients would be very valuable.

Heart Failure (HF)

The Steering Committee recommended eight measures for HF:

- **HF: assessment of activity level—percentage of patient visits or patients with HF with assessment of current activity level (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

[8] See www.acc.org/clinical/guidelines/atherosclerosis/atherosclerosis_pdf.pdf.

The TAP recommended against this measure because of its weak evidence base as currently specified. The Steering Committee agreed that a more standardized method is needed to implement the measure. More importantly, however, the Steering Committee felt that assessment of activity level is a very high priority for HF patients.

- **HF: assessment of clinical symptoms of volume overload (excess)—percentage of patient visits or patients with HF with assessment of clinical symptoms of volume overload (excess) (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

Even though the TAP noted that a weakness of the measure included potential for physician subjectivity when assessing the "presence or absence of symptoms of volume overload," the Committee and TAP recommended this patient-centered measure as an important process of care.

- **HF: left ventricular function (LVF) assessment—percentage of patients with HF with quantitative or qualitative results of LVF assessment recorded (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

The TAP and the Steering Committee recommended this measure, which evaluates physician awareness of an important functional assessment—the measure of LVF in patients with HF.

- **HF: ACEI/ARB therapy—percentage of patients with HF who also have LVSD who were prescribed ACE inhibitor or ARB therapy (AMA PCPI and ACC/AHA)**

  Data source: administrative data, medical record

The Committee agreed with the TAP recommendation for this measure of drug therapy in HF patients as an important care process with a strong evidence base.

- **HF: patient education—percentage of patients who were provided with patient education on disease management and health behavior changes during one or more visit(s) (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

Both the TAP and Steering Committee recommended this patient-centered measure. The Steering Committee agreed with the TAP's assessment that this measure examines an important aspect of care and provides patients with useful information.

- **HF: beta blocker therapy—percentage of patients with HF who also have LVSD who were prescribed beta blocker therapy (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

The Committee agreed with the TAP's conclusion that this measure of drug therapy is an important care process with a strong evidence base.

- **HF: warfarin therapy for patients with atrial fibrillation—percentage of patients with HF who also have paroxysmal or chronic atrial fibrillation who were prescribed warfarin therapy (AMA PCPI and ACC/AHA)**

Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

The Committee agreed with the TAP recommendation for this measure of drug therapy in HF patients as an important care process with a strong evidence base.

- **HF: weight measurement—percentage of patient visits for patients with HF with weight measurement recorded (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective paper medical records, prospective flowsheet, administrative data using CPT II Codes

The TAP and Committee recommended this measure to evaluate an important "vital sign" in the management of patients with HF. The Committee agreed that the measure is less subject to variation with respect to documentation compared to other candidate standards.

Measures Not Recommended

While agreeing that many of the remaining measures were both clinically and conceptually important, the Committee ultimately did not recommend 43 candidate measures for accountability and public reporting. Generally, at least one of the following reasons applied to the Heart Disease TAP and Steering Committee's decision to exclude them:

- no compelling reason that the candidate measure should replace a currently endorsed measure or would complement an endorsed measure;
- measure was not sufficiently specified;
- insufficient evidence to support its implementation;
- lack of evidence regarding the relationship to outcomes; and
- populations of interest to the VHA are often not comparable to the general population, and it may be challenging to apply to other settings or populations.[9]

Upon further evaluation of the technical merits, the TAP and Steering Committee recommended to not continue endorsement of four measures:

- **Percentage of patients discharged from the hospital after AMI, CABG, and PTCA within the measurement year with LDL-C test results <130 mg/dL and <100mg/dL (NCQA)**

The TAP and the Steering Committee did not recommend this measure, because the posthospitalization population is much smaller than the more inclusive population captured in the recommended measure.

- **Percentage of patients with CAD who received at least one lipid profile (or ALL component tests) (AMA PCPI and ACC/AHA)**
- **Percentage of patients discharged from the hospital after AMI, CABG, and PTCA within the measurement year receiving at least one LDL-C screening (NCQA)**
- **Percentage of patients with CAD who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines) (AMA PCPI and ACC/AHA)**

The TAP and the Steering Committee recommended against these three measures, because lipid screening and medication use measures were superseded by the recommended lipid control measure.

[9]Given that the population encompasses one that is largely low income with a high percentage of minority patients, the measures will be re-examined by the Disparities TAP.

However, as noted earlier, the Steering Committee reconsidered the candidate consensus standard *Percentage of patients with CAD who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines) (AMA PCPI and ACC/AHA)* after a reviewer pointed out that this measure is in widespread use, most notably as part of the DOQ-IT project and the AQA Alliance starter set. The Steering Committee agreed that the reasons for including this measure were compelling and recommended that the measure be added to the group of measures for heart disease.

The Steering Committee did not recommend two measures recommended by the TAP:

- **Proportion of patients with CAD who had blood pressure measured at the last office visit.**

Members of the Committee discussed data that suggested the performance for this measure was at about 98 percent. Other members of the Committee felt that the public perception of this measure would be that the quality bar was set very low.

- **Proportion of patients with CAD whose most recent LDL was <130; <100.**

This measure was believed to be redundant with the recommended lipid control measure.

Research Recommendations

In addition to considering the proposed consensus standards for endorsement for heart disease care, the Committee also recommended that additional areas for research and development be pursued:

- All the measures reviewed examined underuse of heart disease care. The Committee recommended that in the future, measures of overuse should be considered, especially in regard to cost.
- There is a great need to develop patient-reported outcome measures and develop survey assessment tools.
- There is a need to develop appropriateness measures that examine heart disease procedures, for example, "percentage of patients receiving angioplasties who do not need them."
- There is a need to conduct more pilot testing of heart disease measures to provide more usability and feasibility data.
- Measures in the area of treatment for atrial fibrillation are needed; there is room for improvement in this area.
- Further research is needed to examine coordination of care. The patient with heart disease interacts with many physicians, and the lack of communication among physicians puts the patient at great risk. Physicians also should consider comorbidity issues when treating patients with heart disease.
- The development of additional composite measures for heart disease should be encouraged.
- There is a need to develop measures of end-of-life care/transition of care and to conduct research on how physicians discuss palliative care with newly diagnosed heart disease patients.
- There is a need to develop more community-level/surveillance measures for assessing heart disease care.
- There is a need to develop measures of medication adherence/persistence.

Priority Area: Hypertension

The area-specific screening criteria determined by the Committee for this priority area were as follows:

- Candidate consensus standards focusing on community rather than provider function are beyond the scope of the hypertension priority area.
- Since hypertension commonly exists as a comorbidity with other chronic diseases, the Committee agreed that overlap of measures into more than one priority area may be unavoidable in some instances. As such, any candidate consensus standard applicable to more than one priority area—as evidenced by the denominator applying to two or more particular diseases, diagnoses, or conditions—is to be considered by both TAPs when appropriate. For example, "ACE inhibitor or angiotensin receptor blocker is needed for patients with diabetes and HTN" will be reviewed by both the hypertension and diabetes TAPs.

Measures Recommended

Three of the 21 candidate consensus standards were recommended for the set:

- **Blood pressure measurement: percentage of patient visits with blood pressure measurement recorded (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective record review, prospective flowsheet

This measure was not recommended by the Steering Committee during Phase 2 because members believed there was little room for improvement in this aspect of hypertension management. However, new evidence suggesting that provider performance might in fact be suboptimal convinced both the Hypertension TAP and the Steering Committee that endorsement of this measure would be necessary to establish a quality standard for this fundamental healthcare goal, convey its importance as an integral component of successful blood pressure management, and drive improvement in both performance and clinical outcomes.

- **Plan of care: percentage of patient visits during which either systolic blood pressure >140 mm Hg or diastolic blood pressure >90 mm Hg with documented plan of care for hypertension (AMA PCPI and ACC/AHA)**

  Data source: EHRS, retrospective record review, prospective flowsheet

Despite receiving endorsement during Phase 2 of the project, the Hypertension TAP reversed its earlier position and recommended that endorsement be withdrawn due to the measure's imprecisely defined numerator. Although the Hypertension TAP previously argued that this would allow providers freedom in their chosen intervention, the Hypertension TAP now believed that this lack of precision may lead to inappropriate care, excessively burdensome data collection, and misclassification of providers. Although the Steering Committee agreed that the Hypertension TAP's concerns were valid, it ultimately felt that this measure represented a vital component of hypertension management and must therefore be included in the set. To address the Hypertension TAP's concerns, the Steering Committee suggested that the developer appropriately "tighten" the specifications, but noted that, given the importance of the measure, endorsement should not be contingent on these changes. The Committee once again recommended the measure.

- **Controlling high blood pressure: percentage of patients with last BP <140/90 mm Hg (CMS/NCQA)**

  Data source: EHRS, retrospective record review, prospective flowsheet

This intermediate outcome is an essential marker of quality in the management of hypertension and was thus deemed a necessary component of the measure set. Of note, four measures of blood pressure control were directly compared and contrasted; both the Hypertension TAP and Steering Committee preferred this previously endorsed measure, because its specifications include all hypertensive patients >18 years of age and a target BP of <140/90 mm Hg.

Measures Not Recommended

While agreeing that many of the remaining measures were both clinically and conceptually important, other candidate consensus standards ultimately were not recommended for accountability and public reporting. Generally, at least one of the following reasons applied to the Hypertension TAP's and Steering Committee's decision to exclude them:

- specifications were inadequately defined for use in public reporting;
- denominator populations were limited by either age or insurance status, effectively excluding a large percentage of otherwise eligible patients;
- excessively burdensome data collection would be required; and/or
- the process to be measured has not been demonstrated to improve clinical outcomes.

Research Recommendations

In addition to its review and evaluation of candidate consensus standards, the Committee recommended the general research priorities formulated and advanced by the Hypertension TAP. These research recommendations represent areas for further investigation and consensus.

Specifically, the development of performance measures was recommended in the following areas of hypertension care, in order to address their notable absence:

- safe monitoring of patients on pharmacotherapy;
- measures of efficiency; and
- patient-centered measures that assess understanding and preferences (i.e., surveys).

Finally, the Hypertension TAP recommended that because intrinsic sociodemographic variations between practices necessarily jeopardize fair and meaningful physician comparisons, some deference must be given to providers with disproportionately high numbers of complex or indigent patients. This has been done traditionally for outcomes measures through multivariate risk adjustments. With process measures, stratified comparisons of providers are recommended to achieve a similar "leveling of the playing field."

Priority Area: Medication Management

Initially, NQF staff identified nearly 300 potential candidate consensus standards for medication management. The Steering Committee agreed to adopt the following definition of medication management, which was derived from work conducted in 2004 by 11 pharmacy-related organizations:

> Medication management includes medication-related assessment, guideline adherence, administration and compliance, monitoring of therapeutic outcomes and related side effects, review and documentation, patient education, coordination of treatment, and drug interactions and polypharmacy.[10]

The area-specific screening criteria determined by the Committee for this priority area were as follows:

- Any candidate consensus standard that addresses medication management for all adult patients (e.g., documentation of medication list in the outpatient record) should be retained in the medication management priority area.
- Any candidate that is disease/condition specific, as evidenced by the denominator applying to a particular disease, diagnosis, or condition, should be reassigned to the TAP responsible for that condition.
- Any measure that addresses the management of a specific medication, or class of medications, should be retained (e.g., measures that address anticoagulation monitoring) unless it is disease specific (e.g., beta blocker treatment after a heart attack).
- Any candidate medication management measure that is not condition specific, but that addresses one or more vulnerable population (e.g., patients with dementia symptoms, elderly patients), should be retained.
- Measures that address a condition outside the 12 ambulatory care priority areas should be considered "out of scope" and excluded from further consideration. (For this reason, measures that address attention deficit disorder, migraine headaches, and HIV disease were excluded.)
- All measures that address areas for which NQF has a "competing" project (e.g., pediatric medication management, renal failure) should be excluded from consideration.

[10] This definition of medication therapy management services was adopted by the Steering Committee. It was derived from work conducted on July 27, 2004, by 11 pharmacy-related organizations (the Academy of Managed Care Pharmacy, the American Association of Colleges of Pharmacy, the American College of Apothecaries, the American College of Clinical Pharmacy, the American Society of Consultant Pharmacists, the American Pharmacists Association, the American Society of Health-System Pharmacists, the National Association of Boards of Pharmacy, the National Association of Chain Drug Stores, the National Community Pharmacists Association, and the National Council of State Pharmacy Association Executives). Available at www.aacp.org/Docs/MainNavigation/Resources/6308_MTMServicesDefinitionandProgramCriteria27-Jul-04.pdf. Last accessed July 2005.

Measures Recommended

Four of seven candidate consensus standards reviewed were recommended for the set.

- **Documentation of medication list in the outpatient record: percentage of patients having a medication list in the medical record (SCRIPT[11])**
- **Documentation of allergies and adverse reactions in the outpatient record: percentage of patients having documentation of allergies and adverse reactions in the medical record (SCRIPT[11])**

  Data source: retrospective record review

The Steering Committee concurred with the Medication Management TAP regarding the tremendous importance of these measures, recognizing them to be the fundamental aspects of quality and safety. While some Committee members viewed the measures as inadequately specified (e.g., no requirement for currency of lists, no specific definition of what constitutes a list), most members viewed these measures as relevant to all patients regardless of diagnosis or age.[12] For this reason, both measures were recommended for application to all populations.

Several comments were made noting that medication lists that are not complete, current, or accurate would render the measure meaningless. Upon further investigation regarding how the data were collected during the SCRIPT testing, it was revealed that during testing of the measures, the data abstraction "rules" allowed for the inclusion of any medication list or for the documentation of allergies and adverse reactions without further verification of currency, accuracy, or timeliness. Because the measure is in the public domain, the Steering Committee recommended including the information about the data abstraction with the measure, although it is not part of the specifications. The information is included in this commentary rather than with the measure specifications.

- **Therapeutic monitoring: annual monitoring for patients on persistent medications—percentage of patients 18 years of age and older who received at least a 180-days supply of medication therapy for the selected therapeutic agent and who received annual monitoring for the therapeutic agent (NCQA)**

  Data source: EHRS, retrospective record review, administrative

The Medication Management TAP viewed this measure as highly feasible (e.g., based on claims information), within the established scope, applicable across multiple drug classes, and potentially generalizable to drugs beyond those currently included in the numerator population. Despite the Medication Management TAP's concerns about applying this measure at the practice level (i.e., the necessity for additional specification regarding the length of time a patient has been followed by a particular physician/practice), the Committee considered it to be relevant and recommended the measure for all levels of analysis.

[11] The SCRIPT measures were developed by the Coalition for Quality in Medication Use, funded by the Centers for Medicare & Medicaid Services (CMS), and are in the public domain; however, the coalition is no longer operational, and the SCRIPT measures have not been implemented nor have they been updated (although selected SCRIPT measures are being reviewed under the CMS project to develop Part D measures). In the absence of an existing, official measure developer, the National Committee for Quality Assurance has agreed to adopt and maintain these measures if endorsed by NQF.

[12] These measures were developed under the CMS SCRIPT project. As a result, the study populations were disease specific (i.e., coronary artery disease, heart failure, atrial fibrillation) and age specific (i.e., 65 years old and older).

- **Drugs to be avoided in the elderly: percentage of patients 65 and older who 1) received at least one drug to be avoided in the elderly in the measurement year and 2) received at least two different drugs to be avoided in the elderly in the measurement year (NCQA)**

  Data source: EHRS, retrospective record review, administrative

The Medication Management TAP viewed this measure as consistent with current scientific evidence, because the list of medications to avoid reflects those that clinicians and researchers widely agree have negative effects. The measure specifications were viewed as comprehensive and inclusive of the most egregious drugs, reflecting a strong focus on safety. Members of both the Medication Management TAP and the Steering Committee favored this measure because it addresses overuse/misuse and polypharmacy, which are priorities for measurement within medication management.

Although both the Medication Management TAP and the Committee generally viewed this measure as favorable, they raised concerns about the application of this measure to small sample sizes, especially at the physician level (although geriatric practices should generate sufficient patients). The Committee also noted a concern for potential unintended consequences, as physicians who are appropriately using drugs that are identified as potentially harmful among the elderly could be penalized. Despite these concerns, the Committee recommended this measure at all levels of analysis because of its importance to healthcare quality.

Measures Not Recommended

The Committee did not recommend three other medication management measures for accountability (outpatient drug utilization, antibiotic utilization, and prothrombin test needed for patients on warfarin). Generally, at least one of the following reasons applied to the Medication Management TAP's and the Committee's decision to exclude them:

- the measure is not obviously directional;
- the measure does not have an explicit link to patient outcomes;
- negative, unintended consequences of reporting the measure would be counterproductive with respect to driving healthcare quality and safety;
- outstanding specification issues exist, including instances in which the specifications were not inclusive enough (e.g., home International Normalized Ratio tests are not included in prothrombin test measure, eligibility for denominator population based on pharmacy benefit status alone), were too inclusive (e.g., antibiotic utilization versus inappropriate antibiotic utilization), or were inconsistent with existing practice guidelines (e.g., measure that addresses prothrombin time monitoring for patients on warfarin within the past two months, while guidelines call for monitoring every month); and/or
- known documentation and upcoding errors exist (e.g., a single instance of a prescription being present in the patient's chart is not considered sufficiently reliable data upon which to assume compliance).

Research Recommendations

In addition to its review and evaluation of candidate consensus standards, the Committee recommended general research priorities formulated and advanced by the Medication Management TAP. These research recommendations represent areas for further investigation, development, and consensus:

- measures that address all aspects of medication management, defined as "medication-related assessment, guideline adherence, administration and compliance, monitoring of therapeutic outcomes and related side effects, review and documentation, patient education, coordination of treatment, and drug interactions and polypharmacy";[13]
- outcome measures;
- measures that address all of the NQF-endorsed aims—especially patient-centeredness, timeliness, efficiency, equity;
- measures that are cross-cutting and address all ambulatory care patients (e.g., pediatric patients) regardless of age, gender, race/ethnicity, and diagnosis;
- measures that address key priority areas for which medication management care quality has the greatest leverage:
  - drug interactions,
  - use of generics,
  - medication use and the elderly with specific focus on dosing and medication withdrawal,
  - transitions in care/care coordination,
  - therapy duplication (i.e., patients on multiple drugs for the same purpose),
  - pharmacological antagonists (i.e., patients on medications that have opposite effects), and
  - literacy, counseling, and consumer/patient education;
- measures that address polypharmacy, recognizing that commonly identified measures that address the number of medications can result in negative consequences if they are used to limit access to needed therapy;
- measures that address over-the-counter medications, including herbal remedies, and their consequences; and
- more rigorous validation studies of candidate consensus standards in this area, especially since these consensus standards will be used for pay-for-performance and other provider-based incentives.

The Committee and the Medication Management TAP also generally supported the policy, data and measurement, practice, and engagement recommendations outlined in NQF's publication *Improving Use of Prescription Medications: A National Action Plan*.[14]

[13] This definition was adopted by the Steering Committee. It was derived from work conducted by 11 pharmacy-related organizations (Academy of Managed Care Pharmacy, the American Association of Colleges of Pharmacy, the American College of Apothecaries, the American College of Clinical Pharmacy, the American Society of Consultant Pharmacists, the American Pharmacists Association, the American Society of Health-System Pharmacists, the National Association of Boards of Pharmacy, the National Association of Chain Drug Stores, the National Community Pharmacists Association and the National Council of State Pharmacy Association Executives) to define "medication therapy management services." Available at www.aacp.org/Docs/MainNavigation/Resources/6308_MTMServicesDefinitionandProgramCriteria27-Jul-04.pdf. Last accessed July 2005.

[14] NQF, *Improving Use of Prescription Medications: A National Action Plan – Workshop Proceedings,* Washington, DC: NQF; 2005.

Priority Area: Mental Health and Substance Use Disorders

The Behavioral Health-Substance Use Disorder (BH-SUD) TAP reviewed 43 measures from a candidate list of 61 potential consensus standards. (This included one measure that was previously endorsed as three separate measures, but was submitted with updated specifications as a single, three-part measure.) The TAP reviewed two measures relating to substance use disorders under a slightly modified scope; this work had been requested under a separate contract with the Substance Abuse and Mental Health Services Administration (SAMHSA) but, for efficiency, it was subsumed in this project. The 43 final candidate measures were identified after applying the Steering Committee's priority area scope criteria.

Candidate measures to be included were as follows:

- depression (screening, management, follow-up, suicide risk assessment, disease-specific depression screening);
- child and adult measures;
- alcohol screening and treatment;
- medication management and utilization;
- schizophrenia treatment;
- substance use disorders (limited);
- personality disorders, including anxiety and post-traumatic stress disorder;
- attention deficit disorders;
- measures addressing healthcare disparities; and
- VHA measures that could be applied to a broader population.

Candidate measures that were excluded:

- patient experience/satisfaction with behavioral health services (to be addressed elsewhere);
- tobacco use and dependence (addressed previously);
- domestic violence;
- homelessness; and
- Competency Assessment Instrument in Rehabilitation.

Recommended Measures

- **Major depressive disorder (MDD): diagnostic evaluation—percentage of patients with a diagnosis of MDD who met the DSM-IV™ criteria during the visit in which the new diagnosis or recurrent episode was identified (AMA PCPI)**

  Data source: medical record, EMR, CPT II Codes

The TAP and Steering Committee recommended this measure because it helps to improve the quality of the diagnostic process; also, it will help reduce both the under- and overuse of medications. The Steering Committee recognized the need for a standardized diagnostic tool and the need for additional specifications to address how to count patients who are transferred with a diagnosis of depression.

- **MDD: suicide risk assessment—percentage of patients who had a suicide risk assessment completed at each visit (AMA PCPI)**

  Data source: medical record, EMR, CPT-II Codes

The TAP and Steering Committee recognized that suicide is an important concern that should be addressed in the management of patients with depression. They noted that the "each visit" requirement may be burdensome and may not be clinically relevant; however, given its

importance, they recommended the measure.

- **New episode of depression: optimal practitioner contacts for medication management—percentage of patients who were diagnosed with a new episode of depression and treated with antidepressant medication, and who had at least three follow-up contacts with a practitioner during the 84-day (12-week) acute treatment phase**
- **Effective acute phase treatment: percentage of patients who were diagnosed with a new episode of depression, were treated with antidepressant medication, and remained on an antidepressant drug during the entire 84-day (12-week) acute treatment phase**
- **Effective continuation phase treatment: percentage of patients who were diagnosed with a new episode of depression and treated with antidepressant medication and remained on an antidepressant for at least 180 days (6 months) (NCQA)**

  Data source: administrative, medical record, EHR

This measure was previously endorsed as three separate measures. The TAP and Steering Committee voted to continue endorsement on the basis of its widespread use and its precision in evaluating the management of depression. The Steering Committee noted that performance may never and should not be at 100 percent for the medication subparts, and it recommended that NCQA develop some descriptive information regarding expected performance levels.

- **Diagnosis of attention deficit hyperactivity disorder (ADHD) in primary care for school-age children and adolescents: percentage of patients newly diagnosed with ADHD and on first-line medication whose medical record contains documentation of DSM-IV or Diagnostic and Statistical Manual for Primary Care (DSM-PC) criteria being addressed (ICSI)**

  Data source: medical record

The TAP and Steering Committee recommended this measure, and the measure that follows on ADHD management, on the basis that it improves diagnostic quality for patients with ADHD. The Steering Committee also recommended aligning the medication lists between ADHD measures from different developers.

- **Management of ADHD in primary care for school-age children and adolescents: percentage of patients diagnosed with ADHD and on first-line medication whose medical record contains documentation of a follow-up visit twice a year (ICSI)**

  Data source: medical record

As with the ADHD diagnosis measure, the TAP and Steering Committee recommended this measure on the basis that it encourages an appropriate level of clinical follow-up for patients on ongoing medication for ADHD. The Steering Committee also recommended aligning the medication lists between ADHD measures from different developers.

- **ADHD: follow-up care for children prescribed ADHD medication (NCQA)**
  - Initiation phase: percentage of children 6-12 years of age as of the index prescription episode start date with an ambulatory prescription dispensed for an ADHD medication and who had one follow-up visit with a practitioner with prescribing authority during the 30-day initiation phase
  - Continuation and maintenance (C&M) phase: percentage of children 6-12 years of age as of the index prescription episode start date with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at

least 210 days and who in addition to the visit in the initiation phase had at least 2 additional follow-up visits with a practitioner within 270 days (9 months) after the initiative phase ended

Data source: administrative data, medical record, EMR

The TAP and Steering Committee recommended this measure on the basis that it is in widespread use and establishes a specific periodicity for visits for patients with a new prescription for ADHD medication. The Steering Committee also recommended aligning the medication lists among ADHD measures from different developers.

- **Bipolar disorder and major depression: assessment for manic or hypomanic behaviors—percentage of patients treated for depression who were assessed, prior to treatment, for the presence of current and/or prior manic or hypomanic behaviors (STABLE)**
- **Bipolar disorder and major depression: appraisal for alcohol or chemical substance use—percentage of patients with depression or bipolar disorder with evidence of an initial assessment that includes an appraisal for alcohol or chemical substance use (STABLE)**
- **Bipolar disorder: appraisal for risk of suicide—percentage of patients diagnosed with bipolar disorder with evidence of an initial assessment that includes an appraisal for risk of suicide (STABLE)**
- **Bipolar disorder: level-of-function evaluation—percentage of patients treated for bipolar disorder with evidence of level-of-function evaluation at the time of the initial assessment and again within 12 weeks of initiating treatment (STABLE)**
- **Bipolar disorder: assessment for diabetes—percentage of patients treated for bipolar disorder who are assessed for diabetes within 16 weeks after initiating treatment with an atypical antipsychotic agent (STABLE)**

The TAP and Steering Committee recognized that these measures are put forward by a new umbrella collaborative, the STABLE initiative, and that they have been specifically tested and validated for their intended use. The Steering Committee and TAP believed that the measures are an important step forward in improving quality of care for individuals with bipolar disorder and that they include the necessary diagnostic, management, and follow-up processes. The Steering Committee noted that one measure addresses a safety issue relating to the risk of hypoglycemia, which is an important monitoring function. It also noted that while assessment for hyperlipidemia is important, the guideline is not absolutely clear on timing, and the risk factor is longer term; therefore, that measure is less ready to be implemented as an accountability measure at this time. The Steering Committee recommended that STABLE and AMA collaborate on measures relating to suicide assessment in order to identify the appropriate frequency for individuals with depression or bipolar disorder.

- **Initiation and engagement of alcohol and other drug (AOD) dependence treatment**
  - Percentage of adults aged 18 and over diagnosed with AOD abuse or dependence and receiving a related service who initiate treatment (NCQA-WC)
  - Assessment of the degree to which members engage in treatment with two additional AOD treatments within 30 days after initiating treatment (NCQA-WC)

  Data source: administrative, medical record, electronic health record

As noted, these measures were reviewed as a paired measure under a contract funded by SAMHSA. The TAP recommended it for use at the health plan level, noting that data access would limit the validity of the measures for data extracted from medical records. Specifically, the TAP noted that a practitioner would not have documentation of hospital discharge information and that community treatment/support groups may not be documented in the physician record for every encounter. The Steering Committee made no recommendation on level of care in recommending endorsement of the measure, noting that it is in widespread use and is an indicator of initiation and engagement.

Measures Not Recommended

Several measures were recommended by the TAP, but not by the Steering Committee:

- **Percentage of patients who were screened annually for depression in primary care setting (VHA/CMS)**

  paired with

- **Percentage of patients with a positive screen for depression with a follow-up assessment or referral (VHA/CMS)**

The TAP recommended these measures because of the importance of screening and the specifications that note the use of a validated screening tool, followed by further evaluation of a positive screen. The Steering Committee strongly supported the concept of screening for depression. The Steering Committee noted that the U.S. Preventive Services Task Force (USPSTF) recommendation does not have a specific frequency associated with it and also is conditional upon the availability of services for follow-up of a positive screen. The Committee also noted that application of this measure pair to the general population may place a high burden on the practitioners, since it would require an annual visit in order to conduct the annual screen. The Committee noted that there is confusion among primary care providers regarding the appropriate tools for initial screening; a brief screener should be included on the list, such as the Patient Health Questionnaire (PHQ) 2. Because of the importance of the issue, representatives of VHA, NCQA, and AMA agreed to work together to develop a measure that could be implemented in the private sector.

- **Continuation of antidepressant medication: percentage of patients with Major Depressive Disorder (MDD) who were continued on medication for a minimum of 16 weeks following remission of symptoms (AMA PCPI)**

The TAP initially recommended this measure to promote the clinical concept of tying medication continuation to "remission." However, the Steering Committee based its decision not to recommend on the difficulty of identifying remission, the lack of documentation of remission, and difficulty interpreting the intent of the measure specifications, particularly with regard to discontinuation of medication.

- **Major depression in adults in primary care: percentage of patients whose symptoms are reassessed by the use of a quantitative symptom assessment tool (such as Patient Health Questionnaire [PHQ-9]) within three months of initiating treatment (ICSI)**
- **Major depression in adults in primary care: percentage of patients whose results on two quantitative symptom assessment tools (such as Patient Health Questionnaire [PHQ-9]) decrease by 50 percent within six months of initiating treatment (ICSI)**

- **Major depression in adults in primary care: percentage of patients whose results on two Patient Health Questionnaires (PHQ-9s) score less than five or similar testing (Hamilton Depression Scale 7 or less) within six months of initiating treatment (ICSI)**

The TAP strongly recommended the second measure as the only measure to address depression outcome monitoring using a standard measurement tool. The TAP noted that this series of measures relies on the use of validated, quantitative assessment tools, which add to the value and clinical quality of the assessments. The Steering Committee did not recommend the measures on the basis that the specifications do not provide enough specificity regarding the "validated tools." Furthermore, Committee members thought that in a general population the measure could have unintended consequences of reducing assessments, since the measure captures only the denominator of patients who were initially assessed with a validated tool. They recommended modifying the denominators as needed to include all patients with depression.

- **Alcohol screening: percent of patients annually screened for alcohol misuse (NEXUS clinics cohort) (VHA)**

The Steering Committee recommended against this measure because it was perceived to be burdensome as an "all population" and annual measure. USPSTF recommends screening, but makes no recommendation on the frequency of screening.

- **Schizophrenia: percent of patients with a Global Assessment of Functioning (GAF) score less than or equal to 40 and no contact with a case manager during the past three months (Young)**

The Steering Committee recognized the lack of measures to evaluate quality of care for patients with schizophrenia. It noted, however, that case management services may not be universally available to patients; it further noted that the GAF tool is valid for use by specialty practitioners, but may not be a valid indicator of patient function status when applied by non-specialists.

Both the TAP and Steering Committee recommended against several measures for a variety of reasons, including lack of evidence base for a measure, lack of correlation between the measure and performance or outcomes, pure utilization measures, inadequate specifications, or lack of testing/validation of the data source.

The Steering Committee considered a measure, *Identification of WC/HEDIS identification measure for alcohol and substance use disorders* (WC/HEDIS), as a quality measure at the system level. In response to the reviewer's comments, the Steering Committee decided against recommending the measure because it is exclusively a population-based utilization measure that is not thought to be a measure of quality or performance for provider groups. Also, the measure included both inpatient and outpatient encounters and is thus not a measure of ambulatory care.

Research Recommendations

Steering Committee members noted the urgent need for measures that address the spectrum of depression management, from screening through management, using validated tools for assessment and outcome measurement. They noted that the AMA PCPI, ICSI, and NCQA measures each address some elements, but do not fit together in terms of tools and approach. The Steering Committee recommended developing sequential measures that incorporate the best elements and ideas from the measures reviewed and that include the largest denominator possible.

It was determined that a number of issues warrant additional research in order to facilitate stronger performance measurement in the areas of behavioral health and substance use conditions, including the following:

- Screening for depression and alcohol misuse in primary care: what instruments are acceptable in terms of scientific properties and burden? Is annual screening in the general primary care population the right frequency?
- What are the differences in psychiatric practice for pediatric patients versus adults (that impact on performance measurement), and what would be the effect of measurement on access to care for children? For example, the TAP was concerned that measurement could prompt providers to refer children to pediatric specialists, which may reduce access to care, given the limited supply and distribution of specialists.
- Should measures of adverse effects associated with atypical antipsychotics be applied across diagnostic conditions? Current measures are limited to bipolar disorder.
- What crosswalk or mapping process could be developed by VHA to facilitate translation of measures from VHA terminology into a general population use?
- Clinically, develop clear indicators for terms such as "remission" that would facilitate the measurement process.

Priority Area: Obesity

A limited number of candidate consensus standards were identified. The Committee did not establish any additional screening criteria to narrow the focus of evaluation.

Over the course of their discussions on specific measures, TAP members raised the following general issues:

- Assessment of height and weight is vital and should be used when assessing obesity status in adults because this information is easily obtained. The TAP noted that height has to be assessed only once in non-elderly adults because it remains relatively constant.
- Holding physicians accountable for changes in a patient's weight is problematic, but an accountability measure related to change in weight was believed by some to be reasonable to explore as a possibility. For such a measure, however, it will be especially important to risk adjust and demographically adjust for differences in the patient population.
- Systems that allow body mass index (BMI) to be calculated more efficiently should be more widely available and affordable.

- Use of BMI to determine obesity is the best way for many patients, but it is not the only way. More research is needed to assess the validity of BMI compared to other methods of assessing obesity.

Measures Recommended

The Obesity TAP recommended 1 measure, and the Steering Committee recommended 2 of 13 candidate consensus standards:

- **Percentage of adults with BMI documentation in the past 24 months (NYC-DHMH)**

  Data source: medical record

The Obesity TAP did not recommend this measure because BMI may not accurately reflect a patient's obesity status (in muscular persons) and because BMI can overestimate body fat (in the elderly). The Steering Committee felt that the logic of this measure was very important and that implementation of this measure would be useful to physicians. The Steering Committee also noted that the National Heart, Lung, and Blood Institute guidelines and the USPSTF recommend the use of BMI to assess obesity status.

- **Percentage of children 2 to 18 years of age whose weight is classified based on BMI percentile for age and gender (NICHQ)**

  Data source: medical record

The Steering Committee agreed with the Obesity TAP that this measure should be recommended for accountability and public reporting. The Obesity TAP noted that physicians regularly determine the height and weight for children and that therefore implementation would be feasible. In addition, the BMI percentile is a standard tool used to assess obesity in children. As submitted, the measure specifications included children ages 2 to 12. The Steering Committee noted that evidence supporting the effectiveness of this measure among adolescents is weak; however, it recommended to the developer that the age range be changed to 2 to 18 years of age. The measure developer agreed to change the age range to 2 to 18 years of age.

Measures Not Recommended

- **Documented offer of counseling and behavioral interventions to promote weight loss for individuals with BMI >30 (NYC-DHMH)**

While the Steering Committee ultimately agreed with the Obesity TAP's recommendation against this measure, Steering Committee members noted that counseling and behavioral interventions to promote weight loss in adults represents a fundamental issue. The Steering Committee also noted that this measure has poor clinical face validity and that no evidence exists that brief counseling benefits patients. Most Committee members noted that this is an imperfect measure that is sparsely specified; it also was felt that physician counseling has little impact.

The Committee did not recommend 11 other obesity measures for accountability and public reporting (physical activity [adults], discussion of weight management strategies, proportion of adults who are at a healthy weight, proportion of adults who are obese, proportion of children at risk for overweight, proportion of overweight children, physical activity and nutrition inquiry [children], management plan, follow-up, and patient and family satisfaction). The Committee concurred with the Obesity TAP's rationale for excluding the measures for at least one of the following reasons:

- the measure was poorly specified;

- a community-level measure was inappropriate as a performance measure for public reporting, since it does not indicate an accountable body;
- the measure was not tested;
- there is no scientific evidence to support the clinical effectiveness of the measure;
- perverse incentives of reporting the measure may cause reluctance in providing quality healthcare; and/or
- the measure was not within the scope of the obesity priority area.

Research Recommendations

In addition to its review and evaluation of candidate consensus standards, the Committee recommended the general research priorities formulated and advanced by the Obesity TAP. The Steering Committee and Obesity TAP members agreed that measures of clinical care for obesity should be developed to ensure that three critical components of care are addressed: 1) assessment, 2) management plan, and 3) implementation of the plan.

These research recommendations represent areas for future refinement and development of obesity measures:

- assess the impact of screening on behavior changes and weight loss;
- screen obese patients for comorbidities (i.e., high blood pressure, heart disease, diabetes, sleep disturbances);
- screen children for parental obesity/family history, excessive weight gain, screen time (e.g., television viewing, video viewing and games, and leisure computer time), minutes of physical activity, intake of discretionary calories (i.e., sugar-sweetened beverages), and sleep duration at age three years;
- assess weight loss or maintenance of current weight;
- document height and weight;
- create composite measures that assess physical activity, nutrition, and sedentary lifestyle in children and adults and clearly define each one.

Other areas deserving of more research include the following:

- develop incentives for coding to encourage measure utilization; and
- examine the impact of restaurants, schools, and employers on obesity, and encourage meaningful action by these key societal entities that can influence patient weight by virtue of their access to patients and their at least partial control over food availability (and thus intake).

Priority Area: Prenatal Care

Following is the area-specific screening criterion determined by the Steering Committee for the prenatal care priority area:

- Candidate measures focusing on community rather than provider function are beyond the scope of the priority area.

Measures Recommended

Four of the 16 candidate measures were recommended for the set:

- **Screening for Human Immunodeficiency Virus (HIV): percentage of patients who gave birth during a 12-month period who were screened for HIV infection during the first or second prenatal care visit (AMA PCPI)**

Data source: EHRS, retrospective paper records, prospective flowsheet, administrative claims data*

Endorsed during Phase 2, this measure was again recommended by both the Prenatal TAP and the Steering Committee. They believed that HIV screening is an important component of prenatal testing that can have profound individual and public health repercussions when overlooked. The Committee also noted that despite the existence of effective vertical transmission prevention protocols, current U.S. prenatal testing rates are estimated to be as low as 25 percent in some areas. The TAP and Steering Committee agreed that continued endorsement and implementation of this measure will emphasize providers' onus to counsel patients effectively and will ultimately improve adherence to established HIV screening guidelines.

- **Anti-D immune globulin: percentage of D-negative, unsensitized patients who gave birth during a 12-month period who received anti-D immune globulin at 26-30 weeks gestation (AMA PCPI)**

  Data source: EHRS, retrospective paper records, prospective flowsheet, administrative claims data*

Endorsed during Phase 2, this measure was again recommended by both the Prenatal TAP and the Steering Committee. They believed that although the importance of appropriate prenatal administration of anti-D immune globulin in cases of D-incompatibility is well established, evidence suggests that provider performance remains less than optimal, particularly following invasive obstetrical procedures (e.g., amniocentesis) and obstetrical complications (e.g., ectopic pregnancy, ante-partum hemorrhage). Both the TAP and Steering Committee agreed that continued endorsement and implementation of this measure will serve to focus provider attention on these important and often overlooked treatment opportunities and will ultimately improve adherence to established guidelines.

- **Blood groups (ABO), D (Rh) type: percentage of patients who gave birth during a 12-month period who had a determination of blood group (ABO) and D (Rh) type by the second prenatal care visit**

  Data source: EHRS, retrospective paper records, prospective flowsheet, administrative claims data*

This measure was considered but not recommended by either the TAP or the Steering Committee during Phase 2, because there was thought to be little room for improvement in this aspect of prenatal care. However, despite some continued debate, the TAP and Committee concurred that provider failure to identify D incompatibility through determination of blood type is intolerable under any circumstances and, while admittedly a rare occurrence, the profound morbidity and mortality resulting from such an oversight is sufficient cause to recommend endorsement of this measure.

- **Blood group antibody testing: percentage of patients who gave birth during a 12-month period who were screened for blood group antibodies during the first or second prenatal care visit**

  Data source: EHRS, retrospective paper records, prospective flowsheet, administrative claims data*

As with the above measure, this candidate was considered but not recommended in Phase 2, as provider performance was thought to be nearly optimal in this aspect of prenatal care. Again, however, the

* CPT Category II Codes in development.

TAP and Steering Committee agreed that any provider failure in this very basic component of maternal-fetal medicine is intolerable, given the profundity of the consequences of such an oversight. This measure was thus recommended for endorsement.

Measures Not Recommended

While many of the remaining measures were acknowledged as both clinically and conceptually important, none was ultimately recommended for endorsement as a publicly reportable consensus standard. Generally, at least one of the following reasons applied to the Prenatal TAP's and Steering Committee's decisions to exclude them:

- the specifications were inadequately defined for use in public reporting;
- some measures were deemed to be inappropriate for performance measurement at the individual, group, or provider level;
- the processes to be measured have not been demonstrated to improve clinical outcomes;
- some measures were thought to have significant potential for unintended consequences with endorsement; and/or
- data collection for many of the measures would be excessively burdensome.

Research Recommendations

In addition to its review and evaluation of candidate measures, the Committee recommended the general research priorities formulated and advanced by the Prenatal TAP. These research recommendations represent areas for further investigation and consensus.

- Due to a notable absence, the development of performance measures in preconception care and genetic screening was strongly and unanimously recommended.
- Research was recommended on how the bundling of related measures affects provider compliance and health outcomes, as well as on how the structure of plan design affects patient eligibility for practices being measured.
- Lack of provider access to data at time of delivery has become an increasingly prevalent problem that can seriously jeopardize patient care. Therefore, research into potential solutions was recommended.

Priority Area: Prevention, Immunization, and Screening

The specific criteria determined by the Committee for this priority area were as follows:

- Primary prevention and screening measures should be evaluated, including activities that are carried out to avert disease or to identify disease at its earliest stage. Counseling and immunization constitute primary preventive services. Screening includes mammography, colorectal cancer screening, and cervical cancer screening.
- All tobacco screening and cessation measures were reviewed by the Prevention TAP, regardless of whether the measures were specified for all populations or a disease-specific population.

- Screening measures that had no obvious clinical home, but that could identify a preventable illness or injury, were included (e.g., fall risk screening and urinary incontinence screening).
- For a few measures, if the screening measure was associated with a closely related "management" measure, both were included. For example, measures of osteoporosis and urinary incontinence follow-up after screening were included.
- Measures specifically related to the management of a disease were excluded, even if the measures were related to processes designed to prevent complications. Examples of such exclusions include ongoing monitoring of blood pressure or lipid levels for individuals with hypertension or heart disease.
- Prenatal and obstetric measures were excluded.
- Disease-specific pediatric measures were excluded. Pediatric measures were included if they related to a primary preventive issue such as immunization, well-child visits, or lead screening.
- All of the community-level AHRQ PQIs that were deferred from Phase 2 were considered by the Prevention TAP, regardless of clinical area.

The Prevention TAP evaluated 107 measures in 5 areas: tobacco related; general prevention; immunization; screening; and community-level PQIs. The Prevention TAP made specific recommendations for "level of use" for the measures based on an analysis of technical properties of each measure if applied to individual physicians, groups, facilities, and health plans. As noted above, the Steering Committee decided not to review level-of-use recommendations, but rather to recommend measures with the assumption that they would be applied to settings in which they would be technically valid.

The Prevention TAP recommended 32 measures to the Steering Committee. The Steering Committee ultimately recommended that 21 measures should move forward. With two exceptions, the Steering Committee discussed in detail only the measures recommended by the Prevention TAP, measures previously endorsed, or measures forwarded to the Committee with no recommendation by the Prevention TAP.

Tobacco-Related Measures Recommended

The Prevention TAP reviewed 21 general and disease-specific measures related to tobacco use assessment and cessation counseling. The Steering Committee recommended six measures or measure pairs. Several reviewers noted that the large number of tobacco measures are overwhelming, confusing, and redundant. Additionally, reviewers suggested that separate measures for specific populations, such as coronary artery disease (CAD) and COPD, are unnecessary, because these patients are captured in the measures for the general population.

Paired Measures

- **Tobacco use: prevention for infants, children, and adolescents—percentage of patients' charts showing either that there is no tobacco use/exposure or (if a user) that the current use was documented at the most recent clinic visit (ICSI)**

- **Tobacco use: cessation for infants, children, and adolescents—percentage of patients with documented tobacco use or exposure at the latest visit who also have documentation that their cessation interest was assessed or that they received advice to quit (ICSI)**

  Data source: medical record

The Prevention TAP recommended these measures, derived from ICSI tobacco use and cessation clinical practice guideline, because they were well specified and are in widespread use at the group practice level. The Prevention TAP noted that the measures address a clinical priority area of tobacco use assessment and cessation counseling for children and adolescents and address the role of caregivers in the pediatric population. The Prevention TAP also noted, and the Steering Committee agreed, that the measures may be challenging to providers because they look for activity at the "latest visit" rather than annually or at some other frequency. Nevertheless, the Prevention TAP and Steering Committee agreed that the importance of the measure and the population outweighed this consideration.

- **Smoking cessation: medical assistance (NCQA)**

  Data source: patient survey

The Prevention TAP recommended this previously endorsed measure, but noted that it was not clear how the survey would be administered at the provider level. The Prevention TAP also noted that it may be challenging to identify a statistically meaningful sample at the provider or small group level and that there may be difficulty assigning physician attribution if the measure is used at the plan level. The Steering Committee agreed that this widely used measure should be recommended.

Paired Measures

- **Tobacco use assessment: percentage of patients who were queried about tobacco use one or more times during the two-year measurement period (AMA PCPI)**
- **Tobacco cessation intervention: percentage of patients identified as tobacco users who received cessation intervention during the two-year measurement period (AMA PCPI)**

  Data source: EHRS, retrospective record review, prospective flowsheet

For technical reasons, the Prevention TAP recommended withdrawing endorsement from this previously endorsed measure pair. The Prevention TAP believed that it sets a low bar, requiring only one query every two years, and it further noted a lack of specification in defining "cessation intervention." The Steering Committee disagreed with the Prevention TAP's recommendation, noting that the measure is endorsed and therefore may be in use.

The Prevention TAP recommended that the tobacco measures (AMA PCPI) previously endorsed in Phase 2 be replaced. The Prevention TAP noted that for disease-specific measures (such as tobacco cessation counseling for patients with COPD and CAD), the sample size available for individual provider evaluation may not be statistically valid, and it also noted that for these chronically ill patients, an annual requirement is a low performance bar. The Prevention TAP recommended that the ICSI measures relating to "last visit" would be more applicable to this population. The Steering Committee disagreed with the TAP's measure and stated that all of the tobacco measures evaluate different aspects of tobacco use that are important and that there was insufficient reason to withdraw endorsement for four previously endorsed

measures. (As noted above, the Committee recommended that the ICSI measures be endorsed in addition to these measures.)

Tobacco Use Measures Not Recommended

A tobacco use measure developed by VHA was not recommended by the Prevention TAP because the populations of interest to the VHA are not comparable to the general population. The measure was considered to be very strong for use in the VHA environment with the VHA-specified cohorts, but it would be challenging to apply to other settings or populations. Due to the perceived difficulty generalizing the VHA measures to other populations and settings, the Steering Committee did not recommend any VHA measures for the purposes of this project.[15]

Paired Measures

- **Tobacco use: tobacco use prevention and cessation for adults and mature adolescents—percentage of patients' charts that either show that there is no tobacco use/exposure or (if user) that the current use was documented at the most recent clinician visit (ICSI)**
- **Tobacco use: tobacco use prevention and cessation for adults and mature adolescents—Percentage of patients with documented tobacco use or exposure at the latest visit who also have documentation that their cessation interest was assessed or that they received advice to quit (ICSI)**

  Data source: medical record

Prevention TAP members recommended this measure pair, because it is well specified and is in use at the group level; they recommended further definition, however, of the term "mature adolescent." The measure developer noted that the formal definition of "mature adolescent"in medical practice refers to a set of physical maturation criteria and some cognitive maturity criteria; however, several ICSI work groups use the term more loosely to identify adolescents who may be mature based on the opinion of the provider, without performing and/or meeting the formal criteria. The measure developer does not anticipate that the definition will be resolved soon.

The Prevention TAP noted that the measure pair is similar to the tobacco use and assessment pair (American Medical Association [AMA] Physician Consortium for Performance Improvement [PCPI]) that is already endorsed and that may be in more widespread use. The Steering Committee recommended the measure, but recommended against replacing the AMA PCPI measure, noting that the AMA PCPI measure may be in use already and is specified for individual physician office use.

- **Tobacco use: Chronic Obstructive Pulmonary Disease (COPD)—percentage of patients with COPD whose physician inquired about smoking cessation (if patient a smoker) at every visit (ICSI)**

  Data source: medical record and administrative

The Prevention TAP recommended this group-level measure from ICSI, which measures tobacco cessation activity at "every visit;" this is in contrast to other candidate measures that require only one visit per year. The Prevention TAP noted

[15] The Prevention TAP commended measures developed by the Veterans Health Administration (VHA) for their precise specification and clinical importance. Prevention TAP members also noted that in a number of measures, VHA has specifically addressed the unique and important population of individuals who are receiving mental health services.

that COPD is well defined in the ICSI measure compared to similar measures. While it also set a "high bar," the Prevention TAP felt that the "last visit" specification is appropriate because of the importance of tobacco cessation for patients with COPD. The Prevention TAP also believed that the ICSI measure was less burdensome to score than an annual measure, which requires a longer look back. The Steering Committee concurred with the Prevention TAP's recommendations.

General Prevention Measures Recommended

The Prevention TAP reviewed 13 general prevention measures and recommended 6 of them, including 1 previously endorsed measure. The Steering Committee accepted only one of the six recommendations. The Steering Committee also recommended an additional measure on which there was no consensus recommendation by the Prevention TAP (Physical Activity in Older Adults).

- **Physical activity in older adults (NCQA)**

  Data source: patient survey

Prevention TAP members did not provide a consensus recommendation on this measure. They noted that it is in use, but they were concerned about a lack of adjustment for comorbidities or other risk factors that may affect the appropriateness or necessity of counseling. They also noted that the measure has not been tested at the provider level. The Steering Committee disagreed with the Prevention TAP's position, noting that while this survey measure may be difficult for accountability, counseling older adults regarding their physical activity is a sound recommendation. The Steering Committee also noted that this measure is in alignment with the USPSTF recommendation that all people should be counseled regarding physical activity.

- **Urinary incontinence management in older adults (NCQA)**

  Data source: patient survey

The Prevention TAP recommended this previously endorsed measure, suggesting that it is an important topic and that the measure is in widespread use. The Prevention TAP also noted that a very large sample size would be needed to get a statistically significant response rate at the individual provider level. It further noted that more information is needed on surveying and sampling for use at group and provider levels. The Prevention TAP also remarked that there could be an issue with provider accountability attribution if a survey measure is used. The Steering Committee agreed with the Prevention TAP's recommendation to move the recommendation forward.

General Prevention Measures Not Recommended

The Prevention TAP recommended a number of utilization measures (well-care visits-adolescents; well-child visits in the first 15 months of life; and well-child visits in the third, fourth, fifth, and sixth years of life) on the basis of technical strengths, although it noted that utilization is an insensitive proxy for quality and that the value of utilization measures is in assessing trends over time. The Steering Committee did not recommend any of the utilization measures, however, as they specifically

were developed for evaluating utilization at the health plan level and could not be generalized.

The Prevention TAP recommended two early and periodic screening, diagnostic, and treatment (EPSDT) measures as an important indicator of delivery of federally mandated EPSDT services for underserved populations. The Prevention TAP noted that the measure pair is well specified, with a clear cohort and data sources. The Steering Committee did not recommend the measure pair, however, largely because it could not be generalized beyond Medicaid HMO plans, and the Committee felt that the focus of this project should be at the physician practice level and not the plan level.

Screening Measures Recommended

The Prevention TAP reviewed 32 screening measures and recommended 9 of them based on technical merits, including 3 previously endorsed measures. The Steering Committee recommended that only six measures move forward.

- **Breast cancer screening (NCQA)**
- **Cervical cancer screening (NCQA)**

  Data source: administrative, medical record review, hybrid

The Prevention TAP recommended these measures, but noted that the measures are specified in two ways, with two options for data collection. It noted that differences in specifications may result in reported performance that is not directly comparable among physician practices. For example, the medical record specifications are for "users," while administrative data specifications are for "enrollees" with or without a recent visit. The Prevention TAP also noted that these previously endorsed measures are in widespread use. The Steering Committee concurred with the Prevention TAP's recommendation.

- **Chlamydia screening in women (NCQA)**

  Data source: EHRS, administrative, medical record review, hybrid

The Prevention TAP recommended this measure and made some recommendations on the use inclusion and exclusion criteria. The Committee agreed with the Prevention TAP that this measure should be recommended as an extremely important public health measure. In addition, it noted that this measure also serves as an indicator for other sexually transmitted diseases. The Steering Committee further noted that oral contraceptive use alone may not be an appropriate proxy for sexually active females.

- **Colorectal cancer screening (NCQA)**

  Data source: EHRS, administrative, medical record review, hybrid

Prevention TAP members noted that this is an endorsed measure that is already in use. They concluded that the measure is well specified for the plan level, however, it is not clearly specified for use at the provider level, as attribution issues have not been clearly addressed. The Prevention TAP noted that the measures allows for two distinct data collection methods—administrative data and medical record abstraction—which may have different results. Some Steering Committee members noted that record abstraction may perform better than administrative data.

- **Fall risk management in older adults (NCQA)**
- **Osteoporosis testing in older women (NCQA)**

  Data source: patient survey

The Prevention TAP recommended these two screening measures, but noted that implementation at the group or provider level might be problematic due to sample size and attribution; no data were presented on performance of the measure at group or individual provider levels. The Prevention TAP further noted that there is no existing survey instrument or methodology for using the measure at the provider level. The Steering Committee discussed the fact that although the measures are currently captured in the Medicare Health Outcomes Survey, the questions could be attached to any survey instrument that is implemented at the physician level; the Steering Committee considered this to be an implementation issue.

Screening Measures Not Recommended

In addition to one VHA measure not recommended for reasons already noted, two Medicaid managed care measures (blood lead toxicity screening and child blood lead screening) recommended by the Prevention TAP were not advanced by the Steering Committee.

The Prevention TAP recommended these measures as a tool for evaluating the use of a service mandated under Medicaid regulation. It noted that the Centers for Disease Control and Prevention recommends blood lead screening for all Medicaid-eligible children, although other forms of screening may be used for lower-risk populations. As specified for Medicaid enrollees, the measure was considered by the Prevention TAP to be appropriate and well specified. Committee members did not recommend the measure on the basis that they perceived it could not be generalized to the entire population and is a plan-level measure.

Immunization Measures Recommended

The Prevention TAP reviewed 27 immunization measures, including 4 endorsed measures, and recommended 9 measures. One additional endorsed measure was identified and recommended by the Steering Committee in the absence of review by the Prevention TAP. In total, the Steering Committee recommended seven immunization measures, five of which are already endorsed.

- **Childhood immunization status (NCQA)**

  Data source: EHRS, administrative, medical record review, hybrid

The Prevention TAP recommended this endorsed measure for group and health plan-level accountability. It commented that difficulty of data collection for individual practitioners and lack of testing at this level are concerns and that missing data may be a problem at the provider level, since patients seek immunizations from many sources. The Prevention TAP also noted that the measure contains different specifications and sampling for different data source approaches, which may affect comparability of results across the two sources. The Steering Committee concurred with the Prevention TAP's recommendation, except it disagreed that it should be limited to the group and health plan levels, instead stating this should be left to the implementing entity.

- **Flu shots for adults ages 50-64 (NCQA)**

  Data source: survey

- **Flu shots for older adults (CMS/NCQA)**

  Data source: patient survey

The Prevention TAP noted that these measures are well specified and in use at the plan level, but that information on performance of the measures for assessing group or provider accountability was not submitted for review. The Prevention TAP was concerned about the lack of a survey vehicle for collecting data at levels other than the health plan level. The Steering Committee noted that the measures are in widespread use.

- **Influenza immunization (AMA PCPI)**

  Data source: EHRS, retrospective record review, prospective flowsheet

The Prevention TAP recommended this endorsed measure. It believed that sample size issues and look-back would not affect this measure to the extent that they do for measures specified for population subsets such as individuals with COPD or bacterial pneumonia. The Steering Committee concurred with the Prevention TAP's recommendation.

- **Pneumococcal vaccine needed for all adults aged 65 years or older (RHI)**

  Data source: administrative

The Steering Committee agreed with the Prevention TAP that the measure takes a unique and clever approach of requiring the vaccine within two years after patient eligibility and that it may encourage providers to deliver the vaccine earlier to eligible patients. The Prevention TAP and Steering Committee noted that the measure also avoids challenges in reviewing data in a long look-back period. The Steering Committee noted that this makes clinical and public health sense. The Committee noted, however, as with other measures, the provider attribution algorithm will be a key to ensuring accurate measurement of this indicator.

- **Pneumococcal vaccination status for older adults (NCQA)**

  Data source: patient survey

- **Pneumococcal vaccination status for older adults (NCQA)**

  Data source: administrative

The Prevention TAP noted challenges with both survey and administrative data approaches to assessing pneumococcal immunization rates, especially since the vaccine is given infrequently and is often confused by patients with the influenza vaccine. It noted, however, that both measures are in use and that the CMS/NCQA measure is endorsed. The Prevention TAP recommended additional testing of the measures at the group and provider levels. The Steering Committee recommended both measures, on the premise that they offer complementary approaches to a challenging measurement topic.

Immunization Measures Not Recommended

In addition to two VHA measures, the Steering Committee did not recommend the ICSI childhood immunization measure, which it believed to be redundant with measures that already have been endorsed. The Steering Committee also discussed an NCQA adolescent immunization measure and concurred with the Prevention TAP that the measure had technical problems.

Community-Level Prevention Quality Indicators (PQIs)

The Prevention TAP reviewed 13 AHRQ PQIs, including 3 community-level PQIs that were recently endorsed as part of NQF's diabetes 2005 update. The Steering Committee agreed with the Prevention TAP's recommendation not to recommend the PQIs for the purpose of accountability and public reporting of ambulatory care performance. The Prevention TAP concluded that the PQIs do not differentiate between clinical quality problems and access barriers, which makes them potentially useful as population health status measures, but not as ambulatory care quality measures. The Prevention TAP recognized that the measures could provide a useful view of areas in which resources may not be in effective use. Additional weaknesses include the following:

- There is little information on the source of the problem for differences in communities.
- Attribution of accountability would not be possible from the measure results.
- The measures may be influenced by population or environmental differences (including prevalence rates). This limits the appropriateness of using the measures for comparative purposes of quality. The measure denominators are specified as "all population," when they would be more appropriately specified with a denominator of individuals with the disease.
- The measures are not directional—they address utilization, but the "correct rate" and whether it should be higher or lower is unknown.
- Statistical validity of the measures may be affected by the size of the system, and a minimum sample size should be recommended. The Prevention TAP noted that the systems are not defined and could be applied in a number of different systems ranging from communities to health plans; additional definition of systems is needed from the developer.
- The Prevention TAP was concerned that the measures could be misunderstood as being indicators of inappropriate hospital care or hospital admissions, rather than inadequate outpatient management prior to admission.

Research Recommendations

In addition to its review and evaluation of candidate consensus standards, the Committee recommended the general research priorities formulated and advanced by the Prevention TAP. These research recommendations, of which several are cross-cutting, represent areas for further investigation and consensus.

- Additional research is needed for measures requiring a "look-back" period to ensure increased consistency in look-back periods specified for vaccinations attributable to a provider. Both administrative data and patient recall sources have strengths and weaknesses that should be compared and evaluated.
- A comprehensive pediatric lead screening measure consistent with guidelines, that does not rely solely on blood lead testing, should be developed.
- A comprehensive child health measure should be developed that addresses well-child visits, adolescent care visits, and EPSDT guidelines for underserved populations.

Reviewers suggested additional research recommendations addressing:

- the use of ambulatory care performance measures in the emergency department setting; and
- issues of implementation at the physician practice level, including attribution and sampling.

Priority Area: Care Coordination

The Care Coordination TAP and the Steering Committee initially reviewed an NQF staff paper that describes the current approaches to defining and measuring care coordination.[16] The Steering Committee established several screening criteria to identify measures of care coordination:

- utilization measures should not be included;
- access measures should not be included;
- efficiency measures should not be included; and
- even though patient experience/satisfaction with care survey instruments may include questions pertaining to coordination of care, all patient survey instruments should be evaluated together by the Patient Experience with Care TAP in spring 2006.

After reviewing measures identified by Romano et al., and considering measures of continuity of care, ambulatory care-sensitive measures, and the care coordination group of Assessing Care of Vulnerable Elders (ACOVE) measures,[17] the Care Coordination TAP did not recommend any currently existing measures because none that are fully developed could be identified that capture the appropriate characteristics of care coordination. To address this absence of measures, the Care Coordination TAP recommended a definition and a framework for measuring care coordination to guide the development of measures, which the Steering Committee generally recommended.

Definition of "Care Coordination"

The Care Coordination TAP reviewed several existing definitions of care coordination, but it did not like any existing definition without modification. Using elements from several existing definitions, it recommended the following definition:

> *Care Coordination* is the characteristic that meets the patient's needs for health services and information sharing across people, functions, and sites over time. Coordination maximizes the value of services delivered to patients by facilitating efficiency, safety, high-quality patient experiences, and improved healthcare outcomes.

The Steering Committee recommended changing "the patient's needs" to "the patients' needs and preferences" in the proposed definition.

[16] *Defining and Measuring Care Coordination.* Available at www.qualityforum.org/docs/ambulatory_care/txCareCoordination%20defandframe08-02-06.pdf.

[17] Wenger NS, Young R, *Quality Indicators of Continuity and Coordination of Care for Vulnerable Elder Persons,* RAND publication. Available at www.rand.org/pubs/working_papers/WR176/index.html. Last accessed August 2006.

Framework for Measuring Care Coordination

The Care Coordination TAP recommended that the definition of care coordination should be expanded by identifying the essential components of care coordination; the various components establish a framework that is useful for identifying measures of care coordination and highlighting the gaps where the development of measures is urgently needed. The Care Coordination TAP noted that the ACOVE measures fit well within the proposed framework[18] and may serve as a starting point for development of robust measures of care coordination.

The Committee generally recommended the proposed care coordination framework with the following revisions:

- expand the framework to include other settings of care;
- clarify sites of care;
- include explicit phrases regarding access and control of personal health information, particularly behavioral health information;
- place transitions higher in framework; and
- strengthen patient-centeredness.

[18] NQF staff contacted RAND, the measure developer, to request information to fully evaluate the measures. Supporting information for the ACOVE measures was not provided by the developer, precluding evaluation by the TAP or the Steering Committee.

Appendix E
Selected References

The following list of references summarizes the evidence considered and reviewed during the screening, evaluation, and selection of measures for the National Quality Forum-endorsed™ voluntary consensus standards. Evidence includes literature that supports a measure's responsiveness to the evaluation criteria (importance, scientific acceptability, usability, and feasibility).

Asthma/Respiratory Illness

Asthma Assessment

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Appendix F
Consensus Development Process: Summary

The National Quality Forum (NQF), a voluntary consensus standards-setting organization, brings together diverse healthcare stakeholders to endorse performance measures and other standards to improve healthcare quality. Because of its broad stakeholder representation and formal Consensus Development Process (CDP), NQF-endorsed™ products have special legal standing as voluntary consensus standards. The primary participants in the NQF CDP are NQF member organizations, which include:

- consumer and patient groups;
- healthcare purchasers;
- healthcare providers, professionals, and health plans; and
- research and quality improvement organizations.

Any organization interested in healthcare quality measurement and improvement may apply to be a member of NQF. Membership information is available on the NQF web site, www.qualityforum.org.

Members of the public with particular expertise in a given topic also may be invited to participate in the early identification of draft consensus standards, either as technical advisors or as Steering Committee members. In addition, the NQF process explicitly recognizes a role for the general public to comment on proposed consensus standards and to appeal healthcare quality consensus standards endorsed by NQF. Information on NQF projects, including information on NQF meetings open to the public, is posted at www.qualityforum.org.

Each project NQF undertakes is guided by a Steering Committee (or Review Committee) composed of individuals from each of the four critical stakeholder perspectives. With the assistance of NQF staff and

technical advisory panels and with the ongoing input of NQF Members, a Steering Committee conducts an overall assessment of the state of the field in the particular topic area and recommends a set of draft measures, indicators, or practices for review, along with the rationale for proposing them. The proposed consensus standards are distributed for review and comment by NQF Members and non-members.

Following the comment period, a revised product is distributed to NQF Members for voting. The vote need not be unanimous, either within or across all Member Councils, for consensus to be achieved. If a majority of Members within each Council do not vote approval, staff attempts to reconcile differences among Members to maximize agreement, and a second round of voting is conducted. Proposed consensus standards that have undergone this process and that have been approved by all four Member Councils on the first ballot or by at least two Member Councils after the second round of voting are forwarded to the Board of Directors for consideration. All products must be endorsed by a vote of the NQF Board of Directors.

Affected parties may appeal voluntary consensus standards endorsed by the NQF Board of Directors. Once a set of voluntary consensus standards has been approved, the federal government may utilize it for standardization purposes in accordance with the provisions of the National Technology Transfer and Advancement Act of 1995 (P.L. 104-113) and the Office of Management and Budget Circular A-119. Consensus standards are updated as warranted.

For this report, the NQF CDP, version 1.7, was in effect. The complete process can be found at www.qualityforum.org.

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