Patient Experience and Function Spring 2019 Cycle: CDP Report

**TECHNICAL REPORT** 

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# Patient Experience and Function, Spring 2019 Review Cycle

### **Executive Summary**

Patient Experience and Function (PEF) is a National Quality Forum (NQF) measure topic area encompassing patient functional status and experience of care as they relate to health-related quality of life and many factors that influence it, including communication, care coordination, transitions of care, and use of health information technology. NQF's Patient Experience and Function Standing Committee was established to evaluate measures within this topic area for NQF endorsement.

Capturing patient experience and evaluating patient function are two important components of patientcentered measurement. The Centers for Medicare & Medicaid Services (CMS) Meaningful Measures Initiative includes the identification of measures that capture patients' experiences with clinicians and providers—one of nineteen measurement areas for focusing our healthcare quality improvement efforts as a country. This falls under the measurement priority associated with strengthening person and family engagement as partners in their care<sup>1</sup>. Ensuring that each person and family is engaged within a care partnership is critical to achieving better patient outcomes. Over the past decade, there have been increasing efforts to change the healthcare paradigm from one that identifies persons as passive recipients of care to one that empowers individuals to participate actively in their care. Healthcare treatments can be tailored to individual patients in terms of patient preferences and individual clinical factors when the patient voice is captured as part of routine care.

The care coordination measures within the Patient Experience and Function Committee portfolio represent a fundamental component for the success of this integrated approach, providing a multidimensional framework that spans the continuum of care and ensures quality care, better patient experiences, and more meaningful outcomes. Well-coordinated care encompasses effective communication between patients, caregivers, and providers, and facilitates linkages between communities and healthcare systems. It also ensures that accountable structures and processes are in place for communication and integration of comprehensive plans of care across providers and settings that align with patient and family preferences and goals.

For this project, the Standing Committee evaluated two newly submitted measures and 13 measures undergoing maintenance review against NQF's standard evaluation criteria. The Committee recommended all 15 measures for endorsement. The endorsed measures are:

- 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 Adult, Child
- 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)
- 0166 HCAPHS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey
- 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)
- 0517 CAHPS Home Health Care Survey (experience with care)

- 2286 Functional Change: Change in Self Care Score
- 2321 Functional Change: Change in Mobility Score
- 2548 Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey
- 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support
- 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients
- 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients
- 2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients
- 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients
- 3227 CollaboRATE Shared Decision-Making Score
- 3461 Functional Status Change for Patients with Neck Impairments

Brief summaries of the measures reviewed by the Patient Experience and Function Committee this cycle are included in the body of the report; detailed summaries of the Committee's discussion and ratings of the criteria for each measure are in <u>Appendix A</u>.

### Introduction

The implementation of patient-centered measures is one of the most important approaches to ensure that the healthcare that Americans receive reflects the goals, preferences, and values of care recipients. Patient-centered measurement aids in the delivery of high-quality care that aims to engage patients and families, leading to improved health outcomes, better patient and family experiences, and lower costs. Patient- and family-engaged care is planned, delivered, managed, and continually improved in active partnership with patients and their families (or care partners as defined by the patient) to ensure integration of their health and healthcare goals, preferences, and values.<sup>2</sup> As such, effective engaged care must adapt readily to individual and family circumstances, as well as differing cultures, languages, disabilities, health literacy levels, and socioeconomic backgrounds.<sup>3</sup>

Poorly coordinated and fragmented care not only compromises the quality of care patients receive, but may also lead to negative, unintended consequences, including medication errors and preventable hospital admissions.<sup>4</sup> For patients living with multiple chronic conditions—including more than two-thirds of Medicare beneficiaries—poor care transitions between different providers can contribute to poor outcomes and hospitalizations.<sup>5</sup> Nearly 15 percent of Medicare beneficiaries discharged from the hospital are readmitted within 30 days, with half of the patients not having yet seen an outpatient doctor for follow-up, and most of these readmissions occur through the emergency department (ED).<sup>6,7</sup> The coordination of care is essential to reduce preventable hospitalizations, improve patient experiences and outcomes, and lower costs in today's healthcare system. Delivery of coordinated care necessarily brings together disparate sectors of the health and healthcare system. Research indicates

that improved care coordination can reduce admissions, readmissions, and emergency department visits, and may also reduce costs.<sup>8,9,10</sup>

The existing evidence suggests that care today in the U.S. is largely uncoordinated, even though evidence also suggests that quality improvement strategies within care can improve performance.<sup>11</sup> Care coordination is positively associated with patient- and family-reported receipt of family-centered care, resulting in greater satisfaction with services, lower financial burden, and fewer emergency department visits.<sup>12</sup> A variety of tools and approaches, when leveraged, can promote effective communication, increase coordination of care, and improve patient experience and engagement. Electronic health records (EHRs) and interoperable health information can ensure that current and useful information follows the patient and is available across every setting and at each health interaction, which in turn reduces unnecessary and costly duplication of patient services. Patient education and the reconciliation of medication lists can also reduce costs by decreasing the number of serious medication events.<sup>13</sup> Shared decision making has been shown to promote better outcomes for patients and to support patients in choosing less costly, more effective interventions.<sup>14,15</sup> Innovative care models such as Patient Centered Medical Homes (PCMH), which invest in care coordination infrastructure, have led to sustained decreases in the number of ED and primary care visits, as well as increased screening for some types of cancer.<sup>16</sup>

### NQF Portfolio of Performance Measures for Patient Experience and Function

The Patient Experience and Function Standing Committee (<u>Appendix C</u>) oversees NQF's portfolio of patient experience and function measures (<u>Appendix B</u>) that includes measures of functional status, communication, shared decision making, care coordination, patient experience, and long-term services and supports. This portfolio contains 51 measures: three process measures, one composite measure, and 47 outcome measures, of which 29 are PRO performance measures (see table below).

|  | Process | Outcome/Patient-<br>Reported Outcome | Composite |
|--|---------|--------------------------------------|-----------|
| Functional status change and<br>assessment | 1       | 23                                   | -         |
| Shared decision making                     | -       | 3                                    | -         |
| Care coordination                          | 2       | 5                                    | -         |
| Patient experience                         | _       | 12                                   | 1         |
| Long-term services and supports            | _       | 4                                    | -         |
| Total                                      | 3       | 47                                   | 1         |

| Table 1. NQF Patient Experience and Function Portfolio of Measures |
|--|
|--|

Additional measures related to Patient Experience and Function are assigned to other projects, including Cost and Efficiency (i.e., emergency department timing measures), Patient Safety (i.e., medication reconciliation measures), and Geriatric and Palliative Care (i.e., home health measures, advance care plan measures, and family experience with hospice and end-of-life care measures).

### **Patient Experience and Function Measure Evaluation**

On June 20, June 25, July 1, and July 2, 2019, the Patient Experience and Function Standing Committee evaluated two new measures and 13 measures undergoing maintenance review against NQF's <u>standard</u> measure evaluation criteria.

|                              | Maintenance | New | Total |
|------------------------------|-------------|-----|-------|
| Measures under consideration | 13          | 2   | 15    |
| Measures endorsed            | 13          | 2   | 15    |

#### Table 2. Patient Experience and Function Measure Evaluation Summary

### **Comments Received Prior to Committee Evaluation**

NQF solicits comments on endorsed measures on an ongoing basis through the <u>Quality Positioning</u> <u>System (QPS)</u>. In addition, NQF solicits comments for a continuous 16-week period during each evaluation cycle via an online tool located on the project webpage. For this evaluation cycle, the commenting period opened on May 1, 2019, and closed on August 30, 2019. Three comments were submitted and shared with the Committee prior to the measure evaluation meetings (<u>Appendix F</u>).

All submitted comments were provided to the Committee prior to its initial deliberations during the inperson meeting.

### **Comments Received After Committee Evaluation**

The continuous 16-week public commenting period with NQF member support closed on August 30, 2019. Following the Committee's evaluation of the measures under review for endorsement, NQF received one comment from one member organization pertaining to the draft report and to the measures under consideration. All comments for each measure under consideration have been summarized in <u>Appendix A</u>.

Throughout the 16-week continuous public commenting period, NQF members had the opportunity to express their support ('support' or 'do not support') for each measure submitted for endorsement consideration to inform the Committee's recommendations. NQF did not receive any expressions of support or non-support from members.

#### **Overarching Issues**

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

#### Costs for Survey Administration

The Committee was concerned that none of the survey-based measure submissions included analyses of the burden associated with the survey administration costs for the entities measured. Particularly for smaller providers where costs for administering the surveys may represent a larger proportion of revenue, survey administrative cost burden is a serious consideration of feasibility for measure implementation. While preliminary analyses of the measures rated all of these measures as low feasibility, the measure developers were prepared to share general information of estimated vendor fees for the surveys. This resulted in sufficient information for the Committee to make decisions related to the feasibility of the measures, and a lessening of concern for the impact on overall measure burden.

#### **Competing Measures Discussion**

This cycle of work included two pairs of competing measures NQF 2286 (UDSMR) vs. NQF 2633 (CMS) and NQF 2321 (UDSMR) vs. NQF 2634 (CMS). NQF staff introduced the discussion by summarizing the history of the two pairs of measures: both were endorsed in 2015, with instructions from the NQF Board of Directors to re-review and make a best-in-class decision at the next maintenance review. Staff then reviewed the NQF criteria and decision rubric for competing measures. Each developer provided a short introduction to their two measures, their current use, and how they differ from the other pair of measures. Following this introduction and overview of the measures, the Committee reviewed the decision tree for competing measures and asked several clarifying questions to NQF staff and to the developers. Committee members expressed confusion on why they were being asked to select a "best-in-class" measure given the differing uses of each pair, the differences between the tools used in the measures, and the differing populations included in the measures. Ultimately, the Committee decided that the measures are complementary, due to the different populations included and the different uses for each pair and elected to recommend both pairs of measures for continued endorsement.

### Summary of Measure Evaluation

The following brief summaries of the measure evaluation highlight the major issues that the Committee considered. Details of the Committee's discussion and ratings of the criteria for each measure are included in <u>Appendix A</u>.

#### **CAHPS Measures**

#### 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 - Adult, Child (AHRQ): Endorsed

**Description**: The Consumer Assessment of Healthcare Providers and Systems Clinician & Group Survey 3.0 (CG-CAHPS) is a standardized survey instrument that asks patients to report on their experiences with primary or specialty care received from providers and their staff in ambulatory care settings over the preceding 6 months.

The CG-CAHPS 3.0 survey can be used in both primary care and specialty care settings. The adult survey is administered to patients aged 18 and over. The child survey is administered to the parents or guardians of pediatric patients under the age of 18. Patients who had at least one visit to a selected provider during the past 6 months are eligible to be surveyed.

CG-CAHPS Survey Version 1.0 was endorsed by NQF in July 2007 (NQF #0005) and version 2.0 received maintenance endorsement in early 2015. Version 3.0 was released in July 2015. The development of the survey is through the CAHPS Consortium and sponsored by the Agency for Healthcare Research and Quality. The survey is part of the CAHPS family of patient experience surveys and is available at <a href="https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html">https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html</a>.

The Adult CG-CAHPS Survey 3.0 has 31 questions including one overall rating of the provider and 13 questions used to create these four multi-item composite measures of care or services provided:

- 1. Getting Timely Appointments, Care, and Information (3 items)
- 2. How Well Providers Communicate With Patients (4 items)
- 3. Helpful, Courteous, and Respectful Office Staff (2 items)
- 4. Providers' Use of Information to Coordinate Patient Care (3 items)

The Child CG-CAHPS Survey 3.0 has 39 questions including one overall rating of the provider and 12 questions used to create these four multi-item composite measures of care or services provided:

- 1. Getting Timely Appointments, Care, and Information (3 items)
- 2. How Well Providers Communicate With Patients (4 items)
- 3. Helpful, Courteous, and Respectful Office Staff (2 items)
- 4. Providers' Use of Information to Coordinate Patient Care (2 items);

**Measure Type**: Outcome: PRO-PM; **Level of Analysis**: Clinician: Group/Practice; **Setting of Care**: Outpatient Services; **Data Source**: Instrument-Based Data

Committee discussion started with a review of evidence and opportunities for improvement, specifically performance gaps within disparities; older patients are happier with their care, but there were no analyses by race. The Committee expressed some concern at the remarks made by the Scientific Methods Panel related to the low reliability of the care coordination domain. The developer countered that the reliability's most important testing feature was the inter-unit reliability, but that the Cronbach's alpha score was derived to reflect a single construct, but that wasn't necessarily the most important determination of the reliability of CAHPS given that it wasn't intended to hang on a single factor. The developer argued instead that the inter-unit reliability is a more important determinant of the instrument's reliability. It was noted that there is a common theme amongst the CAHPS submissions related to feasibility, namely that none of the six submissions included adequate assessments of the burden that providers assume associated with the administration of the CAHPS surveys. The developer noted that costs for vendors are proprietary and have a wide range depending on several factors and suggested that the wide adoption of CAHPS is an indicator of feasibility. There was some discussion on whether CAHPS measures in general should be considered process measures, but several Committee members pointed out that patient-reported experience of care is its own form of outcome according to current NQF classification, and that further discussion was beyond the current scope of the Committee. The Committee elected to recommend continued endorsement for this measure.

# 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial) (AHRQ): Endorsed

**Description**: The CAHPS Health Plan Survey is a survey that asks health plan enrollees to report about their care and health plan experiences as well as the quality of care received from physicians. HP-CAHPS Version 4.0 was endorsed by NQF in July 2007 (NQF 0006) and Version 5.0 received maintenance endorsement in January 2015. The survey is part of the CAHPS family of patient experience surveys and is available in the public domain at <a href="https://www.ahrq.gov/cahps/surveys-guidance/hp/index.html">https://www.ahrq.gov/cahps/surveys-guidance/hp/index.html</a>.

The survey is designed to be administered to include individuals (18 and older for the Adult version; parents or guardians of children aged 0-17 for the Child version) who have been enrolled in a health plan for a specified period (6 months or longer for Medicaid version, 12 months or longer for Commercial version) with no more than one 30-day break in enrollment.

The CAHPS Adult Health Plan Survey has 39 items, and the CAHPS Child Health Plan Survey has 41 items. Ten of the adult survey items and 11 of the child survey items are used to form 4 composite measures. Each survey also has 4 single-item rating measures. The aspect of quality assessed by each measure is described below:

Measure 1: Getting Needed Care (2 items) Measure 2: Getting Care Quickly (2 items) Measure 3: How Well Doctors Communicate (4 items in Adult survey & 5 items in Child survey) Measure 4: Health Plan Information and Customer Service (2 items) Measure 5: How People Rated Their Personal Doctor (1 item) Measure 6: How People Rated Their Specialist (1 item) Measure 7: How People Rated Their Health Care (1 item) Measure 8: How People Rated Their Health Plan (1 item)

# Measure Type: Outcome: PRO-PM; Level of Analysis: Health Plan; Setting of Care: Outpatient Services; Data Source: Instrument-Based Data

Initial concerns were raised about the evidence, which was over 10 years old. In the determination of measure gap, the developer's analysis reviewed plan-level data for 152 Medicaid health plans and 169 commercial health plans, which exhibited what the Committee considered a sufficient degree of difference in performance across the plans analyzed. Committee discussants queried about some reliability concerns identified by the Scientific Methods Panel, especially the standard error of measurement around the health plan performance means on the interclass correlation coefficient analyses. This was ultimately determined to be a minor concern, but the Committee asked the developer to address this concern in future submissions. The Committee asked if there were year-over-year statistical differences in plan performance improvement and asked for the developer's assessment of CAHPS Health Plan Survey Chartbook data. The developer stated that aggregate Medicaid plan-level performance data indicate consistent and regular improvements over time, even if it is slow. The Standing Committee noted that some data appeared to show declining performance over time, which was a concern. The measure developer noted that the cross-sectional data in Chartbook isn't comprehensive and may not be representative of overall performance nationally. The developer added

that other analysis indicates improved performance by Medicaid and Commercial plans. The Committee noted the resolution of the concern on Feasibility and expressed no concerns for Usability and Use. The Standing Committee recommended the measure for continued endorsement.

### 0166 HCAPHS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey (CMS/AHRQ): Endorsed

**Description**: HCAHPS (NQF 0166) is a 29-item survey instrument that produces 10 publicly reported measures:

6 multi-item measures (communication with doctors, communication with nurses, responsiveness of hospital staff, communication about medicines, discharge information and care transition); and

4 single-item measures (cleanliness of the hospital environment, quietness of the hospital environment, overall rating of the hospital, and recommendation of hospital).

Note: The HCAHPS Survey originally included three items about pain which formed a composite measure, Pain Management. CMS discontinued publicly reporting this measure in July 2018. In January 2018, CMS replaced the original HCAHPS pain items with three items that asked about communication about pain. In compliance with the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act (Pub. L. 115-271) of 2018 (Section 6104), CMS will remove the new communication about pain items from the HCAHPS Survey beginning with October 2019 discharges.

Measure Type: Outcome; Level of Analysis: Facility; Setting of Care: Inpatient/Hospital; Data Source: Instrument-Based Data

The Committee expressed little concern associated with the evidence for the measure and the performance gap. The discussion initiated with a note that questions related to pain management were removed from this iteration of the survey, with the Committee expressing concern that patient experience of pain management is a key component of inpatient care. The developer noted that the removal of these questions was a statutory requirement instituted by an act of Congress resulting from a reaction to the opioid crisis, and the potential over-management of pain associated with holding providers accountable for patient experience in this quality domain. The Committee expressed little concern with the overall reliability and validity of the measure, both of which the Methods Panel rated as high. To address the feasibility concern expressed for each of the CAHPS measures that the burden on the provider associated with CAHPS administration was not presented within the submission, the developer offered an approximate yearly cost range, which the Committee determined to be feasible. The Committee had no concerns related to Usability and Use. The Standing Committee recommended the measure for continued endorsement.

#### 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS) (CMS): Endorsed

**Description**: This is a survey-based measure and one of the family of surveys called CAHPS Surveys (Consumer Assessment of Healthcare Providers and Systems) that are focused on patient experience.

The questionnaire asks End Stage Renal Disease (ESRD) patients receiving in-center hemodialysis care about the services and quality of care that they experience. Patients assess their dialysis providers, including nephrologists and medical and non-medical staff, the quality of dialysis care they receive, and information sharing about their disease. The survey is conducted twice a year, in the spring and fall with adult in-center hemodialysis patients. Publicly-reported measures focus on the proportion of survey respondents at each facility who choose the most favorable responses.

Three multi-item measures:

- a. M1: Nephrologists' Communication and Caring (NCC)
- b. M2: Quality of Dialysis Center Care and Operations (QDCCO)
- c. M3: Providing Information to Patients (PIP)

Three Global items:

- a. M4: Rating of the nephrologist
- b. M5: Rating of dialysis center staff
- c. M6: Rating of the dialysis facility

The first three measures are created from six or more questions from the survey that are reported as one measure score. The three global items are single-item measures using a scale of 0 to 10 to report the respondent's assessment.

The results are reported on Dialysis Facility Compare (DFC) on the Medicare.gov website.

Measure Type: Outcome: PRO-PM; Level of Analysis: Facility, Other, Population: Regional and State; Setting of Care: Post-Acute Care; Data Source: Instrument-Based Data

The Committee unanimously agreed that the measure passed the evidence criterion, noting the importance of patient-centered care in facilities that people may go to several times a week. The Committee agreed that the measure demonstrates a moderate performance gap but noted that the examined disparities and their trends over time could be better elucidated without the added adjustment of many social risk factors. Although the Methods Panel rated the measure moderate for reliability and validity, the Committee expressed the need to see more empiric validity testing demonstrated in future maintenance cycles. The Committee thoroughly deliberated its concern about two out of the five denominator exclusions (hospice patients and non-English speaking patients), noting implications on the assessment and delivery of population-sensitive care and the perception of culturally competent care. In this regard, the developer discussed the impractical and insensitive nature of survey application towards hospice patients and explained the way in which facilities account for language barrier. Committee members assessed the developer's reasoning for these exclusions as acceptable.

Although the measure is in use, the Committee was unable to reach consensus concerning feasibility due to the burden and cost of survey implementation for providers. Feasibility is not an NQF must-pass criterion. The measure is currently used in the End-Stage Renal Disease Quality Improvement Program and therefore passed use. The Committee raised questions about the comparison of dialysis units with

respect to size and response rates. Developers explained that the variations in response rate are not as vast as was noted by the Committee and that mixed-mode survey administration has proven to secure the highest response rate across vendors. Developers also added that very small facilities or facilities that are unable to reach the threshold for completed surveys are excluded from the assessment. The Committee raised no significant concerns about usability and agreed that the measure meets the usability criterion. The Standing Committee recommended the measure for continued endorsement. One comment was received during the post-evaluation comment period, raising concerns around the burden on patients for the ICH CAHPS survey, which could potentially cause reliability or validity issues due to low response rates. The Committee discussed this comment and the response submitted by the developer during the post comment call. The Committee agreed burden is an issue and requested the measure for continued endorsement.

#### 0517 CAHPS Home Health Care Survey (experience with care) (CMS): Endorsed

**Description**: The Consumer Assessment of Healthcare Providers and Systems (CAHPS<sup>®</sup>) Home Health Care Survey, also referred as the "CAHPS Home Health Care Survey" or "Home Health CAHPS" or "HHCAHPS" is a standardized survey instrument and data collection methodology for measuring home health patients 'perspectives on their home health care in Medicare-certified home health care agencies. AHRQ and CMS participated in the development of the Home Health CAHPS to measure the experiences of those receiving home health care with these three goals in mind:

- 1. To produce comparable data on patients' perspectives on care that allow objective and meaningful comparisons between home health agencies on domains that are important to consumers,
- 2. To create incentives for agencies to improve their quality of care through public reporting of survey results, and
- 3. To enhance public accountability in health care by increasing the transparency of the quality of care provided in return for public investment.

# **Measure Type**: Outcome: PRO-PM; **Level of Analysis**: Facility; **Setting of Care**: Home Care; **Data Source**: Instrument-Based Data

The Committee recognized the strength of the evidence provided and accepted it. The Committee noted strong points in the patient-reported experience of care linkage with patient behavior and outcomes, as demonstrated in the developer's logic model. The developer discussed implications of race and cognitive status on performance, noting observed and recorded variations. The measure does not control or risk adjust for race, but does control for cognitive status in the case mix adjustment. The developer further explained that the measure is risk-adjusted for two of the top reported patient diagnoses that present cognitive challenges affecting the ability of patients to report on their care. The Committee acknowledged that the main scores for the five domains held wide ranges, and the data suggest room for improvement. The Committee expressed no significant concerns for the performance gap. The Committee agreed with the Methods Panel and passed the measure on both reliability and validity.

The Committee passed feasibility based on verbal information provided by the developer in response to questions; however, they did note the submission lacked an analysis of the burden to the agency, as well

as lacking information about the administrative cost. In response to a question, the developer noted that many home health agencies have begun to incorporate performance data on these measures into their quality improvement work; the Committee expressed curiosity about the extent of data use, but otherwise had no major concerns about usability or use. The Standing Committee recommended the measure for continued endorsement.

#### 2548 Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey (AHRQ/Center of Excellence for Pediatric Quality Measurement): Endorsed

**Description**: The Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey is a standardized survey instrument that asks parents and guardians (henceforth referred to as parents) of children under 18 years old to report on their and their child's experiences with inpatient hospital care.

The performance measures of the Child HCAHPS survey consist of 39 items organized by overarching groups into the following 18 composite and single-item measures:

**Communication with Parent** 

- 1. Communication between you and your child's nurses (3 items)
- 2. Communication between you and your child's doctors (3 items)
- 3. Communication about your child's medicines (4 items)
- 4. Keeping you informed about your child's care (2 items)
- 5. Privacy when talking with doctors, nurses, and other providers (1 item)
- 6. Preparing you and your child to leave the hospital (5 items)
- 7. Keeping you informed about your child's care in the Emergency Room (1 item)

Communication with Child

- 8. How well nurses communicate with your child (3 items)
- 9. How well doctors communicate with your child (3 items)
- 10. Involving teens in their care (3 items)

Attention to Safety and Comfort

- 11. Preventing mistakes and helping you report concerns (2 items)
- 12. Responsiveness to the call button (1 item)
- 13. Helping your child feel comfortable (3 items)
- 14. Paying attention to your child's pain (1 item)

#### Hospital Environment

- 15. Cleanliness of hospital room (1 item)
- 16. Quietness of hospital room (1 item)

**Global Rating** 

- 17. Overall rating (1 item)
- 18. Recommend hospital (1 item)

The measure developer recommends that the scores for the Child HCAHPS composite and single-item measures be calculated using a top-box scoring method. The top-box score refers to the percentage of respondents who answered survey items using the best possible response option. The measure time frame is 12 months. A more detailed description of the Child HCAHPS measure can be found in the Detailed Measure Specifications (Appendix A).

# Measure Type: Outcome; Level of Analysis: Facility; Setting of Care: Inpatient/Hospital; Data Source: Claims

Discussion of evidence and performance gap for this measure was limited, with the Committee expressing general satisfaction with the submission. It was noted that the spirit of this measure is of high importance, with meaningfulness well-illustrated in the submission's literature review which suggested many links to interventions and processes that hospitals can deploy to potentially improve performance on this measure. The Committee noted that some of the measurement domains did not have strong Cronbach's alpha scores in the data element level reliability testing. The survey response rate of 17 percent was also a concern. The Committee questioned the exclusion of certain classes of children, such as those in foster care. The developer responded that foster care children were excluded because of challenges associated with follow-up due to address changes and questions of who to survey when it is not clear who has custody or guardianship of the child. The Committee strongly encouraged the developer to figure out how to include this particularly vulnerable population. The developer noted that they are experimenting with administering the survey upon discharge, which would allow for them to address the challenges that have caused them to exclude this population to this point. The Standing Committee recommended the measure for continued endorsement.

#### Functional Status Measures

#### 2286 Functional Change: Change in Self Care Score (UDSMR): Endorsed

**Description**: Change in rasch derived values of self-care function from admission to discharge among adults receiving inpatient medical rehabilitation and discharged alive. The timeframe for the measure is 12 months. The measure includes the following 8 items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. **Measure Type**: Outcome; **Level of Analysis**: Facility, Other; **Setting of Care**: Inpatient/Hospital, Post-Acute Care; **Data Source**: Instrument-Based Data, Other

The Committee discussed the correlation of the measure's outcomes compared to the larger FIM instrument, noting this was expected as the developer was correlating a subset of the instrument to the larger FIM instrument. Additionally, the Committee wanted evidence to be presented on interquartile numbers for facilities using the measure. The developer provided quartile facility mean change data but not interquartile data. The Committee also noted that the FIM tool will no longer be used for payment and benchmarking as of October 1, 2019. Some Committee members said they believe facilities will no longer use the FIM as they are no longer required to. There is currently a limited gap in care, with negligible adjusted differences pertaining to race, sex, and marital status. The measure passed the Methods Panel review for reliability, but the Committee discussed why there was a need for a random sampling of 30 of the 855 facilities. The developers stated that they did this at the direction of NQF and

the previous Person and Family Centered Care Committee, and that patients at each facility were compared against the other 29 facilities. The measure passed the Methods Panel review for validity. One Committee member questioned whether correlating a subset of the FIM predicts the larger score, because the larger score is dependent on the subset; however, the Committee agreed to accept the Methods Panel rating for validity. The Committee agreed that the measure was feasible. The Committee noted concerns with use once CMS Inpatient Rehabilitation Facility (IRF) Patient Assessment Instrument (PAI) stops using the measure for payments and benchmarking in October 2019, as well as concerns about whether the measure is truly publicly reported. The developer stated that they publish data to their customers. The Committee flagged a lack of year-over-year data pertaining to usability. Ultimately, the measure passed all criteria, and the Committee recommended the measure for continued endorsement.

#### 2321 Functional Change: Change in Mobility Score (UDSMR): Endorsed

**Description**: Change in rasch derived values of mobility function from admission to discharge among adults aged 18 and older receiving inpatient medical rehabilitation at a post acute care facility who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility items: 1. Transfer Bed/Chair/Wheelchair, 2. Transfer Toilet, 3. Locomotion, 4. Stairs. **Measure Type**: Outcome; **Level of Analysis**: Facility, Other; **Setting of Care**: Inpatient/Hospital, Post-Acute Care; **Data Source**: Instrument-Based Data, Other

The Committee agreed that this type of measure is important to consumers, and the evidence resembled those previously discussed for measure 2286. The Committee did not bring forth any comments on gap, though a general comment was made suggesting that measures should show an individual's decline has been reduced or stabilized and not just whether their status has improved or not. The measure passed the Methods Panel review for reliability, and the Committee's comments resembled those for the previous measure, regarding sample size of 30 facilities. The Committee flagged that the measure captured a narrow population, to which the developer responded that they are limited to what data are available in the data set, however have access to race, sex, age, marital status, and payer information. The measure passed the Methods Panel review for validity, and the Committee had no further comment on validity. The Committee members again raised the concern of CMS no longer using the FIM tool starting in October 2019, but otherwise had no concern about the feasibility of this measure. The Committee did not have any comments on use or usability for this measure and voted to pass it on both. The measure passed all criteria, and the Committee recommended the measure for continued endorsement.

### 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (CMS/RTI): Endorsed

**Description**: This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute Care; **Data Source**: Instrument-Based Data

The Committee noted that this maintenance measure was one of the first of a new class of measures using the standardized patient assessment data elements, section GG (Functional Abilities and Goals) for

functional status. Committee members agreed that while there is scant literature for LTCHs specifically, the literature on ventilator patients generally supports early mobilization. There is a clear gap in care, with disparities by marriage status, race, and payment source, and an opportunity for improvement. The measure did pass the Methods Panel review, but the Committee discussed the representativeness and generalizability of the included population, flagging that over one-third of the population is excluded. The Committee agreed that the exclusions are reasonable (incomplete stays, hospice patients, various clinical conditions, etc.) but asked whether the exclusion rates varied across facilities, which would potentially indicate different case mixes. After some discussion of the inclusion and exclusion criteria and the risk-adjustment criteria (particularly around cardiac conditions), the Committee ultimately agreed with the Methods Panel that the measure passed both reliability and validity. The Committee agreed that the measure is feasible. As the measure is in use in two accountability programs, the Committee agreed that it met the use criterion. Committee members flagged that the measure looks at a very narrow population, which limits its usability and actionability for clinicians; the developer noted that Congress mandated the quality measure for this specific subpopulation and setting. The Committee noted that ventilator care is an important patient population in LTCHs. The Committee also noted minimal change over the last two years of data, but the developer noted that the measure is fairly-newly reported, and there have been changes in the last two years for LTCHs, so the developer expects more improvement in the future. Despite these concerns, the measure ultimately passed usability, and the Committee recommended it for continued endorsement.

### 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients (CMS/RTI): Endorsed

**Description**: This measure estimates the risk-adjusted mean change in self-care score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute Care; **Data Source**: Instrument-Based Data

Committee members noted that this measure is important to measure, and that patients value performance information across facilities. In response to questions, the developer noted that patients living alone had better outcomes, likely because facilities will keep patients who live alone longer to ensure they are ready for discharge. Also, in response to questions, the developer explained that this measure and the related measures are implemented as Improving Medicare Post-Acute Care Transformation Act of 2014 measures, using standardized assessment items. Committee members asked about the evidence demonstrating that self-care and mobility should be treated separately, and asked about the lack of information on cognitive function. The developer explained that within IRF settings there is a wide range of patients and merging self-care and mobility data across diagnostic groups (for example, patients with stroke and patients with orthopedic conditions) led to less precise quality scores; in addition, across diagnosis groups it is better to separate cognitive and motor functions because they are very different aspects of functioning and not all IRF patients have cognitive limitations. The Committee agreed there are gaps in care. The Committee discussed the factors used in the risk-adjustment model and the developer noted they continue to track results to see how/if the measure

should be adjusted or stratified. This measure was reviewed by and passed the Methods Panel, and the Committee agreed to take their ratings for reliability. After some discussion of the exclusion criteria, the Committee also agreed to accept the Methods Panel rating for validity. The measure uses standardized data elements that are required, so the Committee had no feasibility concerns. The measure will be publicly reported next year so the Committee agreed it met the Use criterion. Committee members were concerned that the last two years showed no changes in performance. The developer explained there have been many changes in the last two years, and they anticipate seeing improvement in the future, but will be tracking the data carefully. The measure passed usability and was recommended for continued endorsement by the Committee.

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients (CMS/RTI): Endorsed

**Description**: This measure estimates the mean risk-adjusted mean change in mobility score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute Care; **Data Source**: Instrument-Based Data

Committee members noted this measure was easily understood by the public and assesses an important area of health. Committee members flagged that this measure focuses on patients in Medicare or Medicare Advantage, which does somewhat limit its usefulness. After some discussion on the timing of the assessments, they agreed the measure met the importance criteria. They noted the wide gaps in care for several social and demographic factors and agreed the measure met the gap criterion. This measure was reviewed by the Methods Panel, and the Committee agreed to accept their passing recommendations. Similar to the previous measure, this measure is collected from standardized data elements, and the Committee had no concerns with the feasibility. The Committee raised concerns about the potential use of this measure becoming punitive and leading to the closure of facilities, but the developer stated that this is not currently used in value-based purchasing; the Committee noted it might be in the future. Despite these concerns, since the measure is currently in use and will be publicly reported in 2020, it passed use. The measure met the usability criteria and was recommended for continued endorsement.

### 2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (CMS/RTI): Endorsed

**Description**: This measure estimates the percentage of IRF patients who meet or exceed an expected discharge self-care score. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute Care; **Data Source**: Instrument-Based Data

Committee members agreed this measure assesses an important aspect of care and noted both a large range in performance and disparities by race. The Methods Panel reviewed and passed the reliability and validity of this measure; the Committee agreed that the measure passed the reliability criteria. Despite some concerns, including concerns about the adequacy of the risk-adjustment model, about the structure of reporting that updates the benchmark annually, and about the number of patients excluded due to incomplete stays (11 percent), the Committee ultimately agreed that the measure is valid. Since the measure is based on a standardized, required assessment, the Committee agreed that it is feasible.

The measure is publicly reported and used for accountability, so the Committee agreed that it met the use criterion. Committee members noted that the changing benchmarks are complicated. Committee members agreed that it would be interesting to see the change in the benchmark over time as well, and the developer agreed they would present it in the future. The Standing Committee recommended the measure for continued endorsement.

## 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients (CMS/RTI): Endorsed

**Description**: This measure estimates the percentage of IRF patients who meet or exceed an expected discharge mobility score. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute Care; **Data Source**: Instrument-Based Data

The Committee agreed there is evidence supporting the measure; they briefly discussed the exclusions but agreed they are reasonable. Committee members noted there were disparities by dual eligible status and race. They noted that patients with lower economic status and living alone are associated with higher discharge and mobility scores, which was expected. The developer explained that these patients often have a longer length of stay due to increased risks after discharge, and so they have a little more recovery/rehabilitation in order to ensure they can be safer at home without caregiver support. In response to questions, the developer clarified the risk-adjustment model and how the expected score is calculated. The Committee asked about the potential for gaming functional scores, and the developer explained that because this measure uses standardized assessment data that is interoperable between settings, they monitor the data and will be continue to test validity it in the future. The Methods Panel reviewed and passed the measure. The Committee agreed with the Methods Panel and passed the measure on both reliability and validity. This measure was considered feasible because it relies on required data and is currently being used. The measure passed use, as it is currently used for the IRF quality reporting program and IRF Compare. One Committee member asked about the potential for confusion given that this measure is so similar to NQF 2634 (which examines change over time; this measure looks at expected scores). The developer noted different groups have different data needs and interests, and they would continue to assess feedback on both measures. The Standing Committee recommended the measure for continued endorsement.

Geographic region, facility characteristics, and length of stay were not factors tested as disparities. The developer noted that they only tested dual eligibility, race/ethnicity, living alone, urbanicity, and socioeconomic status index in the social risk factor models.

# 3461 Functional Status Change for Patients with Neck Impairments (Focus on Therapeutics Outcomes): Endorsed

**Description**: This is a patient-reported outcome performance measure (PRO-PM) consisting of a patientreported outcome measure (PROM) of risk-adjusted change in functional status (FS) for patients aged 14 years and older with neck impairments. The change in FS is assessed using the Neck FS PROM. The measure is adjusted to patient characteristics known to be associated with FS outcomes (risk adjusted) and used as a performance measure (PM) at the patient, individual clinician, and clinic levels to assess quality. The Neck FS PROM is an item-response theory-based computer adaptive test (CAT) for patients with impairments related to neck problems. Specific ICD-10-CM codes are described in the denominator section.

The Neck PRO-PM is publically available in the CAT version on the Focus on Therapeutic Outcomes (FOTO) website at no charge. The Neck FS PROM is also available at no charge for public use as a 10-item short form (static/paper-pencil). CAT administration is preferred as it reduces patient response burden by administrating the minimum number of items needed to achieve the targeted measurement accuracy. Scores are reported on a 0 to 100 scale with higher scores indicating better functional status. The Neck FS PROM maps to the Mobility and Self-care constructs within the Activities and Participation domain of the International Classification of Functioning, Disability and Health.

### Measure Type: Outcome: PRO-PM; Level of Analysis: Clinician: Group/Practice, Clinician: Individual; Setting of Care: Outpatient Services; Data Source: Instrument-Based Data

The Committee initiated discussion of the measure by expressing a concern around end user access to the measure and resources related to the measure, given the measure developer's provision of dashboards that inform treatment decisions that may influence performance on the metric. The developer responded that the measure itself is free for use, and ancillary services provided by FOTO are not required. It was also noted that this is not a unique approach, and that other measure developers follow a comparable model. A public comment encouraged the measure developer to incorporate Logical Observation Identifiers Names and Codes (LOINC) standardization into the measure; FOTO noted this as an important consideration as they are refining their measures. The Committee also expressed concern about the potential over-specificity of the measure in carving up functional status by individual body part. The developer proffered an explanation that noted their intentions to consolidate measures of foot, knee, and hip into a single lower extremity functional status measure.

The Committee was generally satisfied with the evidence and gap surrounding the measure. Reliability concerns focused on additional sources of error that would potentially factor into the ability to distinguish one provider's performance from another, although this was noted to affect future submissions and not the current one. The Committee's discussion of validity focused on a concern for presentation with multiple complaints resulting in multiple surveys, and the validity of a "main complaint." The developer noted that most patients do not have trouble selecting a specific area, but that there are comorbidity issues that come into play that rely on the professional judgement of the clinician. One Committee member shared an experience of receiving an inappropriate survey. The developer characterized this as an anomaly that does not reflect standard use of their tools. The Committee also discussed the feasibility concern of burden of multiple types of surveys being deployed for the same patient. During the discussion on Use and Usability, the Committee noted the concern that the measure might not be usable at the individual clinician level, and therefore limited its evaluation to the group level of analysis. The Committee finalized the discussion by urging the measure developer once again to use standardized vocabulary such as LOINC, noting that all measures should follow comparable standards to allow for use in multiple care settings, with the additional consideration that this measure is not an eCQM, so there is no need to make it compatible with an electronic standard at this time. The Standing Committee recommended the measure for endorsement.

#### Shared Decision Making Measure

### 3227 CollaboRATE Shared Decision-Making Score (Dartmouth Institute for Health Policy & Clinical Practice): Endorsed

**Description**: CollaboRATE is a patient-reported measure of shared decision making which contains three brief questions that patients, their parents, or their representatives complete following a clinical encounter. The CollaboRATE measure provides a performance score representing the percentage of adults 18 and older who experience a high level of shared decision making.

The measure was developed to be generic and designed so that it could apply to all clinical encounters, irrespective of the condition or the patient group. The measure asks the patient to evaluate the 'effort made' to inform, to listen to issues that matter to the patient, and to include those issues in choosing 'next steps'. The items were co-developed with patients using cognitive interview methods.

CollaboRATE is designed for use in routine health care delivery. The brevity and the ease of completion were purposeful so the measure could be used as a performance metric for shared decision making.

**Measure Type**: Outcome: PRO-PM; **Level of Analysis**: Clinician: Group/Practice; **Setting of Care**: Inpatient/Hospital, Outpatient Services; **Data Source**: Instrument-Based Data

The Standing Committee began their discussion by acknowledging the importance to measure shared decision making, and the impact that improved shared decision making has on a person's overall experience of care. The Committee acknowledged that while evaluation of shared decision making does not need to be part of every clinical encounter, capturing the patient's perception of shared decision making is an important component of good care. The Committee also noted the importance of providing good, actionable feedback to measured clinicians, so they can improve their approach to engaging patients in their own care. The Committee did express concern that the measure does not have a strong connection to an outcome and may lead to lower quality of care if patients are strongly inclined to treatments that have poor evidence. Early discussion of evidence reflected the Committee's general approval of the developer's approach, as well as acknowledgement of a performance gap in some of the data samples provided by the developer. While the Committee expressed some concern in the sampling methodology associated with reliability and validity testing, the Committee accepted the developer's explanation of a sampling recommendation of 25 patients as a minimum, with a preference of 200 as a reliability standard. The Committee did not consider the administration of the measure to be burdensome to patients but had some concerns around the frequency of administration. The developer further clarified that the measure should not be administered more frequently than every six months according to the specifications of the measure. The Standing Committee recommended the measure for endorsement.

#### Measures Withdrawn from Consideration

Four measures previously endorsed by NQF have not been re-submitted for maintenance of endorsement. Endorsement for these measures will be removed.

#### Table 3. Measure Withdrawn from Consideration

| Measure  | Reason for withdrawal  |  |
|--|--|--|
| 0228 3-Item Care Transition Measure (CTM-3)  | Developer elected not to resubmit.   |  |
| 0688 Percent of Residents Whose Need for Help with<br>Activities of Daily Living Has Increased (long stay) | Developer elected not to resubmit.   |  |
| 0701 Functional Capacity in COPD patients before and after Pulmonary Rehabilitation                        | Developer elected not to resubmit.   |  |
| 2624 Functional Outcome Assessment   | Developer elected not to resubmit due to high<br>performance rates and lack of meaningful differences<br>between clinicians. |  |

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### **Appendix A: Details of Measure Evaluation**

Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

#### **Endorsed Measures**

#### 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 – Adult, Child

#### Submission | Specifications

**Description**: The Consumer Assessment of Healthcare Providers and Systems Clinician & Group Survey 3.0 (CG-CAHPS) is a standardized survey instrument that asks patients to report on their experiences with primary or specialty care received from providers and their staff in ambulatory care settings over the preceding 6 months.

The CG-CAHPS 3.0 survey can be used in both primary care and specialty care settings. The adult survey is administered to patients aged 18 and over. The child survey is administered to the parents or guardians of pediatric patients under the age of 18. Patients who had at least one visit to a selected provider during the past 6 months are eligible to be surveyed.

CG-CAHPS Survey Version 1.0 was endorsed by NQF in July 2007 (NQF #0005) and version 2.0 received maintenance endorsement in early 2015. Version 3.0 was released in July 2015. The development of the survey is through the CAHPS Consortium and sponsored by the Agency for Healthcare Research and Quality. The survey is part of the CAHPS family of patient experience surveys and is available at <a href="https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html">https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html</a>

The Adult CG-CAHPS Survey 3.0 has 31 questions including one overall rating of the provider and 13 questions used to create these four multi-item composite measures of care or services provided:

- 1. Getting Timely Appointments, Care, and Information (3 items)
- 2. How Well Providers Communicate With Patients (4 items)
- 3. Helpful, Courteous, and Respectful Office Staff (2 items)
- 4. Providers' Use of Information to Coordinate Patient Care (3 items)

The Child CG-CAHPS Survey 3.0 has 39 questions including one overall rating of the provider and 12 questions used to create these four multi-item composite measures of care or services provided:

- 1. Getting Timely Appointments, Care, and Information (3 items)
- 2. How Well Providers Communicate With Patients (4 items)
- 3. Helpful, Courteous, and Respectful Office Staff (2 items)
- 4. Providers' Use of Information to Coordinate Patient Care (2 items)

**Numerator Statement**: The CG-CAHPS Survey item and composites are often reported using a top box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure.

The top box numerator for the Overall Rating of Provider is the number of respondents who answered 9 or 10 for the item, with 10 indicating "Best provider possible".

For more information on the calculation of reporting measures, see

"Preparing Data from CAHPS® Surveys for Analysis" (AHRQ, 2017) accessible at

https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/helpfulresources/analysis/preparing-data-for-analysis.pdf and the CAHPS Analysis Instructions accessible at

https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/helpfulresources/analysis/2015-instructions-for-analyzing-data.pdf (updated June 2017).

**Denominator Statement**: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 6-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.

**Exclusions**: Among eligible respondents, for a given item, respondents with a missing response is excluded. Among eligible respondents, for a composite measures, respondents who did not answer at least one item in the composite are excluded from the composite measure's denominator.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Clinician : Group/Practice

Setting of Care: Outpatient Services

Type of Measure: Outcome: PRO-PM

Data Source: Instrument-Based Data

Measure Steward: Agency for Healthcare Research and Quality

#### STANDING COMMITTEE MEETING [06/25/2019]

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

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

1a. Evidence: Y-12; N-3; 1b. Performance Gap: H-2; M-10; L-3; I-1

Rationale:

- Committee discussion of the measure initiated with review of evidence and opportunities for improvement, specifically performance gaps within disparities; older patients are happier with their care, but no analyses by race.
- The Committee discussed how the developer offered extensive research-backed evidence of the impact of CG-CAHPS
  - Studies that indicate patients more likely to change physicians based on quality of relationships
  - Studies indicating variance of importance of CAHPS domains across racial and ethnic subgroups
  - Studies indicating importance of provider communication varying by provider type, but consistency for respectful treatment
- The Committee also evaluated the developer's a literature review of studies that support how changes in the health care system can affect their patient-reported outcome, and how that outcome can impact more distal outcomes.
  - Developer cites QI activities such as shadowing, coaching and training, and offers other studies demonstrating the connection between workflow modifications and improved patient communication results.
  - o Other interventions found to impact patient experience:
    - Clinic hour expansion
    - Joining a larger medical group
    - Improving infrastructure
    - Access to medical record

- Improving virtual access
- Provision of same-day or next-day appointments and access to a consistent clinician, group or care team
- Improvement in communication
- Committee determined that the performance gap analyses offered by the developer demonstrated sufficient gaps in performance.

# 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: **Y-15; N-0**; 2b. Validity: **Y-15; N-0** 

Rationale:

- The Committee voted to uphold the Scientific Methods Panel ratings for reliability and validity of moderate.
  - o <u>Reliability</u>: H-1, M-4, L-0, I-1
  - o <u>Validity</u>: H-1, M-5, L-0, I-0
- The Committee expressed some concern at the remarks made by the Scientific Methods Panel related to the low reliability of the Care Coordination domain.
- The developer offered the counterpoint that the reliability's most important testing feature was the inter-unit reliability, but that the Cronbach's alpha score was derived to reflect a single construct, but that wasn't necessarily the most important determination of the reliability of CAHPS given that it wasn't intended to hang on a single factor. The developer argued instead that the inter-unit reliability was a more important determinant of the instrument's reliability.
- Committee discussed the three reliability tests run by the developer:
  - Reliability test 1: Element level Cronbach's alpha to check within domain consistency.
  - Reliability test 2: Score level ICC was used to consider the variability between entities versus within entities. ICCs always were below .046 (lower than desirable, suggesting high samples are needed).
  - Reliability test 3: Measure site (practice) reliability on multi-item composite scores and global one-item scores, which partition within- and between-site variance.
- For validity, Spearman rank order correlations between subscores and each other, and between the overall rating were assessed.
- Missing data said to effect less than 5% of the individual ratings, though it was noted that accounting for response bias did not reduce any bias beyond the limited amount addressed by case-mix adjustment.
- No explicit exclusions were applied.
- The Committee noted that risk adjustment was not conducted, though a method and empirical coefficients to support case-mix illness adjustment is presented. Results presented further demonstrated a very high correlations (>0.85) between adjusted and unadjusted scores, obviating considerably the need for such risk adjustment.
- Performance gap analyses show that 30 to 40% of the sites perform at rates that are statistically distinct from the average rates observed.

#### 3. Feasibility: H-0; M-13; L-3; I-0

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

<u>Rationale</u>:

- The Committee commented on how electronic and paper versions are available, mail, phone, email, and web-based modes available and deployed.
- While the developer did not evaluate the burden on providers associated with measure implementation in the form of fees from retention of an approved CAHPS vendor to administer the surveys during the submission, they offered an analysis during discussion that satisfied the Committee

#### 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

4a. Use: Pass-13; No Pass-3; 4b. Usability: H-2; M-9; L-4; I-1

Rationale:

- The Committee pointed out the long-time use of the CG-CAHPS survey and its broad implementation in multiple accountability programs.
- The Committee also acknowledged that the measure was developed in the late 1990s and has since been refined with substantial input from entities being measured as well as patients.

#### 5. Related and Competing Measures

• Related measures: NQF #0006, #0166, #0258, #0517, #1741, #2548, and #2967

Standing Committee Recommendation for Endorsement: **Yes-14**; **No-2** Rationale

- There was some discussion on whether CAHPS measures in general should be considered process measures, but several Committee members pointed out that patient-reported experience of care is its own form of outcome according to NQF current classification, and that further discussion was beyond the current scope of the Committee.
- The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

# 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

No appeals received.

# 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0

#### Submission | Specifications

**Description**: The CAHPS Health Plan Survey is a survey that asks health plan enrollees to report about their care and health plan experiences as well as the quality of care received from physicians. HP-CAHPS Version 4.0 was endorsed by NQF in July 2007 (NQF #0006) and Version 5.0 received maintenance endorsement in January 2015. The survey is part of the CAHPS family of patient experience surveys and is available in the public domain at https://www.ahrq.gov/cahps/surveys-guidance/hp/index.html

The survey is designed to be administered to includes individuals (18 and older for the Adult version; parents or guardians of children aged 0-17 for the Child version) who have been enrolled in a health plan for a specified period (6 months or longer for Medicaid version, 12 months or longer for Commercial version) with no more than one 30-day break in enrollment.

The CAHPS Adult Health Plan Survey has 39 items, and the CAHPS Child Health Plan Survey has 41 items. Ten of the adult survey items and 11 of the child survey items are used to form 4 composite measures. Each survey also has 4 single-item rating measures. The aspect of quality assessed by each measure is described below:

Measure 1: Getting Needed Care (2 items)

Measure 2: Getting Care Quickly (2 items)

Measure 3: How Well Doctors Communicate (4 items in Adult survey & 5 items in Child survey)

Measure 4: Health Plan Information and Customer Service (2 items)

Measure 5: How People Rated Their Personal Doctor (1 item)

Measure 6: How People Rated Their Specialist (1 item)

Measure 7: How People Rated Their Health Care (1 item)

Measure 8: How People Rated Their Health Plan (1 item)

**Numerator Statement**: We recommend that CAHPS Health Plan Survey items and composites be calculated using a top box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. The top box numerator for each of the four Overall Ratings items is the number of respondents who answered 9 or 10 for the item; with a 10 indicating the "Best possible."

**Denominator Statement**: The eligible population for the survey includes all individuals who have been enrolled in a health plan for at least 6 (Medicaid) or 12 (Commercial) months with no more than one 30-day break in enrollment. Denominators will vary by item and composite.

Exclusions: Individuals are excluded from the survey target population if:

- 1) They were not continuously enrolled in the health plan (excepting an allowable enrollment lapse of less than 30 days).
- 2) Their primary health coverage was not through the plan.
- 3) Another member of his or her household had already been sampled.
- 4) They had been institutionalized (put in the care of a specialized institution) or are deceased.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Health Plan

Setting of Care: Outpatient Services

Type of Measure: Outcome: PRO-PM Data Source: Instrument-Based Data Measure Steward: Agency for Healthcare Research and Quality

#### STANDING COMMITTEE MEETING [06/25/2019]

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

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

1a. Evidence: Y-16; N-1; 1b. Performance Gap: H-2; M-15; L-1; I-0

#### Rationale:

- Initial concerns were raised by the Committee related to the age of the evidence for this measure, with the Committee noting that the evidence offered by the developer is over 10 years old.
- Nonetheless, the Committee also noted that the developers offer good evidence of meaningfulness and value:
  - Studies that indicate patients more likely to change physicians based on quality of relationships
  - Studies indicating variance of importance of CAHPS domains across racial and ethnic subgroups
  - Studies indicating importance of provider communication varying by provider type, but consistency for respectful treatment
- The developers provide a literature review of studies that support how changes in the health care system can affect their patient-reported outcome, and how that outcome can impact more distal outcomes.
  - Associations between financial strength of health plans and favorable CAHPS scores
  - o Improving infrastructure supporting care suggested to improve CAHPS
  - o Improvement in patient safety culture
  - Changes in contracting with providers
- In the determination of measure gap, the developer's analysis reviewed plan level data for 152 Medicaid health plans and 169 commercial health plans, which exhibited what the Committee considered sufficient degree of difference in performance across the plans analyzed.

### 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-18; N-0; 2b. Validity: Y-18; N-0

#### Rationale:

- The Committee voted to uphold the Scientific Methods Panel ratings for reliability and validity of moderate.
  - o <u>Reliability</u>: H-1, M-4, L-0, I-1
  - o <u>Validity</u>: H-1, M-4, L-1, I-0
- Committee discussants queried into some reliability concerns identified by the Scientific Methods Panel, especially the standard error of measurement around the health plan performance means on the interclass correlation coefficient analyses. This was ultimately

determined to be a minor concern, but one the Committee asked the developer to address in future submissions.

- The Committee noted that the Methods Panel members noted that data element and score-• level testing was conducted via Cronbach's alpha, ICC and plan-level reliability (signal-to-noise).
- Cronbach's alphas tended to be below 0.70 threshold, largely because of 2-item scales.
- The coefficients are high enough to suggest they will perform reasonably well. •
- Regarding between vs within plan variance, Committee members generally considered all ICCs • to be problematic (all below 0.05), as they indicate that clinicians and sites may not be able to be differentiated.
- The developer offered the counterpoint that the reliability's most important testing feature was the inter-unit reliability, but that the Cronbach's alpha score was derived to reflect a single construct, but that wasn't necessarily the most important determination of the reliability of CAHPS given that it wasn't intended to hang on a single factor. The developer argued instead that the inter-unit reliability was a more important determinant of the instrument's reliability.
- For validity, the Committee noted the use of Spearman rank order correlations between subscores and each other, and between the overall rating.

#### 3. Feasibility: H-0; M-15; L-2; I-0

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

- Rationale:
  - While the developer did not evaluate the burden on providers associated with measure implementation in the form of fees from retention of an approved CAHPS vendor to administer the surveys during the submission, they offered an analysis during discussion that satisfied the Committee

#### 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

#### 4a. Use: Pass-18; No Pass-0; 4b. Usability: H-4; M-12; L-2; I-0

Rationale:

- The Committee asked if there were year over year statistical differences in plan performance • improvement and asked for the developer's assessment of CAHPS Health Plan Survey Chartbook data.
- The developer stated that aggregate Medicaid plan level performance data indicates consistent and regular improvements over time, even if it is slow.

#### 5. Related and Competing Measures

Related measures: NQF #0005, #0166, #0258, #0517, #1741, #2548, and #2967

Standing Committee Recommendation for Endorsement: Yes-18; No-0 Rationale

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

# 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

No appeals received.

#### 0166 HCAPHS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey

#### Submission | Specifications

**Description**: HCAHPS (NQF #0166) is a 29-item survey instrument that produces 10 publicly reported measures:

6 multi-item measures (communication with doctors, communication with nurses, responsiveness of hospital staff, communication about medicines, discharge information and care transition); and

4 single-item measures (cleanliness of the hospital environment, quietness of the hospital environment, overall rating of the hospital, and recommendation of hospital).

Note: The HCAHPS Survey originally included three items about pain which formed a composite measure, Pain Management. CMS discontinued publicly reporting this measure in July 2018. In January 2018, CMS replaced the original HCAHPS pain items with three items that asked about communication about pain. In compliance with the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act (Pub. L. 115-271) of 2018 (Section 6104), CMS will remove the new communication about pain items from the HCAHPS Survey beginning with October 2019 discharges.

**Numerator Statement**: The HCAHPS Survey asks recently discharged patients about aspects of their hospital experience that they are uniquely suited to address. The core of the survey contains 19 items that ask "how often" or whether patients experienced a critical aspect of hospital care, rather than whether they were "satisfied" with their care. Also included in the survey are three screener items that direct patients to relevant questions, five items to adjust for the mix of patients across hospitals, and two items (race and ethnicity) that support Congressionally-mandated reports. Hospitals may include additional questions after the core HCAHPS items.

For full details, see the current HCAHPS Quality Assurance Guidelines, V.14.0, pp. 57-65,

under the "Quality Assurance" button on the official HCAHPS On-Line Web site at:

https://www.hcahpsonline.org/globalassets/hcahps/quality-assurance/2019 qag v14.0.pdf

**Denominator Statement**: The target population for HCAHPS measures include eligible adult inpatients of all payer types who completed a survey. HCAHPS patient eligibility and exclusions are defined in detail in the sections that follow. A survey is defined as completed if the patient responded to at least 50% of questions applicable to all patients.

**Exclusions**: There are a few categories of otherwise eligible patients who are excluded from the HCAHPS sample frame. As detailed below in sec S.9, these exclusions include patients excluded due to state regulations, no-publicity patients, and specific groups of patients with an admission source or discharge status that results in difficulty collecting patient experience data through a survey instrument.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Facility

Setting of Care: Inpatient/Hospital

Type of Measure: Outcome

Data Source: Instrument-Based Data

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING [06/25/2019]

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

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

1a. Evidence: Y-17; N-0; 1b. Performance Gap: H-2; M-13; L-3; I-0

#### Rationale:

- The discussion initiated with a note by the Committee that questions related to pain management were removed from this iteration of the survey, with the concern expressed that patient experience of pain management is a key component of inpatient care.
- The developer noted that the removal of these questions was a statutory requirement instituted by an act of Congress resulting from a reaction to the opioid crisis, and the potential overmanagement of pain associated with holding providers accountable for patient experience in this quality domain.
- These questions were replaced by questions related to communication about pain, rather than the management of pain.
- The Committee noted that the submission contained appropriate evidence:
- Evidence suggesting patient value and meaningfulness include:
  - o Solicitation of patient feedback in the development of the instrument
  - Focus group testing of inpatient hospital participants, who indicated that they would consider changing hospitals in response to comparisons of HCAHPS scores
  - Independent patient expressions of values, preferences and needs for inpatient care aligning with survey domains
  - Multiple patient focus group confirmations also cited
  - Patients relying on HCAHPS scores over word of mouth reports
- Evidence demonstrating relationship between outcome and healthcare structure, process, intervention or service include:
  - HCAHPS improvement year over year, especially amongst initially low performing hospitals
  - o Cultural competency improvement efforts leading to HCAHPS score improvement
  - Developer cites four studies where hospital managers share best practices to improve HCAHPS scores
  - o Developer cites AHRQ guides in improvement of patient experience of care
- Developer provides data gap analysis of 4,300 hospitals by measure domain, reporting means between 52.36 – 82.05, and standard deviations between 4.74 – 10.72. The Committee assessed this as a sufficient performance gap.

# 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-17; N-0; 2b. Validity: Y-15; N-0

#### Rationale:

- This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.
- The Committee voted to uphold the Methods Panel ratings for reliability and validity, both of which were rated as high.
  - o <u>Reliability:</u> H-5, M-1, L-0, I-0
  - o <u>Validity:</u> H-4, M-2, L-0, I-0

- The Committee noted that Cronbach's alpha was used to evaluate the reliability of the composite measures.
- An ICC and signal-to-noise ratio was used to estimate hospital-level reliability, and the Committee found these are acceptable for evaluating reliability (precision) of hospital scores using the top box approach to scoring.
- The Committee agreed with the Methods Panel that the results of measure score reliability testing were in general good with 300 surveys per hospital. Hospital level item specific reliabilities were also very good in both top-box score and linear mean score forms.
- Developer reported top-box scores by domain. Hospital-level reliabilities of 10 HCAHPS measure mean scores ranged from 0.83 to 0.93. All 10 exceeded the threshold of 0.80 and 9 out of 10 (all but Discharge Information) exceeded the very good/0.85 standard.
- Internal consistency reliability coefficients (Cronbach's alpha) were presented for each of the six multi-item measures. Three of six multi-item measures had internal consistency reliability estimates of 0.80 or higher (Communication with Nurses, Communication with doctors) and three had estimates of 0.68-0.69 (Responsiveness of Hospital Staff, Communication about Medicines, Discharge Information).
- The Committee found that both item-level top-box scores and composite scores were correlated with the global rating of provider at patient and hospital level. Hospital-level factor analysis was conducted to identify underlying factors. The developer also compared possible hospital-level composite item groupings to the composites found in the individual-level factor analysis. The Committee agreed with the Methods Panel that these analyses were done appropriately and thoughtfully.

#### 3. Feasibility: H-4; M-11; L-2; I-0

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

Rationale:

• To address the feasibility concern expressed for each of the CAHPS measures that the burden on the provider associated with CAHPS administration was not presented within the submission, the developer offered an approximate yearly cost range, which the Committee determined to be feasibility.

#### 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

4a. Use: Pass-15; No Pass-2; 4b. Usability: H-3; M-12; L-2; I-0

Rationale:

• The Committee recognized the high degree of utilization for these measures as well as the efforts on the developer's part to ensure the voice of the patient is considered, and feedback loops established with the hospitals that are measured.

#### 5. Related and Competing Measures

• Related measures: NQF #0005, #0006, #0258, #0517, #1741, #2548, and #2967
Standing Committee Recommendation for Endorsement: **Yes-17**; **No-0** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

# 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

## Submission | Specifications

**Description**: This is a survey-based measure and one of the family of surveys called CAHPS Surveys (Consumer Assessment of Healthcare Providers and Systems)that are focused on patient experience. The questionnaire asks End Stage Renal Disease (ESRD) patients receiving in-center hemodialysis care about the services and quality of care that they experience. Patients assess their dialysis providers, including nephrologists and medical and non-medical staff, the quality of dialysis care they receive, and information sharing about their disease. The survey is conducted twice a year, in the spring and fall with adult in-center hemodialysis patients. Publicly-reported measures focus on the proportion of survey respondents at each facility who choose the most favorable responses.

Three multi-item measures:

- a. M1: Nephrologists' Communication and Caring (NCC)
- b. M2: Quality of Dialysis Center Care and Operations (QDCCO)
- c. M3: Providing Information to Patients (PIP)

Three Global items:

- a. M4: Rating of the nephrologist
- b. M5: Rating of dialysis center staff
- c. M6: Rating of the dialysis facility

The first three measures are created from six or more questions from the survey that are reported as one measure score. The three global items are single-item measures using a scale of 0 to 10 to report the respondent's assessment.

The results are reported on Dialysis Facility Compare (DFC) on the Medicare.gov website.

**Numerator Statement**: There are a total of six ICH CAHPS measures. Three of them are multi-item measures and three are global ratings. Each measure is composed of the responses for all individual questions included in the measure. Missing data for individual survey questions are not included in the calculations. Only data from a "completed survey" is used in the calculations. Each measure score is at the facility level and averages the proportion of respondents who chose each answer option for all items in the measure. Each global rating is be scored based on the number of respondents in the distribution of top responses; e.g., the percentage of patients rating the facility a "9" or "10" on a 0 to 10 scale (with 10 being the best).

**Denominator Statement**: Patients receiving in-center hemodialysis at sampled facility for the past 3 months or longer are included in the sample frame.

The denominator for each question is composed of the sample members that responded to the particular question.

Proxy respondents are not allowed.

Only complete surveys are used. A complete survey is defined as one where the sampled patient answered at least 50 percent of the questions that are applicable to all sample patients: Q1-Q20, Q22, Q23, Q25-Q37, Q39-Q41 (Appendix provides more details about these questions.)

Exclusions: Exclusions:

- a. Patients less than 18 years of age
- b. Patients not receiving dialysis at sampled facility for 3 months or more

- c. Patients who are receiving hospice care
- d. Any surveys completed by a proxy (mail only mode or mixed mode)
- e. Any ineligible patients due to death, institutionalization, language barrier, physically or mentally incapable.

Adjustment/Stratification: Other

Level of Analysis: Facility, Other, Population: Regional and State

Setting of Care: Post-Acute Care

Type of Measure: Outcome: PRO-PM

Data Source: Instrument-Based Data

Measure Steward: Centers for Medicare & Medicaid Services

## STANDING COMMITTEE MEETING [07/01/2019]

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

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

1a. Evidence: Y-15; N-0; 1b. Performance Gap: H-1; M-14; L-0; I-0

Rationale:

- The Committee unanimously agreed that the measure passed the evidence criterion, noting the importance of patient-centered care in facilities that people may go to several times a week.
- The Committee agreed that the measure demonstrates a moderate performance gap but noted that the examined disparities and their trends over time could be better elucidated without the added adjustment of many social risk factors.

## 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: **Y-15; N-0**; 2b. Validity: **Y-15; N-0** Rationale:

- The Committee expressed the need to see more empiric validity testing demonstrated in future maintenance cycles.
  - o Testing for reliability and validity included score-level and data element testing.
- The Committee expressed concern about two out of the five denominator exclusions (hospice patients and non-English speaking patients), noting implications on the assessment and delivery of population-sensitive care and the perception of culturally competent care. In this regard, the developer discussed the impractical and insensitive nature of survey application towards hospice patients and explained the way in which facilities account for language barrier. Committee members assessed the developer's reasoning for these exclusions as acceptable.
- The Committee voted to uphold the Methods Panel ratings for reliability and validity, both of which were rated as moderate.
  - o <u>Reliability</u>: H-2, M-3, L-0, I-1
  - o <u>Validity</u>: H-2, M-4, L-0, I-0

## 3. Feasibility: H-0; M-9; L-1; I-0

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

• While the developer did not evaluate the burden on providers associated with measure implementation in the form of fees from retention of an approved CAHPS vendor to administer the surveys during the submission, they offered an analysis during discussion that satisfied the Committee

## 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

4a. Use: Pass-14; No Pass-2; 4b. Usability: H-0; M-13; L-2; I-1 Rationale:

#### 5. Related and Competing Measures

• Related measures: NQF #0005, #0006, #0166, #0517, #1741, #2548, and #2967

Standing Committee Recommendation for Endorsement: **Yes-16**; **No-0** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for endorsement.

#### 6. Public and Member Comment

One comment was submitted during the post-evaluation comment period: On behalf of DaVita, Inc., the approximately 200,000 patients with end-stage renal disease (ESRD) that we serve, and our teammates dedicated to their care, we are pleased to provide the following comments, structured according to the NQF evaluation criteria, on NQF Measure # 0258: Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH-CAHPS).

## Evidence, Performance Gap, Priority – Importance to Measure and Report

The In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS) provides a measure of patients' experience of care with in-center hemodialysis. It was created to allow:

- Consumers and patients to make comparisons among dialysis facilities;
- Dialysis facilities to benchmark their performance;
- CMS to monitor facility performance; and
- Facilities to gather information for internal quality improvement purposes.

We believe it is critically important to evaluate patients' experiences when receiving dialysis and continue to support the ICH CAHPS measure conceptually. However, the burden associated with completion of the survey in its current form limits its effectiveness as a means of engaging patients and driving improvements in care quality. Our specific concerns are detailed in the relevant sections below.

#### Reliability and Validity – Scientific Acceptability of Measure Properties

In its current form, the ICH CAHPS is extremely lengthy and places a significant burden on those patients who choose to complete it. As a comparison, the ICH CAHPS is almost twice as long as the Hospital CAHPS (HCAHPS), despite the fact that hospitals are treating a variety of patient conditions and ESRD facilities only kidney failure. This issue is compounded by the fact that ICH CAHPS administration occurs in the context of numerous other surveys that dialysis patients are asked to complete (e.g. Kidney Disease Quality of Life, provider-specific questionnaires).

As a consequence of its burdensome nature, ICH CAHPS response rates are consistently low and this, in turn, leads to concerns about validity of the reported results. As described in section S.15 of the Measure Information document, a target minimum of 200 completed ICH CAHPS surveys are needed for each facility over each 12-month reporting period in order to achieve statistical precision. However, no minimum response rate on the survey is specified and CMS currently reports CAHPS measures on the Dialysis Facility Compare website for facilities with a minimum of only 30 completed surveys over the prior two data collection periods. Thus, the results that are reported for many facilities lack sufficient statistical power to provide accurate information. This problem is likely to be exacerbated in the future as anticipated increases in the number of dialysis patients selecting home-based treatment modalities further reduces the number of ICH CAHPS responses.

#### Feasibility

Section 3c of the Measure Information document discusses data collection strategy and highlights current efforts to explore the possibility of conducting the survey online. Currently, ICH CAHPS responses are captured by mail and telephone. The excessive length of ICH CAHPS means that font size of the printed version of the survey must be very small, resulting in it being inaccessible to patients with visual impairments. Telephone interviews are also problematic in that CMS requires that these are conducted while the patient is outside the dialysis facility, but during a restricted range of acceptable hours. The lengthy, repetitive nature of the survey questions means that such calls are extremely time consuming. Development of a web-based version of the survey would circumvent many of these issues and additionally would allow patients to easily select their preferred language. Importantly, the use of more acceptable survey delivery methods would likely improve survey response rates.

#### **Usability and Use**

ICH CAHPS results are currently reported on Dialysis Facility Compare and are included in the CMS ESRD Quality Incentive Program (QIP). While having a measure of patients' experiences of care is critically important to inform both patient choice and dialysis facility quality improvement efforts, concerns about the validity of the reported ICH CAHPS results (discussed above) significantly limit the extent to which it is effective in this regard. Section 4a2 of the Measure Information document details suggestions for possible improvements that have been identified through informal meetings with patient groups: these include using the web to collect survey data and shortening the questionnaire. We strongly concur with this feedback and believe that these changes would improve response rates on the survey, resulting in more accurate and meaningful information.

#### **Comparison to Related or Competing Measures**

N/A

#### MEASURE STEWARD/DEVELOPER RESPONSE:

CMS thanks the National Quality Forum (NQF) and DaVita for the opportunity to respond to DaVita's comments on the In-Center Hemodialysis CAHPS® Survey (ICH CAHPS). CMS submitted the current ICH CAHPS questionnaire to NQF for re-endorsement. We have made no substantial changes to the questionnaire or to the survey administration procedures from the initial endorsement. While we are not proposing changes to the current questionnaire or administrative procedures at this time, we are launching an effort to update the ICH CAHPS survey in the future. CMS has begun research and analysis of the current survey data to determine how we might reduce burden on respondents in the future. This includes considering shortening the questionnaire, making modifications to the current questions, and re-evaluating the frequency of administration. If we do make updates to the ICH CAHPS measures, we would make an application to NQF for endorsement of the revised measures.

In general survey response rates have been declining for several years across all types of surveys. CMS believes there are a number of factors contributing to survey response declines. Consequently, we are asking survey vendors to take steps to encourage response.

For telephone surveys we ask vendors to:

- Try different times of day and weekends to reach respondents.
- Whenever possible, ask for a good call back time if the respondent is unable to complete at the moment. We ask vendors to call back at the appointment time.
- Do 10 follow-up call attempts to maximize the possibility of reaching a patient and having them complete the survey.

For the mail surveys we ask vendors to:

- Check mailing addresses to ensure they are as updated as possible.
- Follow questionnaire formatting guidelines in the Survey Administration and Specifications manual, available at <a href="https://ichcahps.org/">https://ichcahps.org/</a>. These guidelines are intended to make the survey as readable as possible.

DaVita mentions conducting a web-based survey. CMS has been conducting tests of web-based CAHPS surveys. Our results indicate that a web-only survey will produce response rates of under 10%. This is far less than we currently get with more traditional methods. For this reason, we are considering the possibility of offering a web-based option along with the traditional methods of data collection (mail, telephone, and mail with telephone follow-up).

#### COMMITTEE RESPONSE:

The Committee appreciates the comment from DaVita, Inc, regarding the In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS) measure. The Committee discussed this during the post-comment call and requested additional information from the measure developer. During the call and in material provided prior, the developer stated that results are reported with 30 completed surveys over two semi-annual periods, and also noted that additional psychometric work shows that 30 completed surveys gives intraclass correlations and intraclass reliability scores of close to or above the critical cutoff of 0.7 for each of the three global ratings, and for two of the three composites, with the third composite scoring 0.65. The Committee is satisfied with this response and believes the measure meets the reliability criteria.

However, the Committee does request the developer and steward take the comments on usability and response rates under consideration for improvement in the next maintenance of endorsement review cycle.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

## 0517 CAHPS Home Health Care Survey (Experience with Care)

#### Submission | Specifications

**Description**: The Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Home Health Care Survey, also referred as the "CAHPS Home Health Care Survey" or "Home Health CAHPS" or "HHCAHPS" is a standardized survey instrument and data collection methodology for measuring home health patients 'perspectives on their home health care in Medicare-certified home health care agencies. AHRQ and CMS participated in the development of the Home Health CAHPS to measure the experiences of those receiving home health care with these three goals in mind:

- 1. To produce comparable data on patients' perspectives on care that allow objective and meaningful comparisons between home health agencies on domains that are important to consumers,
- 2. To create incentives for agencies to improve their quality of care through public reporting of survey results, and
- 3. To enhance public accountability in health care by increasing the transparency of the quality of care provided in return for public investment.

**Numerator Statement**: The numerator statement is that each measure encompasses the responses for all questions that make up the particular measure. Missing data for individual survey questions are not included in the calculations. Only data from a completed survey are used in the calculations. The measures scores averages the proportion of those responding to each answer choice in all questions. Each global rating is scored based on the number of the respondents in the distribution of top responses, such as the percentage of patients rating a home health agency with a 9 or a 10, where 10 is the highest quality responses on a scale from 0 to 10.

**Denominator Statement**: For each of the proportions described in S.5 the denominator is the number of respondents who replied to the question.

**Exclusions**: Numerator and Denominator Exclusions:

- Patients under 18 years of age at any time during their stay are excluded.
- Patients who received fewer than 2 visits from home health agency personnel during a 2-month look-back period are excluded. The 2-month look-back period is defined as the 2-months prior to and including the last day in the sample month.
- Patients have been previously selected for an HHCAHPS sample during any month in the current quarter, or during the last 5 months, are excluded.
- Patients who are currently receiving hospice, or are discharged to hospice, are excluded.
- All routine maternity patients are excluded.
- All "No publicity" status patients are excluded.
- Patients receiving only non-skilled care are excluded.
- Patients who reside in a state where their health condition exclude them from surveys.
- Patients who are decedents at the time of the sample are excluded.

#### Adjustment/Stratification: Other

Level of Analysis: Facility

Setting of Care: Home Care

Type of Measure: Outcome: PRO-PM

Data Source: Instrument-Based Data

## STANDING COMMITTEE MEETING [07/01/2019]

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

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

1a. Evidence: Y-14; N-0; 1b. Performance Gap: H-1; M-13; L-0; I-1

#### Rationale:

- The Committee noted the lack of empirical evidence but recognized the strength of the available • evidence, notably the linkage between the logic model and the five dimensions of assessment and the evidence of importance of the measures to the target populations. The Committee further acknowledged that the scores for the five domains demonstrated wide ranges and the corresponding data suggested vast opportunity for improvement.
- Due to agency turnover, developer noted that improvement is difficult to capture at the aggregate level and is captured, rather, in the items that constitute the composite measures and the implementation of agency-level quality improvement and activities.
- Data indicated variation among racial groups, however, at low levels and warranted by the • developer as insufficient variation for case-mix control.

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

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

#### 2a. Reliability: Y-15; N-0; 2b. Validity: Y-14; N-0

#### Rationale:

- The Committee voted to uphold the Scientific Methods Panel ratings for reliability of high and validity of moderate.
  - o Reliability: H-3, M-2, L-0, I-1
  - o Validity: H-1, M-4, L-0, I-1
- The Committee noted Interclass Correlation (ICC) results with respect to sample sizes above 50 • as strong.

## 3. Feasibility: H-0; M-11; L-4; I-0

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

## Rationale:

While the developer did not evaluate the burden on providers associated with measure • implementation in the form of fees from retention of an approved CAHPS vendor to administer the surveys during the submission, they offered an analysis during discussion that satisfied the Committee.

#### 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

#### 4a. Use: Pass-14; No Pass-1; 4b. Usability: H-1; M-12; L-1; I-1

Rationale:

- The Committee expressed uncertainty about the extent of data use but acknowledge that many home health agencies have begun to incorporate performance data on these measures into their quality improvement work.
- Measure noted as currently used in public reporting via Home Health Compare and in accountability/payment programs.

#### 5. Related and Competing Measures

• Related measures: NQF #0005, #0006, #0166, #0258, #1741, #2548, and #2967

Standing Committee Recommendation for Endorsement: **Yes-14**; **No-1** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

## 2286 Functional Change: Change in Self Care Score

## Submission | Specifications

**Description**: Change in rasch derived values of self-care function from admission to discharge among adults receiving inpatient medical rehabilitation and discharged alive. The timeframe for the measure is 12 months. The measure includes the following 8 items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

**Numerator Statement**: Average change in rasch derived self-care score from admission to discharge at the facility level. Items at admission and discharge include: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. Average is calculated as: ((sum of change at the patient level for all items (Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) / total number of patients)).

**Denominator Statement**: Facility adjusted expected change in rasch derived self-care values, adjusted at the Case Mix Group (CMG) level.

**Exclusions**: National values used in the CMG-adjustment procedure will not include cases who died in the IRF or cases less than 18 years old. It is standard to exclude cases who died during rehabilitation as this is a highly atypical outcome, in addition, minors are excluded as well. The measure testing file includes further explanation regarding the exclusion criteria as well as references.

Adjustment/Stratification: Stratification by risk category/subgroup

Level of Analysis: Facility, Other

Setting of Care: Inpatient/Hospital, Post-Acute Care

Type of Measure: Outcome

Data Source: Instrument-Based Data, Other

**Measure Steward**: Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc. and its successor in interest, UDSMR, LLC.

## STANDING COMMITTEE MEETING [06/20/2019]

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

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

1a. Evidence: Y-13; N-8; 1b. Performance Gap: H-1; M-17; L-2; I-0

Rationale:

- This is a measure of functional status change assessing eight different self-care functions for patients 18+, assessed by a clinician.
- The Committee discussed the correlation of the measure's outcomes compared to the larger FIM instrument, noting this was expected as the developer was correlating a subset of the instrument to the larger FIM instrument.
- The developer noted that multiple peer-reviewed journal articles state that scores on the FIM instrument have shown to be statistically significant as a predictor of patient outcomes in inpatient rehabilitation facilities.
- The Committee wanted evidence to be presented on interquartile numbers for facilities using the measure. The developer provided quartile facility mean change data but not interquartile data.

- The Committee noted that the FIM tool will no longer be used for payment and benchmarking as of October 1, 2019 and Committee members stated they believed facilities will no longer use the FIM tool as they will no longer be required to do so.
- The developer provided quartile mean and standard deviation scores for change in self-care at the facility level.
- There is currently a limited gap in care, with negligible adjusted differences pertaining to race, sex, and marital status.

## 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-20; N-1; 2b. Validity: Y-21; N-0

Rationale:

- The Committee voted to uphold the Scientific Methods Panel ratings for reliability of moderate and validity of high.
  - o <u>Reliability</u>: H-1, M-4, L-1, I-0
  - o <u>Validity</u>: H-3, M-1, L-0, I-2
- Both the Committee and the Methods Panel questioned the developer as to why there was a need for a random sampling of 30 of the 855 facilities.
- Developer noted they were given this instruction by NQF and the previous Person and Family Centered Care Committee.
- The Methods Panel noted that "A stronger method of reliability testing would include an analysis of within- facility score and between-facility score variation".
- The developer stated that patients at each facility were compared against the other 29 facilities.
- The measure passed the Methods Panel review with a rating of High for validity.
- One Committee member questioned whether correlating a subset of the FIM predicts the larger score, because the larger score is dependent on the subset; however, the Committee agreed to accept the Methods Panel rating for validity.

## 3. Feasibility: H-3; M-16; L-1; I-0

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

Rationale:

- FIM tool data is collected by healthcare personnel during the provision of care and all data elements are defined fields in electronic clinical data.
- The Committee agreed that the measure was feasible.

## 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

4a. Use: Pass-21; No Pass-0; 4b. Usability: H-4; M-14; L-1; I-1

<u>Rationale</u>:

- The Committee noted concerns with use once CMS IRF-PAI stops using the measure for payments and benchmarking in October 2019, as well as concerns about whether the measure is truly publicly reported.
- The developers stated the measure is publicly available for use free of charge and that they publish data to their customers.
- The developer also noted that Facility-level and national benchmark reporting are available by the developer through a subscription; cost varies based on facility type and size.
- The Committee flagged a lack of year-over-year data pertaining to usability.
- In lieu of year-over-year data, the developer provided differences in average self-change scores among differing facilities and rank ordered them in terms of patient average change in self-care function from admission to discharge.
  - Mean change scores and standard deviation by quartile:
    - Quartile 1 (25th%): Mean 4.6, Standard Deviation 4.2
    - Quartile 2 (25th-50th%): Mean 11.5, Standard Deviation 1.1
    - Quartile 3 (50th-75th%): Mean 15.9, Standard Deviation 1.4
    - Quartile 4 (75th%): Mean 23.3, Standard Deviation 4.02

#### 5. Related and Competing Measures

- This measure directly competes with NQF #2633, Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients. Description: This measure estimates the risk-adjusted mean change in self-care score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.
- This cycle of work included two pairs of competing measures NQF 2286 (UDSMR) vs. NQF 2633 (CMS) and NQF 2321 (UDSMR) vs. NQF 2634 (CMS). NQF staff introduced the discussion by summarizing the history of the two pairs of measures: both were endorsed in 2015, with instructions from the NQF Board to re-review and make a best-in-class decision at the next maintenance review. Staff then reviewed the NQF criteria and decision rubric for competing measures. Each developer provided a short introduction to their two measures, their current use, and how they differ from the other pair of measures. Following this introductory section, the Committee reviewed the decision tree and asked several clarifying questions to NQF staff and to the developers. NQF noted the need for parsimony among the endorsed measure set to reduce burden on measure users and clarified that was one of the main reasons for not endorsing competing measures.
- Committee members noted confusion on why they were being asked to select a "best-in-class" measure given the differing uses of each pair, the differences between the tools used in the measures, and the differing populations included in the measures.
- Committee members noted that CMS has statutory requirements to use 2633 and 2634, and that they are included in the PAC unified payment system (whether or not they are NQFendorsed), but that measures 2286 and 2321 have a broader population and are useful for non-Medicare beneficiaries since they include all payors. They strongly stated that both sets have value to the healthcare system and add different things. Further, they noted the long-standing use of the FIM-based measures (which includes state performance benchmarks, as well as issues like facilities not wanting to retrain staff on entirely new measures) and that there are many other payors using measures, not just Medicare.

- It was noted the UDSMR measures start at age 18 and the CMS measures start at age 21, and that the diagnoses are skewed by age – patients 18-21 are more likely to get traumatic brain injuries, traumatic spinal cord injuries, and multiple trauma for motor vehicle accidents, which impacts both rehab needs and outcomes. The CMS measures are intended for Medicare beneficiaries, which are mostly (but not entirely) people ages 65 and older.
- It was also noted that cognitive function is not currently included in the CMS measures except as a risk adjustor, but that it might be in the future; however, there was some disagreement over whether or not it is appropriate to merge data for both cognitive and motor function in these measures.
- It was clarified that the burden of multiple measures looking at similar outcomes falls on the person scoring and the facility reporting, not on the patient.
- Ultimately, the Committee decided the measures are complementary, due to the different populations included and the different uses for each pair and elected to recommend both pairs of measures for continued endorsement.

Standing Committee Recommendation for Endorsement: Yes-20; No-0

## <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

## 2321 Functional Change: Change in Mobility Score

#### Submission | Specifications

**Description**: Change in rasch derived values of mobility function from admission to discharge among adults aged 18 and older receiving inpatient medical rehabilitation at a post acute care facility who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility items:1. Transfer Bed/Chair/Wheelchair, 2. Transfer Toilet, 3. Locomotion, 4. Stairs.

**Numerator Statement**: Average change in rasch derived mobility function score from admission to discharge at the facility level. Includes the following items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level/total number of patients). Patient less than 18 years of age at admission to the facility or patients who died within the facility are excluded.

**Denominator Statement**: Facility adjusted expected change in rasch derived mobility values, adjusted at the Case Mix Group (CMG) level.

**Exclusions**: National values used in the CMG adjustment procedure will not include cases who died in the IRF or patients less than 18 years of age at admission. Cases who died during rehabilitation are not typical patients and are routinely omitted from reports and published research on rehabilitation outcomes. Further details and references related to the exclusion criteria can be found in the Measure Testing form.

Adjustment/Stratification: Stratification by risk category/subgroup

Level of Analysis: Facility, Other

Setting of Care: Inpatient/Hospital, Post-Acute Care

Type of Measure: Outcome

Data Source: Instrument-Based Data, Other

**Measure Steward**: Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc. and its successor in interest, UDSMR, LLC.

#### STANDING COMMITTEE MEETING [06/20/2019]

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

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

1a. Evidence: Y-18; N-2; 1b. Performance Gap: H-1; M-17; L-2; I-0

Rationale:

- This is a measure of functional status change assessing eight different self-care functions for patients 18+, assessed by a clinician.
- The measure is informed by the FIM instrument, a tool used in inpatient medical rehabilitation to assess the patient's level of functional status at admission and at discharge. The FIM instrument includes 18 items, of which, four items address patient mobility function.
- The Committee agreed that this kind of measure is important to consumers and that the evidence issues resembled those previously discussed for measure 2286, and the Committee had no additional concerns to discuss.
- The Committee did not bring forth any comments on gap, though a general comment was made suggesting that measures should show an individual's decline has been reduced or stabilized and not just whether their status has improved or not.

# 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-20; N-1; 2b. Validity: Y-18; N-3

Rationale:

- The Committee voted to uphold the Scientific Methods Panel ratings for reliability of moderate and validity of high.
  - o <u>Reliability</u>: H-1, M-4, L-1, I-0
  - o <u>Validity</u>: H-3, M-1, L-0, I-2
- Committee's comments resembled those of measure 2286, regarding sample size of 30 facilities.
- The Committee flagged that the measure captured a narrow population, to which the developer responded that they are limited to what data are available in the data set, but they have access to race, sex, age, marital status, and payer information.

## 3. Feasibility: H-3; M-16; L-2; I-0

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

Rationale:

- FIM tool data is collected by healthcare personnel during the provision of care and all data elements are defined fields in electronic clinical data.
- The Committee agreed that the measure was feasible but again raised the concern of CMS no longer using the FIM tool starting in October 2019.

## 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

## 4a. Use: Pass-21; No Pass-0; 4b. Usability: H-1; M-16; L-3; I-0

Rationale:

- In lieu of year-over-year data, the developer provided differences in average mobility change scores among differing facilities and rank ordered them in terms of patient average change in mobility care function from admission to discharge.
  - Mean change scores and standard deviation by quartile:
    - Quartile 1 (25th%): Mean- 2.8, Standard Deviation- 2.6
    - Quartile 2 (25th-50th%): Mean- 8.6, Standard Deviation- 1.1
    - Quartile 3 (50th-75th%): Mean- 11.5, Standard Deviation- 0.5
    - Quartile 4 (75th%): Mean- 15.2, Standard Deviation- 2.0
- The Committee did not have any comments on use or usability for this measure and voted to pass it on both.

## 5. Related and Competing Measures

• This measure directly competes with NQF #2634, Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients. Description: This measure estimates the mean risk-adjusted mean change in mobility score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.

- This cycle of work included two pairs of competing measures NQF 2286 (UDSMR) vs. NQF 2633 (CMS) and NQF 2321 (UDSMR) vs. NQF 2634 (CMS). NQF staff introduced the discussion by summarizing the history of the two pairs of measures: both were endorsed in 2015, with instructions from the NQF Board to re-review and make a best-in-class decision at the next maintenance review. Staff then reviewed the NQF criteria and decision rubric for competing measures. Each developer provided a short introduction to their two measures, their current use, and how they differ from the other pair of measures. Following this introductory section, the Committee reviewed the decision tree and asked several clarifying questions to NQF staff and to the developers. NQF noted the need for parsimony among the endorsed measure set to reduce burden on measure users and clarified that was one of the main reasons for not endorsing competing measures.
- Committee members noted confusion on why they were being asked to select a "best-in-class" measure given the differing uses of each pair, the differences between the tools used in the measures, and the differing populations included in the measures.
- Committee members noted that CMS has statutory requirements to use 2633 and 2634, and that they are included in the PAC unified payment system (whether or not they are NQFendorsed), but that measures 2286 and 2321 have a broader population and are useful for non-Medicare beneficiaries since they include all payors. They strongly stated that both sets have value to the healthcare system and add different things. Further, they noted the long-standing use of the FIM-based measures (which includes state performance benchmarks, as well as issues like facilities not wanting to retrain staff on entirely new measures) and that there are many other payors using measures, not just Medicare.
- It was noted the UDSMR measures start at age 18 and the CMS measures start at age 21, and that the diagnoses are skewed by age patients 18-21 are more likely to get traumatic brain injuries, traumatic spinal cord injuries, and multiple trauma for motor vehicle accidents, which impacts both rehab needs and outcomes. The CMS measures are intended for Medicare beneficiaries, which are mostly (but not entirely) people ages 65 and older.
- It was also noted that cognitive function is not currently included in the CMS measures except as
  a risk adjustor, but that it might be in the future; however, there was some disagreement over
  whether or not it is appropriate to merge data for both cognitive and motor function in these
  measures.
- It was clarified that the burden of multiple measures looking at similar outcomes falls on the person scoring and the facility reporting, not on the patient.
- Ultimately, the Committee decided the measures are complementary, due to the different populations included and the different uses for each pair and elected to recommend both pairs of measures for continued endorsement.
- Related measures: NQF #2632 and #2636

Standing Committee Recommendation for Endorsement: **Yes-20**; **No-0** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

# 2548 Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

## Submission | Specifications

**Description**: The Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey is a standardized survey instrument that asks parents and guardians (henceforth referred to as parents) of children under 18 years old to report on their and their child's experiences with inpatient hospital care.

The performance measures of the Child HCAHPS survey consist of 39 items organized by overarching groups into the following 18 composite and single-item measures:

Communication with Parent

- 1. Communication between you and your child's nurses (3 items)
- 2. Communication between you and your child's doctors (3 items)
- 3. Communication about your child's medicines (4 items)
- 4. Keeping you informed about your child's care (2 items)
- 5. Privacy when talking with doctors, nurses, and other providers (1 item)
- 6. Preparing you and your child to leave the hospital (5 items)
- 7. Keeping you informed about your child's care in the Emergency Room (1 item)

Communication with Child

- 8. How well nurses communicate with your child (3 items)
- 9. How well doctors communicate with your child (3 items)
- 10. Involving teens in their care (3 items)

Attention to Safety and Comfort

- 11. Preventing mistakes and helping you report concerns (2 items)
- 12. Responsiveness to the call button (1 item)
- 13. Helping your child feel comfortable (3 items)
- 14. Paying attention to your child's pain (1 item)

Hospital Environment

- 15. Cleanliness of hospital room (1 item)
- 16. Quietness of hospital room (1 item)

**Global Rating** 

- 17. Overall rating (1 item)
- 18. Recommend hospital (1 item)

We recommend that the scores for the Child HCAHPS composite and single-item measures be calculated using a top-box scoring method. The top box score refers to the percentage of respondents who answered survey items using the best possible response option. The measure time frame is 12 months. A more detailed description of the Child HCAHPS measure can be found in the Detailed Measure Specifications (Appendix A).

**Numerator Statement**: Using the top-box scoring method, the numerator of the top-box score for a measure consists of the number of respondents with a completed survey who gave the best possible answer for the item(s) in a measure.

For example, the top-box numerator for the communication between you and your child's nurses composite is the number of respondents who answered "Always" to questions about how well nurses communicated well with them.

**Denominator Statement**: The denominator for each single-item measure is the number of respondents with a completed survey who responded to the item. The denominator for each composite measure is the number of respondents with a completed survey who responded to at least one of the items within the measure. The target population for the survey is parents of children under 18 years old who have been discharged from the hospital during the target 12-month time frame.

## Exclusions: SURVEY AND MEASURES 1-18

Exclude parents of certain patients from the measure (numerator and denominator) based on clinical and non-clinical criteria:

- 1. "No-publicity" patients
- 2. Court/law enforcement patients
- 3. Patients with a foreign home addresses
- 4. Patients discharged to hospice care (hospice-home or hospice-medical facility)
- 5. Patients who are excluded because of state regulations
- 6. Patients who are wards of the state
- 7. Healthy newborns
- 8. Maternity-stay patients
- 9. Patients admitted for observation
- 10. Patients discharged to skilled nursing facilities
- 11. Patients who are emancipated minors

## MEASURES 1-18

Exclude respondents from the numerator and denominator of a measure if they have completed survey items in the measure using multiple marks (i.e., they gave multiple answers to an individual question).

## **MEASURES 8-9**

Exclude the following respondents from the numerator and denominator:

- 1. All those who answered "No" to screener question 6 (Is your child able to talk with nurses and doctors about his or her health care?)
- 2. All those whose child was under 3 years old at discharge as determined using administrative data

## MEASURE 10

Exclude the following respondents from the numerator and denominator:

- 1. All those who answered "No" in screener question 43 (During this hospital stay, was your child 13 years old or older?)
- 2. All those whose child was under 13 years old at discharge as determined using administrative data
- 3. All those who answered "No" in screener question 6 (Is your child able to talk with nurses and doctors about his or her health care?)

## MEASURE 12

Exclude the following respondents from the numerator and denominator:

1. All those who answered "No" in screener question 25 (During this hospital stay, did you or your child ever press the call button?)

**MEASURE 14** 

Exclude the following respondents from the numerator and denominator:

1. All those who answered "No" in screener question 30 (During this hospital stay, did your child have pain that needed medicine or other treatment?)

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Facility Setting of Care: Inpatient/Hospital Type of Measure: Outcome: PRO-PM Data Source: Claims Measure Steward: Agency for Healthcare Research and Quality

## STANDING COMMITTEE MEETING [06/25/2019]

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

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

1a. Evidence: Y-14; N-0; 1b. Performance Gap: H-1; M-13; L-0; I-1

## Rationale:

- Discussion of Evidence and Performance Gap for this measure was limited, with the Committee expressing general satisfaction with the submission.
- It was noted that the spirit of this measure is of high importance, with meaningfulness wellillustrated in the submission's literature review suggesting lots of links to interventions and processes that hospitals can deploy to potentially improve performance on this measure.
- Value and meaningfulness to patient was addressed by the developer. Patient and family input was provided during survey development through 8 focus groups, 109 cognitive interviews, and 23 end-user interviews.
- The evidence presented didn't clearly define evidence of processes, structures, interventions or services that can be used to influence HCAHPS performance. There is an implied connection cited through several sources:
  - Studies linking treatment adherence and communication between providers; this suggests that if providers improve communication, patients will have better outcomes and will therefore report better experience of communication and overall satisfaction with care.
  - Studies linking patient experience to higher levels of adherence to recommended treatments, better clinical outcomes, and lower health care utilization; this makes the argument for patient experience of care but does not necessarily empirically demonstrate something that a hospital can do to improve their performance on the measure.
- The Committee was satisfied with the developer's analyses of performance gaps.

# 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
2a. Reliability: Y-15; N-0; 2b. Validity: Y-14; N-0
<u>Rationale</u>:

- The Committee voted to uphold the Scientific Methods Panel ratings for reliability of moderate and validity of moderate.
  - o <u>Reliability</u>: H-1, M-4, L-0, I-1
  - o <u>Validity</u>: H-1, M-4, L-0, I-1
- The Committee noted that some of the measurement domains did not have strong Cronbach's alpha scores in the data element level reliability testing.
- The survey response rate of 17% was also a concern.
- The Committee questioned the exclusion of certain classes of children, such as those in foster care.
- The developer responded that foster care children were excluded because of challenges associated with follow-up due to address changes and questions of whom to give the survey too when there is ambiguity surrounding who has custody or guardianship of the child.
- The Committee strongly encouraged the developer to figure out how to include this particularly vulnerable population. The developer noted that they are experimenting with administering the survey upon discharge, which would allow for them to address the challenges that have caused them to exclude this population to this point.
- The Committee voted to uphold the Methods Panel ratings.

## 3. Feasibility: H-0; M-11; L-4; I-0

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

Rationale:

• While the developer did not evaluate the burden on providers associated with measure implementation in the form of fees from retention of an approved CAHPS vendor to administer the surveys during the submission, they offered an analysis during discussion that satisfied the Committee

## 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

## 4a. Use: Pass-14; No Pass-1; 4b. Usability: H-1; M-12; L-1; I-1

Rationale:

- The Committee noted the wide implementation of the measure and its continued evaluation and updating based on user and patient feedback.
- The Committee did not express any concerns with usability and use.

## 5. Related and Competing Measures

• Related measures: NQF #0005, #0006, #0166, #0258, #0517, #1741, and #2967

Standing Committee Recommendation for Endorsement: **Yes-14**; **No-1** Rationale

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

## 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (CMS/RTI)

## Submission | Specifications

**Description**: This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission.

**Numerator Statement**: The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score.

**Denominator Statement**: The target population (denominator) for this quality measure is the number of LTCH patients requiring ventilator support at the time of admission to the LTCH.

Exclusions: This quality measure has following patient-level exclusion criteria:

1) Patients with incomplete stays:

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute-care setting (Inpatient Prospective Payment System or Inpatient Psychiatric Hospital or unit) because of a medical emergency or psychiatric condition; patients transferred to another LTCH; patients who leave the LTCH against medical advice; patients who die; and patients with a length of stay less than 3 days.

2) Patients discharged to hospice:

Rationale: Patients discharged to hospice are excluded because functional improvement may not be a goal for these patients.

3) Patients with progressive neurological conditions, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, and Huntington's chorea:

Rationale: These patients are excluded because they may have functional decline or less predictable function trajectories.

4) Patients in coma, persistent vegetative state, complete tetraplegia, and locked-in syndrome:

Rationale: The patients are excluded because they may have limited or less predictable mobility recovery.

5) Patients younger than age 21:

Rationale: There is only limited evidence published about functional outcomes for individuals younger than 21.

6) Patients who are coded as independent on all the mobility items at admission:

Rationale: These patients are excluded because no improvement in mobility skills can be measured with the mobility items used in this quality measure.

Facility-level quality measure exclusion: For LTCHs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Facility

Setting of Care: Post-Acute Care

Type of Measure: Outcome

Measure Steward: Centers for Medicare & Medicaid Services

## STANDING COMMITTEE MEETING [07/02/2019]

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

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

1a. Evidence: Y-14; N-1; 1b. Performance Gap: H-1; M-11; L-3; I-0

Rationale:

- The Committee noted that this maintenance measure was one of the first of a "new class" of measures using G.G. codes for functional status. Committee members agreed that while there is scant literature for LTACs specifically, the literature on ventilator patients generally supports early intervention.
- There is a clear gap in care, with disparities around marriage status, race, and payment source, and an opportunity for improvement.

## 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-14; N-0; 2b. Validity: Y-14; N-0

Rationale:

- The measure did pass the Methods Panel review, but the Committee discussed the representativeness and generalizability of the included population, flagging that over one-third of the population is excluded. The Committee agreed the exclusions are reasonable (incomplete stays, hospice patients, various clinical conditions, etc.) but asked whether the exclusion rates varied across facilities which would potentially indicate different case mixes.
- After some discussion of the inclusion and exclusion criteria, and the risk adjustment criteria (particularly around cardiac conditions), the Committee ultimately agreed with the Methods Panel that the measure passed both reliability and validity, which were each rated as moderate.
  - o <u>Reliability</u>: H-2, M-4, L-0, I-1
  - o <u>Validity</u>: H-2, M-3, L-0, I-1

## 3. Feasibility: H-6; M-8; L-0; I-0

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

<u>Rationale</u>:

• The Committee agreed the measure was feasible and had no concerns with this criterion.

## 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

4a. Use: Pass-13; No Pass-1; 4b. Usability: H-0; M-10; L-3; I-1

#### Rationale:

- As the measure is in use in two accountability programs, the Committee agreed it met the use criterion.
- Committee members flagged that the measure looks at a very narrow population, which limits its usability and actionability for clinicians; the developer noted the specific subpopulation and setting were mandated by Congress. The Committee also noted there was minimal change over the last two years of data but the developer noted the measure is fairly newly reported and there have been a number of changes in the last two years for LTCHs so they expect more improvement in the future.
- Despite these concerns, the measure ultimately passed usability and the Committee recommended it for continued endorsement.

#### 5. Related and Competing Measures

Related measures: NQF #0167, #0175, #0422, #0423, #0424, #0425, #0426, #0427, #0428, #0429, #0688, #2287, #2321, #2612, #2634, #2636, #2643, #2653, #2774, #2775, #2776, #2778

Standing Committee Recommendation for Endorsement: **Yes-12**; **No-2** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

## 8. Appeals

# 2633 IRF Functional Outcome Measure- Change in Self-Care Score for Medical Rehabilitation Patients (CMS/RTI)

## Submission | Specifications

**Description**: This measure estimates the risk-adjusted mean change in self-care score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.

**Numerator Statement**: The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in self-care score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients age 21 or older. The change in self-care score is calculated as the difference between the discharge self-care score and the admission self-care score.

**Denominator Statement**: The denominator is the number of Inpatient Rehabilitation Facility Medicare patient stays, except those that meet the exclusion criteria.

Exclusions: This quality measure has six patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients who are independent with all self-care activities at the time of admission.

Rationale: Patients who are independent with all the self-care items at the time of admission are assigned the highest score on all the self-care items, and thus, would not be able to show functional improvement on this same set of items at discharge.

3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; or severe anoxic brain damage, cerebral edema or compression of the brain.

Rationale: These patients are excluded because they may have limited or less predictable self-care improvement with the selected self-care items.

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

5) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Facility Setting of Care: Post-Acute Care Type of Measure: Outcome Data Source: Instrument-Based Data Measure Steward: Centers for Medicare & Medicaid Services

## STANDING COMMITTEE MEETING [06/20/2019]

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

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

1a. Evidence: Y-17; N-2; 1b. Performance Gap: H-0; M-15; L-4; I-0

Rationale:

- Committee members noted that this measure is important to measure, and that patients find performance across facilities to be valuable information.
- In response to questions, the developer noted that patients living alone had better outcomes, likely because facilities will keep patients who live alone longer to ensure they are fully ready for discharge.
- Also in response to questions, the developer explained that this measure and the related measures were developed in response to a mandate through the IMPACT Act, using standardized assessment items.
- Committee members noted that the evidence demonstrates that self-care and mobility should be kept together instead of treated separately, and also asked about the lack of information on cognitive function, and the developer explained that within IRF settings there is a wide range of patients, and merging the data across diagnostic groups (for example, strokes and orthopedic conditions) led to less precise results; in addition, across diagnosis groups it is better to separate cognitive and motor functions because they are very different and not all patients need both measured.
- A Committee member noted the population included in the measure seems similar in sociodemographic factors to the general population so results did not indicate there were gaps in referral patterns. The Committee agreed there are gaps in care.

## 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: **Y-19; N-0**; 2b. Validity: **Y-17; N-2** 

Rationale:

- The Committee discussed the factors used in the risk adjustment model and the developer noted they continue to track results to see how/if the measure should be adjusted or stratified.
- This measure was reviewed by and passed the Methods Panel, and the Committee agreed to take their ratings for reliability of high.
  - o <u>Reliability</u>: H-4, M-2, L-0, I-0
- After some discussion of the exclusion criteria, the Committee also agreed to accept the Methods Panel rating for validity of moderate.
  - o <u>Validity</u>: H-2, M-3, L-1, I-0

## 3. Feasibility: H-7; M-11; L-1; I-0

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

#### <u>Rationale</u>:

• The measure uses standardized data elements that are required, so the Committee had no feasibility concerns.

### 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

#### 4a. Use: Pass-15; No Pass-4; 4b. Usability: H-2; M-12; L-6; I-0

Rationale:

- The measure will be publicly reported next year so the Committee agreed it met the Use criterion.
- Committee members were concerned that the last two years showed no changes in performance. The developer explained there have been many changes in the last two years and these are also new, and they anticipate seeing changes in the future, but will be tracking the data carefully. The measure passed usability.

#### 5. Related and Competing Measures

- This measure directly competes with NQF #2286, Functional Change: Change in Self Care Score. Description: Change in rasch derived values of self-care function from admission to discharge among adult patients treated at an inpatient rehabilitation facility who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 8 items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.
- This cycle of work included two pairs of competing measures NQF 2286 (UDSMR) vs. NQF 2633 (CMS) and NQF 2321 (UDSMR) vs. NQF 2634 (CMS). NQF staff introduced the discussion by summarizing the history of the two pairs of measures: both were endorsed in 2015, with instructions from the NQF Board to re-review and make a best-in-class decision at the next maintenance review. Staff then reviewed the NQF criteria and decision rubric for competing measures. Each developer provided a short introduction to their two measures, their current use, and how they differ from the other pair of measures. Following this introductory section, the Committee reviewed the decision tree and asked several clarifying questions to NQF staff and to the developers. NQF noted the need for parsimony among the endorsed measure set to reduce burden on measure users and clarified that was one of the main reasons for not endorsing competing measures.
- Committee members noted confusion on why they were being asked to select a "best-in-class" measure given the differing uses of each pair, the differences between the tools used in the measures, and the differing populations included in the measures.
- Committee members noted that CMS has statutory requirements to use 2633 and 2634, and that they are included in the PAC unified payment system (whether or not they are NQF-endorsed), but that measures 2286 and 2321 have a broader population and are useful for non-Medicare beneficiaries since they include all payors. They strongly stated that both sets have

value to the healthcare system and add different things. Further, they noted the long-standing use of the FIM-based measures (which includes state performance benchmarks, as well as issues like facilities not wanting to retrain staff on entirely new measures) and that there are many other payors using measures, not just Medicare.

- It was noted the UDSMR measures start at age 18 and the CMS measures start at age 21, and that the diagnoses are skewed by age – patients 18-21 are more likely to get traumatic brain injuries, traumatic spinal cord injuries, and multiple trauma for motor vehicle accidents, which impacts both rehab needs and outcomes. The CMS measures are intended for Medicare beneficiaries, which are mostly (but not entirely) people ages 65 and older.
- It was also noted that cognitive function is not currently included in the CMS measures except as a risk adjustor, but that it might be in the future; however, there was some disagreement over whether or not it is appropriate to merge data for both cognitive and motor function in these measures.
- It was clarified that the burden of multiple measures looking at similar outcomes falls on the person scoring and the facility reporting, not on the patient.
- Ultimately, the Committee decided the measures are complementary, due to the different populations included and the different uses for each pair and elected to recommend both pairs of measures for continued endorsement.
- Related measures: NQF #0174, #0175, #0426, #0427, #0428, #0688, #2287, #2613, #2635, #2643, #2769, #2775, #2776, and #2777

Standing Committee Recommendation for Endorsement: **Yes-20**; **No-0** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

## 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

# 2634 IRF Functional Outcome Measure – Change in Mobility Score for Medical Rehabilitation Patients (CMS/RTI)

## Submission | Specifications

**Description**: This measure estimates the mean risk-adjusted mean change in mobility score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.

**Numerator Statement**: The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in mobility score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients age 21 and older. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score.

**Denominator Statement**: The denominator is the number of Inpatient Rehabilitation Facility Medicare Part A and Medicare Advantage patient stays, except those that meet the exclusion criteria.

Exclusions: This quality measure has six patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients who are independent with all mobility activities at the time of admission.

Rationale: Patients who are independent with all the mobility items (with the exception of the wheelchair items GG0170R and GG0170S) at the time of admission are assigned the highest score on all the mobility items, and thus, would not be able to show functional improvement on this same set of items at discharge.

3) Patients with the following medical conditions on admission: coma, persistent vegetative state; complete quadriplegia; locked-in syndrome or severe anoxic brain damage, cerebral edema or compression of brain.

Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected mobility items.

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

5) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

Adjustment/Stratification: Statistical Risk Model Level of Analysis: Facility Setting of Care: Post-Acute Care Type of Measure: Outcome Data Source: Instrument-Based Data Measure Steward: Centers for Medicare & Medicaid Services

## STANDING COMMITTEE MEETING [06/20/2019]

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

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

1a. Evidence: Y-20; N-0; 1b. Performance Gap: H-6; M-12; L-2; I-0

Rationale:

- Committee members noted this measure was easily understood by the public and assesses an important area of health.
- Committee members flagged that this measure focuses on patients in Medicare or Medicare Advantage, which does somewhat limit its usefulness.
- After some discussion on the timing of the assessments they agreed the measure met the importance criteria.
- They noted the wide gaps in care for a number of social and demographic factors, including urban vs. rural, and agreed the measure met the gap criterion.

## 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-20; N-0; 2b. Validity: Y-15; N-4

Rationale:

- The Committee voted to uphold the Scientific Methods Panel ratings for reliability of high and validity of moderate.
  - o <u>Reliability</u>: H-4, M-2, L-0, I-0
  - o <u>Validity</u>: H-2, M-4, L-0, I-0

## 3. Feasibility: H-9; M-10; L-0; I-0

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

Rationale:

• Similar to the previous measure, this measure is collected from standardized data elements and the Committee had no concerns with the feasibility.

## 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

## 4a. Use: Pass-20; No Pass-0; 4b. Usability: H-6; M-11; L-3; I-0

Rationale:

- The Committee raised concerns about the potential use of this measure becoming punitive and leading to the closure of facilities, but the developer started this is not currently used in value-based purchasing; the Committee noted it might be in the future.
- Despite these concerns, since the measure is currently in use and will be publicly reported in 2020, it passed use.
- The measure met the usability criteria and was recommended for maintenance of endorsement.

#### 5. Related and Competing Measures

- This measure directly competes with NQF #2321, Functional Change: Change in Mobility Score. Description: Change in rasch derived values of mobility function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility FIM<sup>®</sup> items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.
- This cycle of work included two pairs of competing measures NQF 2286 (UDSMR) vs. NQF 2633 (CMS) and NQF 2321 (UDSMR) vs. NQF 2634 (CMS). NQF staff introduced the discussion by summarizing the history of the two pairs of measures: both were endorsed in 2015, with instructions from the NQF Board to re-review and make a best-in-class decision at the next maintenance review. Staff then reviewed the NQF criteria and decision rubric for competing measures. Each developer provided a short introduction to their two measures, their current use, and how they differ from the other pair of measures. Following this introductory section, the Committee reviewed the decision tree and asked several clarifying questions to NQF staff and to the developers. NQF noted the need for parsimony among the endorsed measure set to reduce burden on measure users and clarified that was one of the main reasons for not endorsing competing measures.
- Committee members noted confusion on why they were being asked to select a "best-in-class" measure given the differing uses of each pair, the differences between the tools used in the measures, and the differing populations included in the measures.
- Committee members noted that CMS has statutory requirements to use 2633 and 2634, and that they are included in the PAC unified payment system (whether or not they are NQFendorsed), but that measures 2286 and 2321 have a broader population and are useful for non-Medicare beneficiaries since they include all payors. They strongly stated that both sets have value to the healthcare system and add different things. Further, they noted the long-standing use of the FIM-based measures (which includes state performance benchmarks, as well as issues like facilities not wanting to retrain staff on entirely new measures) and that there are many other payors using measures, not just Medicare.
- It was noted the UDSMR measures start at age 18 and the CMS measures start at age 21, and that the diagnoses are skewed by age patients 18-21 are more likely to get traumatic brain injuries, traumatic spinal cord injuries, and multiple trauma for motor vehicle accidents, which impacts both rehab needs and outcomes. The CMS measures are intended for Medicare beneficiaries, which are mostly (but not entirely) people ages 65 and older.
- It was also noted that cognitive function is not currently included in the CMS measures except as a risk adjustor, but that it might be in the future; however, there was some disagreement over

whether or not it is appropriate to merge data for both cognitive and motor function in these measures.

- It was clarified that the burden of multiple measures looking at similar outcomes falls on the person scoring and the facility reporting, not on the patient.
- Ultimately, the Committee decided the measures are complementary, due to the different populations included and the different uses for each pair and elected to recommend both pairs of measures for continued endorsement.
- Related measures: NQF #0167, #0175, #0422, #0423, #0424, #0425, #0426, #0427, #0428, #0429, #0688, #2287, #2321, #2612, #2632, #2636, #2643, #2653, #2774, #2775, #2776, and #2778

Standing Committee Recommendation for Endorsement: **Yes-20**; **No-0** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

## 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

# 2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (CMS/RTI)

## Submission | Specifications

**Description**: This measure estimates the percentage of IRF patients who meet or exceed an expected discharge self-care score.

**Numerator Statement**: The numerator is the number of patients in an IRF with an observed discharge self-care score that is equal to or higher than the calculated expected discharge self-care score.

**Denominator Statement**: Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

Exclusions: This quality measure has five patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; or severe anoxic brain damage, cerebral edema or compression of the brain.

Rationale: These patients are excluded because they may have limited or less predictable self-care improvement with the selected self-care items.

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

4) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

5) Patients not covered by the Medicare Part A and Medicare Advantage program.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Facility

Setting of Care: Post-Acute Care

Type of Measure: Outcome

Data Source: Instrument-Based Data

Measure Steward: Centers for Medicare & Medicaid Services

## STANDING COMMITTEE MEETING [07/02/2019]

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

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

1a. Evidence: Y-14; N-0; 1b. Performance Gap: H-5; M-9; L-0; I-0

## Rationale:

• Committee members agreed this measure looks at an important aspect of care and noted there is a large range in performance and there were disparities by race.

## 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-14; N-0; 2b. Validity: Y-13; N-1

Rationale:

- This measure was also reviewed by and passed the Methods Panel; the Committee agreed the measure passed the reliability criteria, voted as high by the Methods Panel.
  - o <u>Reliability</u>: H-4, M-2, L-0, I-0
- Despite some concerns, including concerns about the risk adjustment model being adequate; about the structure of reporting that updates the benchmark annually; and about the number of patients excluded due to incomplete stays (37%), the Committee ultimately agreed the measure passed the validity criteria, voted as moderate by the Methods Panel.
  - o <u>Validity</u>: H-2, M-4, L-0, I-0

## 3. Feasibility: H-4; M-10; L-0; I-0

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

Rationale:

• Since the measure is based on a standardized, required assessment, the Committee agreed it is feasible.

## 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

4a. Use: Pass-13; No Pass-1; 4b. Usability: H-0; M-13; L-0; I-1

Rationale:

- The measure is publicly reported and used for accountability, so the Committee agreed it met the use criterion.
- Committee members noted that the changing benchmarks are complicated, but the evidence on ventilator management changes every year. Committee members agreed it would be interesting to see the change in the benchmark over time as well, and the developer agreed they would present it in the future.
#### 5. Related and Competing Measures

Related measures: NQF #0174, #0175, #0426, #0427, #0428, #0688, #2287, #2613, #2633, #2643, #2769, #2775, #2776, and #2777

Standing Committee Recommendation for Endorsement: **Yes-13**; **No-1** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

# 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

No appeals received.

# 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients (CMS/RTI)

#### Submission | Specifications

**Description**: This measure estimates the percentage of IRF patients who meet or exceed an expected discharge mobility score.

**Numerator Statement**: The numerator is the number of patients in an IRF with an observed discharge mobility score that is equal to or higher than a calculated expected discharge mobility score.

**Denominator Statement**: IRF patients included in this measure are at least 21 years of age, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

**Exclusions**: This quality measure has five patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients with the following medical conditions on admission: coma, persistent vegetative state, complete quadriplegia, locked-in syndrome, or severe anoxic brain damage, cerebral edema or compression of brain.

Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected items.

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

4) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

5) Patients who are not Medicare Part A or Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Facility

Setting of Care: Post-Acute Care

Type of Measure: Outcome

Data Source: Instrument-Based Data

Measure Steward: Centers for Medicare & Medicaid Services

#### STANDING COMMITTEE MEETING [07/02/2019]

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

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

1a. Evidence: Y-14; N-0; 1b. Performance Gap: H-5; M-9; L-0; I-0

Rationale:

- The Committee agreed there is evidence supporting the measure; they briefly discussed the exclusions but agreed they are reasonable.
- Committee members noted there were disparities by geographic region, facility characteristics, length of stay, dual eligible status, and race.
- They noted that patients with lower economic status and living alone are associated with higher discharge and mobility scores, which may not be what was expected; the developer explained that these patients often have a longer length of stay due to increased risks at discharge, and so they have a little more recovery/rehabilitation in order to ensure they can be safer at home without caregiver support.

# 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-14; N-0; 2b. Validity: Y-13; N-1

Rationale:

- In response to questions, the developer clarified the risk adjustment model and how the expected score is calculated.
- The measure was reviewed by and passed the Methods Panel.
- The Committee asked about the potential for gaming functional scores, and the developer explained that because this measure uses standardized assessment data that is interoperable between settings, they will be better able to validate it in the future.
- The Committee voted to uphold the Scientific Methods Panel ratings for reliability of high and validity of moderate.
  - o <u>Reliability</u>: H-4, M-2, L-0, I-0
  - o <u>Validity</u>: H-2, M-4, L-0, I-0

# 3. Feasibility: H-9; M-5; L-0; I-0

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

Rationale:

• Again, this measure was considered feasible because it relies on required data and is currently being used.

#### 4. Usability and Use: The maintenance measure meets the Use subcriterion

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

4a. Use: Pass-12; No Pass-2; 4b. Usability: H-1; M-12; L-0; I-1 Rationale:

- The measure passed use as it is currently used for the IRF quality reporting program and IRF Compare.
- One Committee member asked about the potential for confusion given that this measure is so similar to 2634 (that looks at score as expected, this looks at change over time). The developer noted different groups have different data needs and interests, and that they would continue to assess feedback on both measures.

#### 5. Related and Competing Measures

Related measures: NQF #0167, #0175, #0422, #0423, #0424, #0425, #0426, #0427, #0428, #0429, #0688, #2287, #2321, #2612, #2632, #2634, #2643, #2653, #2774, #2775, #2776, #2778

Standing Committee Recommendation for Endorsement: **Yes-13**; **No-1** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for continued endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

# 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

No appeals received.

# 3227 CollaboRATE Shared Decision Making Score

#### Submission | Specifications

**Description**: CollaboRATE is a patient-reported measure of shared decision making which contains three brief questions that patients, their parents, or their representatives complete following a clinical encounter. The CollaboRATE measure provides a performance score representing the percentage of adults 18 and older who experience a high level of shared decision making.

The measure was developed to be generic and designed so that it could apply to all clinical encounters, irrespective of the condition or the patient group. The measure asks the patient to evaluate the 'effort made' to inform, to listen to issues that matter to the patient, and to include those issues in choosing 'next steps'. The items were co-developed with patients using cognitive interview methods.

CollaboRATE is designed for use in routine health care delivery. The brevity and the ease of completion were purposeful so the measure could be used as a performance metric for shared decision making.

**Numerator Statement**: The numerator consists of those cases (i.e. patient responses) where perfect scores are given on all three CollaboRATE items; cases with perfect scores are coded '1', whereas all other patient scores are coded '0' in a dichotomous top score outcome variable.

**Denominator Statement**: CollaboRATE is applicable to all patients; the denominator therefore consists of all complete responses.

**Exclusions**: Exclude from the denominator any cases in which there are missing responses on any of the three collaboRATE items.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Clinician: Group/Practice

Setting of Care: Inpatient/Hospital, Outpatient Services

Type of Measure: Outcome: PRO-PM

Data Source: Instrument-Based Data

Measure Steward: The Dartmouth Institute for Health Policy & Clinical Practice

#### STANDING COMMITTEE MEETING [06/20/2019]

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

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

1a. Evidence: Y-16; N-1; 1b. Performance Gap: H-6; M-12; L-0; I-0

Rationale:

- The Standing Committee began their discussion of this measure with an acknowledgement of the importance to measure shared decision making, and the role that improved shared decision making has on a person's overall experience of care.
- The Committee acknowledged that while evaluation of shared decision making doesn't need to be part of every clinical encounter, capturing the patient's perception of shared decision making is an important component of good care.
- The Committee also noted the importance for good, actionable feedback to be provided to measured clinicians for them to be able to improve their approach to patients in engaging them in their care.

- The Committee did express concern that the measure doesn't have a strong outcome connection and may lead to lowered quality of care if patients are strongly inclined to treatments that have poor evidence.
- Early discussion of evidence reflected the Committee's general approval of the developer's approach, as well as acknowledgement of a performance gap in some of the data samples provided by the developer.

# 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

2a. Reliability: Y-14; N-4; 2b. Validity: Y-13; N-4

# Rationale:

- The Committee voted to uphold the Scientific Methods Panel ratings for reliability of moderate and validity of moderate.
  - o <u>Reliability</u>: H-0, M-5, L-0, I-0
  - o <u>Validity</u>: H-1, M-3, L-1, I-0
- While the Committee expressed some concern in the sampling methodology associated with reliability and validity testing, the Committee accepted the developer's explanation of a sampling recommendation of 25 patients as a minimum, with a preference of 200 as a reliability standard.
- The Committee elected to uphold the Scientific Methods Panel ratings for both reliability and validity.

# 3. Feasibility: H-6; M-12; L-0; I-0

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

Rationale:

- The Committee did not consider the administration of the measure to be burdensome to patients but had some concerns around the frequency of administration.
- The developer further clarified that the administration of the measure should not occur more frequently than every 6 months according to the specifications of the measure.

# 4. Usability and Use:

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

# 4a. Use: Pass-13; No Pass-5; 4b. Usability: H-8; M-5; L-4; I-1

Rationale:

- As this is a new measure, the Committee did not have high expectations for its implementation.
- The Committee elected to pass the measure for both usability and use.

# 5. Related and Competing Measures

This measure is related to NQF #2962, Shared Decision Making Process. Description: This
measure assesses the extent to which health care providers actually involve patients in a

decision-making process when there is more than one reasonable option. This proposal is to focus on patients who have undergone any one of 7 common, important surgical procedures: total replacement of the knee or hip, lower back surgery for spinal stenosis of herniated disc, radical prostatectomy for prostate cancer, mastectomy for early stage breast cancer or percutaneous coronary intervention (PCI) for stable angina. Patients answer four questions (scored 0 to 4) about their interactions with providers about the decision to have the procedure, and the measure of the extent to which a provider or provider group is practicing shared decision making for a particular procedure is the average score from their responding patients who had the procedure.

Standing Committee Recommendation for Endorsement: **Yes-14**; **No-4** <u>Rationale</u>

• The Committee noted that the measure passed each of the criteria and is suitable for endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

# 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

#### 8. Appeals

No appeals received.

### 3461 Functional Status Change for Patients with Neck Impairments

#### Submission | Specifications

**Description**: This is a patient-reported outcome performance measure (PRO-PM) consisting of a patient-reported outcome measure (PROM) of risk-adjusted change in functional status (FS) for patients aged 14 years and older with neck impairments. The change in FS is assessed using the Neck FS PROM. The measure is adjusted to patient characteristics known to be associated with FS outcomes (risk adjusted) and used as a performance measure (PM) at the patient, individual clinician, and clinic levels to assess quality.

The Neck FS PROM is an item-response theory-based computer adaptive test (CAT) for patients with impairments related to neck problems. Specific ICD-10-CM codes are described in the denominator section.

The Neck PRO-PM is publically available in the CAT version on the FOTO website at no charge. The Neck FS PROM is also available at no charge for public use as a 10-item short form (static/paper-pencil). CAT administration is preferred as it reduces patient response burden by administrating the minimum number of items needed to achieve the targeted measurement accuracy. Scores are reported on a 0 to 100 scale with higher scores indicating better functional status. The Neck FS PROM maps to the Mobility and Self-care constructs within the Activities and Participation domain of the International Classification of Functioning, Disability and Health.

**Numerator Statement**: The numerator is based on residual scores (actual change scores - predicted change after risk adjustment) of patients receiving care for neck impairments and who: a) completed the Neck PRO-PM at admission and at the end of the episode of care; and b) were discharged from care.

**Denominator Statement**: All patients 14 years and older with a neck impairment who have initiated an episode of care and completed the neck functional status PROM at admission and discharge.

**Exclusions**: Patients who are not being treated for a neck impairment. Patients who are less than 14 years of age.

Adjustment/Stratification: Statistical Risk Model

Level of Analysis: Clinician : Group/Practice, Clinician : Individual

Setting of Care: Outpatient Services

Type of Measure: Outcome: PRO-PM

Data Source: Instrument-Based Data

Measure Steward: Focus on Therapeutic Outcomes

#### STANDING COMMITTEE MEETING [06/20/2019]

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

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

1a. Evidence: Y-17; N-4; 1b. Performance Gap: H-4; M-13; L-4; I-0

Rationale:

- The Committee expressed concern around the potential over-specificity of the measure in carving up functional status by individual body part.
- The Committee noted that the developers provided data indicating that administering interim functional status assessments early in the episode of care is associated with statistically

significant improvement in functional status. Developers suggest that administration of interim assessments allow clinicians to continue/modify treatment interventions based on patient report of improvement in function.

- The developer described how they determined that patients with neck pain find the physical activity question on the Neck FS PROM to be meaningful vis-à-vis their neck pain. The Committee noted that it appears the developers did not explicitly discuss with patients the meaningfulness of the measured outcome itself (i.e., change in functional status).
- The developer responded that results from their analysis suggest that most sampled patients found at least some of the questions to be meaningful. Developers note that older patients found the questions more meaningful than did younger patients, but no differences by sex, treatment status, or current neck pain status.
- The Committee assessed the performance gap provided by the developer to be sufficient to warrant a measure.

# 2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability</u> <u>criteria</u>

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

# 2a. Reliability: Y-21; N-0; 2b. Validity: H-1; M-15; L-5; I-0

# Rationale:

- This measure was evaluated by the NQF Scientific Methods Panel and was given a reliability rating of moderate.
  - o <u>Reliability</u>: H-0, M-5, L-0, I-0
- The Methods Panel noted a missing analysis in the submission that resulted in consensus not being reached, but they also proffered that they would otherwise have rated the measure as high were that analysis. This analysis was provided to the Committee for their consideration.
- The analysis in question related to Pearson's correlations on performance of an external measure of quality paired with performance on the measure, which was found to be sufficient by the Committee.
- Reliability concerns focused on additional sources of error that would potentially factor into the ability to distinguish one provider's performance from another, although this was noted to affect future submissions and not the current.
- The Committee's discussion of validity was focused on a concern for presentation with multiple complaints resulting in multiple surveys, and the validity of a "main complaint".
- The developer noted that most patients do not have trouble selecting a specific area, but that there are comorbidity issues that come into play that rely on the professional judgement of the clinician.
- One Committee member shared an experience of receiving an inappropriate survey. This was addressed by the developer as an anomaly that is irreflective of standardized use of their tools.
- The Committee voted to uphold the Method Panel's rating on reliability, and passed the measure on validity with a rating of moderate.

# 3. Feasibility: H-0; M-15; L-6; I-0

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

- The Committee initiated discussion of the measure by expressing a concern around end user access to the measure, and resources around the measure, given the measure developer's business model around providing dashboards that inform treatment decisions that may influence performance on the metric.
- The developer responded that the measure itself is free for use, and ancillary services provided by FOTO are not required.
- Other Committee members noted that this is not a unique approach, and that other measure developers follow a comparable model.
- A public comment encouraged the measure developer to incorporate LOINC standardization into the measure; FOTO noted this as an important consideration as they are refining their measures.

### 4. Usability and Use:

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

4a. Use: Pass-18; No Pass-3; 4b. Usability: H-0; M-13; L-7; I-1

Rationale:

- During the discussion on Use and Usability, the Committee noted the concern that the measure might not be usable at the individual clinician level, and therefore limited to group level of analysis.
- The Committee finalized the discussion by urging the measure developer once again to use standardized vocabulary such as LOINC, noting that all measures should follow comparable standards to allow for use in multiple care settings, with the additional consideration that this measure is not an eCQM, so there is no need to make it compatible with an electronic standard at this time.

#### 5. Related and Competing Measures

 This measure directly competes with NQF #0428, Functional Status Change for Patients with General Orthopaedic Impairments. Description: A self-report outcome measure of functional status for patients 14 years+ with general orthopaedic impairments. The change in functional status assessed using FOTO (general orthopedic) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality.

Standing Committee Recommendation for Endorsement: **Yes-14**; **No-7** Rationale

• The Committee noted that the measure passed each of the criteria and is suitable for endorsement.

#### 6. Public and Member Comment

• NQF did not receive comments following the Committee's evaluation of the measure.

# 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-14; No-0 (10/21/2019)

Decision: Approved for endorsement

### 8. Appeals

No appeals received.

# Appendix B: Patient Experience and Function Portfolio—Use in Federal Programs<sup>a</sup>

| NQF # | Title  | Federal Programs: Finalized or<br>Implemented as of November 7, 2019   |  |  |  |  |
|-------|--|--|--|--|--|--|
| 0005  | CAHPS Clinician & Group Surveys (CG-<br>CAHPS)-Adult, Child  | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Implemented)</li> <li>Physician Compare (Implemented)</li> </ul>   |  |  |  |  |
| 0006  | Consumer Assessment of Healthcare<br>Providers and Systems (CAHPS) Health<br>Plan Survey, Version 5.0 (Medicaid<br>and Commercial) | <ul> <li>Medicaid (Implemented)</li> </ul>   |  |  |  |  |
| 0166  | HCAHPS   | <ul> <li>Hospital Compare (Implemented)</li> <li>Hospital Inpatient Quality Reporting<br/>(Implemented)</li> <li>Hospital Value-Based Purchasing<br/>(Implemented)</li> <li>Prospective Payment System-Exempt<br/>Cancer Hospital Quality Reporting<br/>(Implemented)</li> </ul> |  |  |  |  |
| 0258  | CAHPS In-Center Hemodialysis Survey  | End-Stage Renal Disease Quality     Incentive Program (Implemented)  |  |  |  |  |
| 0291  | EMERGENCY TRANSFER<br>COMMUNICATION MEASURE  | • N/A  |  |  |  |  |
| 0422  | Functional status change for patients with Knee impairments  | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Implemented)</li> </ul>  |  |  |  |  |
| 0423  | Functional status change for patients with Hip impairments   | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Implemented)</li> </ul>  |  |  |  |  |
| 0424  | Functional status change for patients with Foot and Ankle impairments  | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Implemented)</li> </ul>  |  |  |  |  |
| 0425  | Functional status change for patients with lumbar impairments  | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Finalized)</li> </ul>  |  |  |  |  |
| 0426  | Functional status change for patients with Shoulder impairments  | Merit-based Incentive Payment System     (MIPS) Program (Implemented)  |  |  |  |  |
| 0427  | Functional status change for patients with elbow, wrist and hand impairments   | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Implemented)</li> </ul>  |  |  |  |  |
| 0428  | Functional status change for patients with General orthopaedic impairments   | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Implemented)</li> </ul>  |  |  |  |  |

<sup>&</sup>lt;sup>a</sup> Per CMS Measures Inventory Tool as of 12/02/2019

| NQF # | Title   | Federal Programs: Finalized or<br>Implemented as of November 7, 2019  |
|-------|---|---|
| 0517  | CAHPS <sup>®</sup> Home Health Care Survey<br>(experience with care)  | <ul> <li>Home Health Quality Reporting<br/>(Implemented)</li> <li>Home Health Value Based Purchasing<br/>(Implemented)</li> </ul> |
| 0726  | Patient Experience of Psychiatric Care<br>as Measured by the Inpatient<br>Consumer Survey (ICS)   | • N/A   |
| 1741  | Patient Experience with Surgical Care<br>Based on the Consumer Assessment of<br>Healthcare Providers and Systems<br>(CAHPS) <sup>®</sup> Surgical Care Survey | • N/A   |
| 2286  | Functional Change: Change in Self<br>Care Score   | • N/A   |
| 2287  | Functional Change: Change in Motor<br>Score   | • N/A   |
| 2321  | Functional Change: Change in Mobility Score   | • N/A   |
| 2483  | Gains in Patient Activation (PAM)<br>Scores at 12 Months  | • N/A   |
| 2548  | Child Hospital CAHPS (HCAHPS)   | • N/A   |
| 2612  | CARE: Improvement in Mobility   | • N/A   |
| 2613  | CARE: Improvement in Self Care  | • N/A   |
| 2614  | CoreQ: Short Stay Discharge Measure   | • N/A   |
| 2615  | CoreQ: Long-Stay Resident Measure   | • N/A   |
| 2616  | CoreQ: Long-Stay Family Measure   | • N/A   |
| 2631  | Percent of Long-Term Care Hospital<br>(LTCH) Patients With an Admission<br>and Discharge Functional Assessment<br>and a Care Plan That Addresses<br>Function  | <ul> <li>Long-Term Care Hospital Quality<br/>Reporting (Implemented)</li> </ul>   |
| 2632  | Long-Term Care Hospital (LTCH)<br>Functional Outcome Measure: Change<br>in Mobility Among Patients Requiring<br>Ventilator Support                            | <ul> <li>Long-Term Care Hospital Quality<br/>Reporting (Implemented)</li> </ul>   |

| NQF # | Title  | Federal Programs: Finalized or<br>Implemented as of November 7, 2019                      |
|-------|--|---|
| 2633  | Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure: Change<br>in Self-Care Score for Medical<br>Rehabilitation Patients | <ul> <li>Inpatient Rehabilitation Facility Quality<br/>Reporting (Implemented)</li> </ul> |
| 2634  | Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure: Change<br>in Mobility Score for Medical<br>Rehabilitation Patients  | <ul> <li>Inpatient Rehabilitation Facility Quality<br/>Reporting (Implemented)</li> </ul> |
| 2635  | Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure:<br>Discharge Self-Care Score for Medical<br>Rehabilitation Patients | <ul> <li>Inpatient Rehabilitation Facility Quality<br/>Reporting (Implemented)</li> </ul> |
| 2636  | Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure:<br>Discharge Mobility Score for Medical<br>Rehabilitation Patients  | <ul> <li>Inpatient Rehabilitation Facility Quality<br/>Reporting (Implemented)</li> </ul> |
| 2643  | Average change in functional status following lumbar spine fusion surgery  | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Finalized)</li> </ul>   |
| 2653  | Average change in functional status<br>following total knee replacement<br>surgery   | <ul> <li>Merit-based Incentive Payment System<br/>(MIPS) Program (Finalized)</li> </ul>   |
| 2769  | Functional Change: Change in Self<br>Care Score for Skilled Nursing Facilities   | • N/A   |
| 2774  | Functional Change: Change in Mobility<br>Score for Skilled Nursing Facilities  | • N/A   |
| 2775  | Functional Change: Change in Motor<br>Score for Skilled Nursing Facilities   | • N/A   |
| 2776  | Functional Change: Change in Motor<br>Score in Long Term Acute Care<br>Facilities  | • N/A   |
| 2777  | Functional Change: Change in Self<br>Care Score for Long Term Acute Care<br>Facilities   | • N/A   |
| 2778  | Functional Change: Change in Mobility<br>Score for Long Term Acute Care<br>Facilities  | • N/A   |
| 2958  | Informed, Patient Centered (IPC) Hip<br>and Knee Replacement Surgery   | • N/A   |
| 2962  | Shared Decision Making Process   | <ul> <li>Medicare Shared Savings Program<br/>(Implemented)</li> </ul>                     |
| 2967  | CAHPS <sup>®</sup> Home- and Community-Based<br>Services Measures  | Medicaid (Implemented)  |

| NQF # | Title  | Federal Programs: Finalized or<br>Implemented as of November 7, 2019                      |
|-------|--|---|
| 3227  | CollaboRATE Shared Decision Making Score   | • N/A   |
| 3420  | CoreQ: AL Resident Satisfaction<br>Measure   | • N/A   |
| 3422  | CoreQ: AL Family Satisfaction Measure  | • N/A   |
| 3455  | Timely Follow-Up After Acute<br>Exacerbations of Chronic Conditions                          | • N/A   |
| 3461  | Functional Status Change for Patients with Neck Impairments                                  | <ul> <li>Merit-Based Incentive Payment System<br/>(MIPS) Program (Finalized)</li> </ul>   |
| 3477  | Discharge to Community-Post Acute<br>Care Measure for Home Health<br>Agencies                | • N/A   |
| 3479  | Discharge to Community-Post Acute<br>Care Measure for Inpatient<br>Rehabilitation Facilities | <ul> <li>Inpatient Rehabilitation Facility Quality<br/>Reporting (Implemented)</li> </ul> |
| 3480  | Discharge to Community-Post Acute<br>Care Measure for Long-Term Care<br>Hospitals            | <ul> <li>Long-Term Care Hospital Quality<br/>Reporting (Implemented)</li> </ul>           |
| 3481  | Discharge to Community-Post Acute<br>Care Measure for Skilled Nursing<br>Facilities          | <ul> <li>Skilled Nursing Facility Quality<br/>Reporting (Implemented)</li> </ul>          |

# Appendix C: Patient Experience and Function Standing Committee and NQF Staff

#### STANDING COMMITTEE

#### Lee Partridge (Co-chair) United Hospital Fund

New York, NY

# Christopher Stille, MD, MPH, FAAP (Co-chair)

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# **Beth Averbeck, MD** HealthPartners Medical Group Minneapolis Minnesota

# **Donald Casey, MD, MPH, MBA, FACP, FAHA, FAAPL, DFACMQ** American College of Medical Quality Chicago, Illinois

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### 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

#### STEWARD

Agency for Healthcare Research and Quality

#### DESCRIPTION

The Consumer Assessment of Healthcare Providers and Systems Clinician & Group Survey 3.0 (CG-CAHPS) is a standardized survey instrument that asks patients to report on their experiences with primary or specialty care received from providers and their staff in ambulatory care settings over the preceding 6 months.

The CG-CAHPS 3.0 survey can be used in both primary care and specialty care settings. The adult survey is administered to patients aged 18 and over. The child survey is administered to the parents or guardians of pediatric patients under the age of 18. Patients who had at least one visit to a selected provider during the past 6 months are eligible to be surveyed.

CG-CAHPS Survey Version 1.0 was endorsed by NQF in July 2007 (NQF #0005) and version 2.0 received maintenance endorsement in early 2015. Version 3.0 was released in July 2015. The development of the survey is through the CAHPS Consortium and sponsored by the Agency for Healthcare Research and Quality. The survey is part of the CAHPS family of patient experience surveys and is available at https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html

The Adult CG-CAHPS Survey 3.0 has 31 questions including one overall rating of the provider and 13 questions used to create these four multi-item composite measures of care or services provided:

- 1. Getting Timely Appointments, Care, and Information (3 items)
- 2. How Well Providers Communicate With Patients (4 items)
- 3. Helpful, Courteous, and Respectful Office Staff (2 items)
- 4. Providers' Use of Information to Coordinate Patient Care (3 items)

The Child CG-CAHPS Survey 3.0 has 39 questions including one overall rating of the provider and 12 questions used to create these four multi-item composite measures of care or services provided:

- 1. Getting Timely Appointments, Care, and Information (3 items)
- 2. How Well Providers Communicate With Patients (4 items)
- 3. Helpful, Courteous, and Respectful Office Staff (2 items)
- 4. Providers' Use of Information to Coordinate Patient Care (2 items)

#### TYPE

Outcome: PRO-PM

#### DATA SOURCE

Instrument-Based Data

#### LEVEL

Clinician: Group/Practice

#### SETTING

#### **Outpatient Services**

#### NUMERATOR STATEMENT

The CG-CAHPS Survey item and composites are often reported using a top box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure.

The top box numerator for the Overall Rating of Provider is the number of respondents who answered 9 or 10 for the item, with 10 indicating "Best provider possible".

For more information on the calculation of reporting measures, see

"Preparing Data from CAHPS® Surveys for Analysis" (AHRQ, 2017) accessible at

https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/helpful-resources/analysis/preparing-data-for-analysis.pdf

and the CAHPS Analysis Instructions accessible at

https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/helpfulresources/analysis/2015-instructions-for-analyzing-data.pdf (updated June 2017).

#### NUMERATOR DETAILS

For each individual item, the top box numerator is the number of respondents who answered "Always" (the most positive response) for the item.

There are two basic steps to calculating a composite score for a practice site:

1. Calculate the proportion of patient responses in the top box or most positive response category for each item in a composite.

2. Calculate the mean top box proportions across all items in a composite to determine the composite's top box score.

Step 1 – Calculate the proportion of cases in the top box or most positive response for each item in a composite

Example: Items in "Helpful, Courteous, and Respectful Office Staff" (2 items) have four response options: Never, Sometimes, Usually, Always. The top box percentage for each item in the composite is the proportion of respondents who answered "Always."

• Item #1 "Clerks and receptionists at this provider's office were as helpful as you thought they should be." = Proportion of respondents who answered "Always" = 80%

• Item #2 "Clerks and receptionists at the provider's office treat you with courtesy and respect." = Proportion of respondents who answered "Always" = 90%

Step 2 – Average the top box item scores to form the overall composite top box score

Calculate the average top box score across the items in the composite. In the above example, the calculation would be as follows:

Top box score for "Helpful, Courteous, and Respectful Office Staff" = (Item1 + Item2) / 2 = (80% + 90%) / 2 = 85%

More detail can be found in https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/helpful-resources/analysis/preparing-data-for-analysis.pdf

#### DENOMINATOR STATEMENT

The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 6-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.

#### DENOMINATOR DETAILS

For each item in a composite and the provider rating item, the top box denominator is the number of respondents who answered the item per aggregate-level entity (e.g., a physician or practice site). For a composite score, the denominator is the number of respondents who answered at least one item within the composite. Composite scores are the average proportion of respondents who gave the highest rating across the items in the composite (as discussed in S.5).

#### **EXCLUSIONS**

Among eligible respondents, for a given item, respondents with a missing response is excluded. Among eligible respondents, for a composite measures, respondents who did not answer at least one item in the composite are excluded from the composite measure's denominator.

#### EXCLUSION DETAILS

Surveys will not be obtained from the following:

1) Deceased patients. For example, the individual has died between the visit(s) and receipt of the questionnaire.

2) If the potential respondent has a language barrier, the instrument is not available in the respondent's preferred language, and no one was available to translate the questions for the respondent.

The following should be excluded from the sample where date was obtained but is not useable due to ineligibility:

1) The respondent reports he or she has not visited the sampled entity (e.g., a physician or practice site). This might be indicated by a "no" response to Question 1 (e.g., "Our records show that you got care from the provider named below in the last 6 months. Is that right?").

2) Individuals from a household that has already been sampled.

3) When a proxy was used (someone answered the questions on behalf of the target respondent) and the users do not intent to add a proxy indicator with case-mix adjustment

Survey respondents who did not answer at least one item of a measure are excluded from a measure's denominator.

Survey code specifications --- including how to code an appropriately skipped item, multiple marks or blank items --- can be found in this document:

https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/helpful-resources/analysis/preparing-data-for-analysis.pdf.

More instruction is available as downloadable files from the CAHPS analysis web page https://www.ahrq.gov/cahps/surveys-guidance/helpful-resources/analysis/index.html. Files are:

- SAS programs with test modules (ZIP, 170 KB)—updated June 2017
- Instructions for Analyzing Data from CAHPS Surveys (PDF, 927 KB)

The CAHPS Analysis Program computes scores for practices, sponsors and vendors. The goal of the CAHPS Analysis Program is to provide the user with a flexible way to analyze CAHPS survey data to make standardized comparisons of performance.

The CAHPS macro calculates scores at the unit level (e.g. practice site) for all survey measures including individual survey items, ratings, and multi-item composite measures. The output from the program then compares the performance of an entity to the overall performance of units. If a user wants to adjust their results for responder characteristics, the CAHPS macro can adjust unit scores for variations across units such as for respondent age, education, global rating of mental health, and global rating of general health (herein referred to as case-mix).

#### **RISK ADJUSTMENT**

Statistical Risk Model

#### STRATIFICATION

CG-CAHPS users that have collected data for different clinical practices may decide to analyze the data separately or together. If practices are to be analyzed together, no changes to the CAHPS Analysis Program are necessary. If a team decides to analyze the practices separately and the data file contains more than one group, it is important to set up selection criteria in the CAHPS Analysis Program or split the data set.

Users can separate case-mix adjustments on two different subgroups using the macro parameter SPLITFLG = 1 in the CAHPS analysis program. (The default value = 0.) An example of splitting the case-mix adjustments separately on two populations is when comparing urban and rural locations.

#### TYPE SCORE

Other (specify): 1.) Top-box score; 2) case-mix adjusted mean score

#### ALGORITHM

Top Box Score Calculation:

1) Target Population: Patients that had at least one visit during the past 6-months to a selected provider

2) Exclusions = Patients who did not answer at least one item of the composite measures or rating item.

3) Screener items. Example: Patients who answered "No" to the first item indicating that they did not receive care from the provider entity in the last 6 months

4) Top box scores (percent with highest rating) are computed for each item

5) Top box scores are averaged across the items within each composite, weighting each item equally.

Case-mix Adjusted Top box or Mean Scores:

The steps for user-defined calculations of risk-adjusted scores can be found in Instructions for Analyzing Data from CAHPS® Surveys: Using the CAHPS Analysis Program Version 4.1 available at https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/helpful-resources/analysis/2015-instructions-for-analyzing-data.pdf (updated June 2017)

# 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

#### STEWARD

Agency for Healthcare Research and Quality

#### DESCRIPTION

The CAHPS Health Plan Survey is a survey that asks health plan enrollees to report about their care and health plan experiences as well as the quality of care received from physicians. HP-CAHPS Version 4.0 was endorsed by NQF in July 2007 (NQF #0006) and Version 5.0 received maintenance endorsement in January 2015. The survey is part of the CAHPS family of patient experience surveys and is available in the public domain at

https://www.ahrq.gov/cahps/surveys-guidance/hp/index.html

The survey is designed to be administered to includes individuals (18 and older for the Adult version; parents or guardians of children aged 0-17 for the Child version) who have been enrolled in a health plan for a specified period (6 months or longer for Medicaid version, 12 months or longer for Commercial version) with no more than one 30-day break in enrollment.

The CAHPS Adult Health Plan Survey has 39 items, and the CAHPS Child Health Plan Survey has 41 items. Ten of the adult survey items and 11 of the child survey items are used to form 4 composite measures. Each survey also has 4 single-item rating measures. The aspect of quality assessed by each measure is described below:

Measure 1: Getting Needed Care (2 items)

Measure 2: Getting Care Quickly (2 items)

Measure 3: How Well Doctors Communicate (4 items in Adult survey & 5 items in Child survey)

Measure 4: Health Plan Information and Customer Service (2 items)

Measure 5: How People Rated Their Personal Doctor (1 item)

Measure 6: How People Rated Their Specialist (1 item)

Measure 7: How People Rated Their Health Care (1 item)

Measure 8: How People Rated Their Health Plan (1 item)

#### түре

Outcome: PRO-PM

#### DATA SOURCE

Instrument-Based Data

#### LEVEL

Health Plan

#### SETTING

**Outpatient Services** 

#### NUMERATOR STATEMENT

We recommend that CAHPS Health Plan Survey items and composites be calculated using a top box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. The top box numerator for each of the four Overall Ratings items is the number of respondents who answered 9 or 10 for the item; with a 10 indicating the "Best possible."

#### NUMERATOR DETAILS

Respondents describe their experiences accessing and using care, and interacting with their health plans, over the past 6 months (Medicaid) or 12 months (Commercial Health Plans).

For each individual item, the top box numerator is the number of respondents who answered "Always" (the most positive response) for the item. The top box composite score is the average proportion of respondents who answered "Always" across the items in the composite.

There are two steps to calculating a composite score for a health plan:

1. Calculate the proportion of patient responses with the most positive response for each item in a composite.

2. Calculate the mean top box proportions across all items in a composite to determine the composite's top box score.

Example: Applying the Proportional Scoring Method to the composite "Getting Care Quickly":

Step 1 – Calculate the proportion of cases in the top box or most positive response for each item in a composite

Example: Items in "Getting Care Quickly" (2 items) have four response options: Never, Sometimes, Usually, Always. The top box percentage for each item in the composite is the proportion of respondents who answered "Always."

• Item #1 "Got care for illness/injury as soon as needed" = Proportion of respondents who answered "Always" = 80%

• Item #2 "Got non-urgent appointment as soon as needed" = Proportion of respondents who answered "Always" = 90%

Step 2 – Average the top box item scores to form the overall composite top box score

Calculate the average top box score across the items in the composite. In the above example, the calculation would be as follows:

Top box score for "Getting Care Quickly" = (Item1 \* Item2) / 2 = (80% + 90%) / 2 = 85%

#### DENOMINATOR STATEMENT

The eligible population for the survey includes all individuals who have been enrolled in a health plan for at least 6 (Medicaid) or 12 (Commercial) months with no more than one 30-day break in enrollment. Denominators will vary by item and composite.

#### DENOMINATOR DETAILS

For each individual item, the top box denominator is the number of respondents who answered the item. For each composite score, the denominator is the number of respondents who answer at least one item within the composite. Composite scores are the average proportion of respondents who gave the highest rating across the items in the composite (as discussed in S.5). Survey population (adult survey): All adult (age 18 and older) health plan enrollees who have been enrolled in a health plan for a specified period (6 months or longer for Medicaid version, 12 months or longer for Commercial version) with no more than one 30-day break in enrollment.

Survey population (child survey): Parents of children (age 0-17) enrolled in a health plan who have been enrolled in for a specified period (6 months or longer for Medicaid version, 12 months or longer for Commercial version) with no more than one 30-day break in enrollment.

Denominator for Measures 1-4 (composites): The number of respondents who answer at least one item within the composite.

Denominator for Measures 5-8 (ratings): The number of respondents who answered the item.

#### EXCLUSIONS

Individuals are excluded from the survey target population if:

1) They were not continuously enrolled in the health plan (excepting an allowable enrollment lapse of less than 30 days).

2) Their primary health coverage was not through the plan.

3) Another member of his or her household had already been sampled.

4) They had been institutionalized (put in the care of a specialized institution) or are deceased.

#### **EXCLUSION DETAILS**

The following should be excluded from the denominator:

1) Individuals not continuously enrolled in the health plan (excepting an allowable enrollment lapse of less than 30 days) or those for whom their primary health coverage is not through the plan.

2) Individuals from a household that has already been sampled.

Some users also exclude a survey from scoring and analysis if someone else answered the questions (as a proxy) for the respondent. (Question #38 on Adult survey.)

Survey code specifications for how to code an appropriately skipped item, multiple marks or blank items and for how to use the CAHPS Analysis Program can be found by downloading the Instructions for Analyzing Data from

CAHPS<sup>®</sup> Surveys available at https://www.ahrq.gov/cahps/surveys-guidance/helpfulresources/analysis/index.html.

The CAHPS Analysis Program computes scores for users, sponsors and vendors. The goal of the CAHPS Analysis Program is to provide the user with a flexible way to make valid comparisons of performance across units (e.g., plans).

The CAHPS macro calculates scores at the unit level (e.g. health plan) for all survey measures including individual survey items, ratings, and multi-item composite measures. The output from the program then compares the performance of an entity to the overall performance of units. If a user wants to adjust their results for responder characteristics, the CAHPS macro can adjust unit scores for variations across units such as for respondent age, education, mental health status, and general health status (herein referred to as case-mix).

#### **RISK ADJUSTMENT**

Statistical Risk Model

#### STRATIFICATION

HP-CAHPS users that have collected data for different groups (i.e., strata) of people can analyze the data separately or together. If groups are analyzed together, no changes to the CAHPS Analysis Program are necessary.

Users can estimate separate case-mix adjustments on two different populations using the macro parameter SPLITFLG = 1 in the CAHPS analysis program. (The default value = 0.) An example of splitting the case-mix adjustments separately on two populations is when comparing Medicaid Fee-for-Service populations with Medicaid Managed Care populations.

If survey users want to combine data for reporting from different sampling strata, they will need to create a text file that identifies the strata and indicates which ones are being combined and the identifier of the entity obtained by combining them.

Reference: Instructions for Analyzing Data from

CAHPS® Surveys: Using the CAHPS Analysis Program Version 4.1 available at

https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/helpful-resources/analysis/2015-instructions-for-analyzing-data.pdf.

#### TYPE SCORE

Other (specify): 1. Top box score 2. Case-mix adjusted mean score

#### ALGORITHM

Top Box Score Calculation:

1) Target Population = continuous enrollment in health plan for past 6 (12) months with no more than 30 day lapse in enrollment

2) Exclusions = lapse in enrollment or enrollment less than 6 (12) months, household already represented in sample, primary health care is not with this health plan

3) Screener items identify beneficiaries who meet the target process for each composite, such as whether the beneficiary sought any medical care, saw a personal doctor, saw a specialist, or interacted with the health plan's customer service. Composites are only calculated using enrollees who experienced a particular service/process.

4) Top box scores (percent with highest rating) are computed for each item

5) Top box scores are averaged across the items within each composite, weighting each item equally.

Users can adjust the survey data for characteristics such as self-reported respondent age, education, mental health status, and general health status. The CAHPS Analysis Program—often referred to as the CAHPS MACRO—is a free program written in SAS (version 6.0 or later) that enables survey users to case-mix adjust their data. The program also generates a distribution of survey results for each of the measures, calculates the mean score for both individual survey items and composite measures, and indicates whether an entity's scores are statistically different from the average. The most recent CAHPS Analysis Program can be found by downloading the Instructions for Analyzing Data from

CAHPS<sup>®</sup> Surveys available at https://www.ahrq.gov/cahps/surveys-guidance/helpful-resources/analysis/index.html.

#### 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey

#### STEWARD

Center for Medicare & Medicaid Services

#### DESCRIPTION

HCAHPS (NQF #0166) is a 29-item survey instrument that produces 10 publicly reported measures:

6 multi-item measures (communication with doctors, communication with nurses, responsiveness of hospital staff, communication about medicines, discharge information and care transition); and

4 single-item measures (cleanliness of the hospital environment, quietness of the hospital environment, overall rating of the hospital, and recommendation of hospital).

Note: The HCAHPS Survey originally included three items about pain which formed a composite measure, Pain Management. CMS discontinued publicly reporting this measure in July 2018. In January 2018, CMS replaced the original HCAHPS pain items with three items that asked about communication about pain. In compliance with the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act (Pub. L. 115-271) of 2018 (Section 6104), CMS will remove the new communication about pain items from the HCAHPS Survey beginning with October 2019 discharges.

#### ТҮРЕ

Outcome

#### DATA SOURCE

Instrument-Based Data

#### LEVEL

Facility

#### SETTING

Inpatient/Hospital

#### NUMERATOR STATEMENT

The HCAHPS Survey asks recently discharged patients about aspects of their hospital experience that they are uniquely suited to address. The core of the survey contains 19 items that ask "how often" or whether patients experienced a critical aspect of hospital care, rather than whether they were "satisfied" with their care. Also included in the survey are three screener items that direct patients to relevant questions, five items to adjust for the mix of patients across hospitals, and two items (race and ethnicity) that support Congressionally-mandated reports. Hospitals may include additional questions after the core HCAHPS items.

For full details, see the current HCAHPS Quality Assurance Guidelines, V.14.0, pp. 57-65,

under the "Quality Assurance" button on the official HCAHPS On-Line Web site at:

https://www.hcahpsonline.org/globalassets/hcahps/quality-assurance/2019\_qag\_v14.0.pdf

#### NUMERATOR DETAILS

For each question in a multi-item measure, the proportion of responses in the "top" (most positive response) and "bottom" (least positive response) boxes are calculated for a given hospital (completed surveys only). For clarification on which answer values go in each box for each measure go to www.hospitalcompare.hhs.gov. To obtain a hospital's raw score for the top or bottom box category, the mean proportion for all the questions in a given measure is calculated. Note that the middle box is the proportion remaining after the top and bottom boxes have been calculated; see below for details.

The following raw score calculations are performed for each eligible hospital and within each quarter.

• Multi-item Measure Calculation – Communication with Nurses (3 questions):

Pi1 = Proportion of (item) respondents who said "Never" to question i

Pi2 = Proportion of respondents who said "Sometimes" to question i

Pi3 = Proportion of respondents who said "Usually" to question i

Pi4 = Proportion of respondents who said "Always" to question i

The index i represents the number of questions in the multi-item measure, here i = 1, 2, 3.

The bottom box consists of the answer value categories of "Never" and "Sometimes". Bottom Box multi-item measure Score = (P11+P12+P21+P22+P31+P32)/3

The top box consists only of the answer category "Always".

Top Box multi-item measure Score = (P14+P24+P34)/3

• Individual Item Example – Cleanliness of Hospital Environment (1 question):

P1 = Proportion of respondents who said "Never" to the question

P2 = Proportion of respondents who said "Sometimes" to the question

P3 = Proportion of respondents who said "Usually" to the question

P4 = Proportion of respondents who said "Always" to the question

The bottom box consists of the answer value categories of "Never" and "Sometimes".

Bottom Box Individual Item Score = P1 + P2

The top box consists only of the answer category "Always".

Top Box Individual Item Score = P4

• Global Item Example – Overall Hospital Rating (1 question):

P0 = Proportion of respondents who rated the hospital as 0 (worst hospital possible)

P1 = Proportion of respondents who rated the hospital as 1

P2 = Proportion of respondents who rated the hospital as 2

P3 = Proportion of respondents who rated the hospital as 3

P4 = Proportion of respondents who rated the hospital as 4

P5 = Proportion of respondents who rated the hospital as 5

P6 = Proportion of respondents who rated the hospital as 6

P7 = Proportion of respondents who rated the hospital as 7

P8 = Proportion of respondents who rated the hospital as 8

P9 = Proportion of respondents who rated the hospital as 9

P10 = Proportion of respondents who rated the hospital as 10 (best hospital possible)

The bottom box consists of hospital rating response values from 0 to 6. Bottom Box Global Item Score = P0 + P1 + P2 + P3 + P4 + P5 + P6 The top box consists of hospital rating response values of 9 and 10. Top Box Global Item Score = P9 + P10

#### DENOMINATOR STATEMENT

The target population for HCAHPS measures include eligible adult inpatients of all payer types who completed a survey. HCAHPS patient eligibility and exclusions are defined in detail in the sections that follow. A survey is defined as completed if the patient responded to at least 50% of questions applicable to all patients.

#### DENOMINATOR DETAILS

Eligibility for the HCAHPS Survey.

The HCAHPS Survey is broadly intended for patients of all payer types who meet the following criteria:

Eighteen (18) years or older at the time of admission

Admission includes at least one overnight stay in the hospital

• An overnight stay is defined as an inpatient admission in which the patient's admission date is different from the patient's discharge date. The admission need not be 24 hours in length. For example, a patient had an overnight stay if he or she was admitted at 11:00 PM on Day 1, and discharged at 10:00 AM on Day 2. Patients who did not have an overnight stay should not be included in the sample frame (e.g., patients who were admitted for a short period of time solely for observation; patients admitted for same day diagnostic tests as part of outpatient care).

Non-psychiatric MS-DRG/principal diagnosis at discharge

Note: Patients whose principal diagnosis falls within the Maternity Care, Medical, or Surgical service lines and who also have a secondary psychiatric diagnosis are still eligible for the survey.

Alive at the time of discharge

Note: Pediatric patients (under 18 years old at admission) and patients with a primary psychiatric diagnosis are ineligible because the current HCAHPS instrument is not designed to address the unique situation of pediatric patients and their families, or the behavioral health issues pertinent to psychiatric patients.

A completed HCAHPS survey is one with responses for at least 50% of the questions that are applicable to all patients (questions 1-10, 12, 15, and 18-22).

#### **EXCLUSIONS**

There are a few categories of otherwise eligible patients who are excluded from the HCAHPS sample frame. As detailed below in sec S.9, these exclusions include patients excluded due to state regulations, no-publicity patients, and specific groups of patients with an admission source or discharge status that results in difficulty collecting patient experience data through a survey instrument.

#### **EXCLUSION DETAILS**

There is a two-stage process for determining whether a discharged patient can be included in the HCAHPS Sample Frame. The first stage is to determine whether the discharged patient

meets the HCAHPS eligibility criteria, listed above. If the patient meets the eligibility criteria, then a second set of criteria is applied: Exclusions from the HCAHPS Survey.

Patients who meet the eligible population criteria previously outlined are to be included in the HCAHPS Sample Frame. However, there are a few categories of otherwise eligible patients who are excluded from the sample frame. These are:

"No-Publicity" patients – Patients who request that they not be contacted (see below)

Court/Law enforcement patients (i.e., prisoners); this does not include patients residing in halfway houses

Patients with a foreign home address (the U.S. territories – Virgin Islands, Puerto Rico, Guam, American Samoa, and Northern Mariana Islands are not considered foreign addresses and therefore, are not excluded)

Patients discharged to hospice care (Hospice-home or Hospice-medical facility)

Patients who are excluded because of state regulations

Patients discharged to nursing homes and skilled nursing facilities

"No-Publicity" patients are defined as those who voluntarily sign a "no-publicity" request while hospitalized or who directly request a survey vendor or hospital not to contact them ("Do Not Call List"). These patients should be excluded from the HCAHPS Survey. However, documentation of patients' "no-publicity" status must be retained for a minimum of three years.

Court/Law enforcement patients (i.e., prisoners) are excluded from HCAHPS because of both the logistical difficulties in administering the survey to them in a timely manner, and regulations governing surveys of this population. These individuals can be identified by the admission source (UB-04 field location 15) "8 – Court/Law enforcement," patient discharge status code (UB-04 field location 17) "21 – Discharged/transferred to court/law enforcement," or patient discharge status code "87 – Discharged/transferred to court/law enforcement with a planned acute care hospital inpatient readmission." This does not include patients residing in halfway houses.

Patients with a foreign home address are excluded from HCAHPS because of the logistical difficulty and added expense of calling or mailing outside of the United States (the U.S. territories - Virgin Islands, Puerto Rico, Guam, American Samoa, and Northern Mariana Islands are not considered foreign addresses and therefore, are not excluded).

Patients discharged to hospice care are excluded from HCAHPS because of the heightened likelihood that they will expire before the survey process can be completed. Patients with a "Discharge Status" of "50 – Hospice – home" or "51 – Hospice – medical facility" would not be included in the sample frame. "Discharge Status" is the same as the UB-04 field location 17.

Some state regulations place further restrictions on patients who may be contacted after discharge. It is the responsibility of the hospital/survey vendor to identify any applicable regulations and to exclude those patients as required by law or regulation in the state in which the hospital operates.

Patients discharged to nursing homes and skilled nursing facilities are excluded from HCAHPS. This applies to patients with a "Discharge Status" (UB-04 field location 17) of:

- "03 Skilled nursing facility"
- "61 SNF Swing bed within hospital"
- "64 Certified Medicaid nursing facility"
- "83 Skilled nursing facility with a planned acute care hospital inpatient readmission"

"92 – Certified Medicaid nursing facility with a planned acute care hospital inpatient readmission"

Hospitals/Survey vendors must retain documentation that verifies all exclusions and ineligible patients. This documentation is subject to review.

Note: Patients must be included in the HCAHPS Survey sample frame unless the hospital/ survey vendor has positive evidence that a patient is ineligible or fits within an excluded category. If information is missing on any variable that affects survey eligibility when the sample frame is constructed, the patient must be included in the sample frame.

For more details, please see the HCAHPS Quality Assurance Guidelines, V14.0, pp. 57-80, located at the "Quality Assurance" button on the official HCAHPS On-Line Web site, at

https://www.hcahpsonline.org/globalassets/hcahps/quality-assurance/2019\_qag\_v14.0.pdf

#### **RISK ADJUSTMENT**

Statistical Risk Model

#### STRATIFICATION

NOTE: For the complete response, please see, "ADDITIONAL, A.1" (HCAHPS Survey, NQF 0166 Appendix A.1: Supplemental Materials.)

HCAHPS utilizes risk adjustment, not stratification, in reporting outcomes.

Please see below for details regarding S.11.

The information below is taken from a document on our public Web site, HCAHPS On-Line Web site. For more details, and appendices, about the statistical risk model and variables, including the tables that are referenced in the material below, please see the "Mode & Patient-Mix Adjustment Abstract (revised 5/2/08)" paper located via the "Mode and Patient-Mix Adj" button on the official HCAHPS On-Line Web site, at

http://www.hcahpsonline.org/en/mode--patient-mix-adj/

A document containing the patient-mix adjustment coefficients for the April 2018 public reporting of HCAHPS results, based on discharges from July 1, 2016 to June 30, 2017, is located via the "Mode and Patient-Mix Adj" button on the official HCAHPS On-Line Web site, at

http://www.hcahpsonline.org/globalassets/hcahps/mode-patient-mix-adjustment/2018-4\_mode\_patient\_mix-adj.pdf

on the official HCAHPS On-Line Web site, www.HCAHPSonline.org

(Please note: in the document "Mode and Patient-mix Adjustment of the CAHPS® Hospital Survey (HCAHPS) of April 30, 2008, "we refer to multi-item scores as "composites," but these are in fact "multi-item measures").

A randomized Mode Experiment of 27,229 discharges from 45 hospitals was used to develop adjustments for the effects of survey mode (Mail Only, Telephone Only, Mixed, or Active Interactive Voice Response) on responses to the CAHPS® Hospital Survey (also known as Hospital CAHPS or HCAHPS). In general, patients randomized to the Telephone Only and Active Interactive Voice Response modes provided more positive evaluations than patients randomized to Mail Only and Mixed (Mail with Telephone follow-up) modes. These mode effects varied little by hospital and were strongest for the Responsiveness, Pain Management, and Discharge Information multi-item measures, the Cleanliness and Quiet items, and the global Rating and Recommendation. The Mode Experiment was also used to develop a model for patient-mix adjustment in order to account for the effect on HCAHPS responses of patient characteristics not under the control of hospitals. Adjustments for the effects of survey mode and patient-mix are necessary for valid comparison of scores across hospitals. After making these adjustments, no adjustments for nonresponse are necessary.

#### Introduction

The intent of the CAHPS®1 Hospital Survey, also known as Hospital CAHPS or HCAHPS, is to provide a standardized survey instrument and data collection methodology for measuring patients' perspectives of hospital care. In order to achieve the goal of fair comparisons across all hospitals that participate in HCAHPS, it is necessary to adjust for factors that are not directly related to hospital performance but do affect how patients answer HCAHPS survey items. These factors include the mode of survey administration, the characteristics of patients in participating hospitals, and differences between participating and non-participating patients. Collectively, we propose adjustments that are intended to eliminate any advantage or disadvantage in scores that might result from the mode of survey administration or patient characteristics beyond a hospital's control.

In order to ensure that publicly reported HCAHPS scores allow fair and accurate comparisons of hospitals, in 2006 the Centers for Medicare & Medicaid Services (CMS) undertook a Mode Experiment to examine whether mode of survey administration, the mix of patients in participating hospitals, or survey non-response systematically affect HCAHPS survey results and then developed necessary statistical adjustments. This paper summarizes the derivation of these adjustments from that large-scale, randomized mode experiment.

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The Mode Experiment addressed three important sources of potential bias in hospital-level HCAHPS results. First, hospitals participating in the HCAHPS survey have the option of choosing among four different modes of data collection: Mail, Telephone, Mail combined with Telephone follow-up (also known as Mixed mode), and Active Interactive Voice Response (IVR). If patient responses differ systematically by mode of survey administration, it is necessary to adjust for survey mode.

Second, certain patient characteristics that are not under the control of the hospital, such as age and education, may be related to the patient's survey responses. For example, several studies have found that younger and more educated patients provide less positive evaluations of healthcare. If such differences occur in HCAHPS data, it is necessary to adjust for such respondent characteristics before comparing hospitals' HCAHPS results.

Third, if the patients who respond to the HCAHPS survey differ from those who are sampled but do not complete the survey, there is a possibility that patterns of nonresponse may create a bias in reported scores. Nonresponse bias is a concern if three conditions hold: (1) nonrespondents differ from respondents, (2) nonrespondents and respondents differ in ways that are related to how patients evaluate hospitals using HCAHPS, and (3) these differences persist even after adjusting for survey mode and patient-mix. Only if all three of these conditions hold is it necessary to adjust for survey nonresponse.

The HCAHPS Mode Experiment

To assess the effect of mode of data collection, CMS conducted a large-scale experiment to compare the four allowed modes of HCAHPS data collection: Mail questionnaire only; Telephone interview only; Mixed mode (Mail questionnaire with Telephone follow up if needed); and Active IVR. In the Active IVR mode, live telephone interviewers contact the patients and invite them to participate in an automated IVR interview using their telephone keypads.

A random sample of 45 hospitals from across the United States participated in the HCAHPS Mode Experiment in early 2006. Each hospital provided a sample of discharged patients who met HCAHPS eligibility criteria.2 These samples were randomly allocated to each of the four modes in equal numbers within each hospital and patients were then surveyed accordingly. To assure uniformity in administration, sample selection and surveying for the Mode Experiment were conducted by a single agent, the National Opinion Research Center (NORC) of the University of Chicago. Analysis of Mode Experiment data and construction of the adjustment algorithms were performed by the RAND Corporation for CMS.

Table 1 (below) displays response rates from the HCAHPS Mode Experiment. As can be seen, the response rate was highest for Mixed mode (41.2%) and lowest for IVR (20.7%). Although there was some variation in response rate by hospital (the hospital-level

standard deviation in response rates was 5.6%), the response rate patterns by mode were consistent across hospitals.

(For information about eligibility, please see the HCAHPS Quality Assurance Guidelines, at www.hcahpsonline.org.

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Table 1: Comparison of Patient Response Rates by Survey Mode in the HCAHPS Mode Experiment

| MAIL   | ONLY                   | TELEPHONE ON  | NLY  | MIXED | ACTIVE | IVR  | OVERA | LL   |      |
|--|------------------------|---------------|------|-------|--------|------|-------|------|------|
| Discharges Randomized<br>27,229                          |                        | d to Mode     | 6806 |       | 6808   |      | 6808  |      | 6807 |
| Cases Determi  | Cases Determined to be |               |      |       |        |      |       |      |      |
| Ineligible in the  | e Field                | 23            |      |       |        |      |       |      |      |
| (0.3%)   | 928                    |               |      |       |        |      |       |      |      |
| (13.6%) 761  |                        |               |      |       |        |      |       |      |      |
| (11.2%)  | 900                    |               |      |       |        |      |       |      |      |
| (13.2%)  | 2612                   |               |      |       |        |      |       |      |      |
| (9.6%)   |                        |               |      |       |        |      |       |      |      |
| Completed Surveys  |                        | 2239          | 1607 |       | 2489   |      | 1220  |      | 7555 |
| Response Rate of Eligible Patients (Completes/Eligible1) |                        |               |      |       |        |      |       |      |      |
| 33.0   |                        |               |      |       |        |      |       |      |      |
| %  |                        |               |      |       |        |      |       |      |      |
| 27.3   |                        |               |      |       |        |      |       |      |      |
| %  |                        |               |      |       |        |      |       |      |      |
| 41.2   |                        |               |      |       |        |      |       |      |      |
| %  |                        |               |      |       |        |      |       |      |      |
| 20.7   |                        |               |      |       |        |      |       |      |      |
| %  |                        |               |      |       |        |      |       |      |      |
| 30.7   |                        |               |      |       |        |      |       |      |      |
| %  |                        |               |      |       |        |      |       |      |      |
| Yield (Complet<br>27.7                                   | es/ Rano<br>%          | domized) 32.9 | %    | 23.6  | %      | 36.6 | %     | 17.9 | %    |

1 "Eligible" is defined as randomized cases minus those determined to be ineligible in the field. Analysis of the HCAHPS Mode Experiment

CMS estimated mode effects in linear models that include both hospital fixed effects and patient-mix adjustment (PMA)3 for demographic and other patient factors associated with response tendency. For each HCAHPS rating or report item, a linear regression model consisting of mode fixed effects, hospital fixed effects, and patient-mix adjusters was estimated. These linear models generate adjustments for both mode and patient-mix. Because patient-mix adjustment will be employed, we calculate mode adjustments that correspond to the mode effects that remain after patient-mix adjustments.4

Developing the Patient-Mix Adjustment (PMA) Model

Patient-mix refers to patient characteristics that are not under the control of the hospital that may affect patient reports of hospital experiences. The goal of adjusting for patient-mix is to estimate how different hospitals would be rated if they all provided care to comparable groups of patients. In developing the HCAHPS patient-mix adjustment (PMA) model, we sought important and statistically significant predictors of patients' HCAHPS ratings that also vary meaningfully across hospitals. Adjustors with both of these characteristics will substantially adjust hospital-level scores.

We considered eight candidate PMA variables: service line (medical, surgical, or maternity care), age, education, self-reported health status, language other than English spoken at home, age by service line interactions, emergency room (ER) admission, and percentile response order, also known as "relative lag time," which is based on the time between discharge and survey completion.5

For the ordinal candidates (age, education, and self-rated health status), we tested whether treating the PMA variable categorically as a series of dummy variables was more predictive of HCAHPS outcomes than a linear form; we used the categorical form only when there was evidence of it being more predictive. We tested the statistical significance of candidate PMA variables in multivariate linear regressions, one for each outcome, using patient-mix adjustors, mode dummies, and hospital dummies as predictors. We calculated the explanatory power of each candidate patient-mix adjustor for hospital-level adjustments (O'Malley et al., 2005).

3 Also known as case-mix adjustment (CMA) in other parts of the CAHPS literature. CMS uses the term patient-mix adjustment here to distinguish this adjustment from severity adjustments for clinical outcomes or payment.

4 These mode adjustments are very similar to the mode adjustments that would be employed in the absence of patient-mix adjustment.

5 Computed as a percentile of all fielded cases within a given hospital and mode, so that the 10th response of 100 fielded cases for the Mail Only mode of Hospital A would be 0.10 and the 40th and last response from that same hospital in that same mode, assuming a 40% response rate, would be 0.40.

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#### **Developing the Mode Adjustments**

In making mode adjustments, it is necessary to choose one mode as a reference point. One can then interpret all adjusted data from all modes as if they had been surveyed in the reference mode. Because it is the most commonly used mode in patient surveys, CMS selected the Mail Only mode as the reference mode of survey administration. The choice of mail mode as the reference mode does not indicate that mail mode is preferable to other approved modes in any way.

Surveys conducted in the Mail Only mode are not adjusted further for mode after PMA. Surveys conducted in the other three modes (Telephone Only, Mixed, Active IVR) are adjusted according to the difference in mode effects between that mode and the Mail Only mode, as estimated through linear regression in the HCAHPS Mode Experiment. In particular, the mode effects for each outcome are the coefficients for the mode dummy variables in regression models with three mode dummies, hospital dummies, and the final patient-mix adjustors. These coefficients estimate the remaining difference between Mail Only mode and each of the other modes after patient-mix adjustment.

#### Nonresponse Analysis

Logistic regression was used to model response propensity among eligible discharges from hospital indicators, survey mode, and available individual-level administrative variables: age, gender, service line, emergency room admission, and discharge status (sick, left against medical advice, or standard). Nonresponse weights were derived from these models and tested with respect to the extent to which they were associated with patient-mix adjusted scores.

#### **HCAHPS Multi-item measure Scoring**

Each of the six HCAHPS composites (Communication with Nurses, Communication with Doctors, Responsiveness of Hospital Staff, Pain Management, Communication about Medicines, and Discharge Information) is calculated as the average of its two or three constituent items. In following previous CAHPS practice, items within a multi-item measure are first individually patient-mix adjusted and then are weighted so as to give each item equal influence within the multi-item measure. Mode adjustments for multi-item measure scores are derived as the unweighted averages of mode adjustments for individual constituent items, so that each item has equal influence on the multi-item measure adjustment.

#### Mode Adjustment Results

Patients generally provided more best category ("top-box") responses in the Telephone Only and Active IVR modes than in the Mail Only and Mixed modes. Differences between Telephone Only and Active IVR responses were generally small, and only two items differed between Mail Only and Mixed Mode. In particular, Telephone Only responses were more positive than Mail Only for the Communication with Nurses multi-item measure, the Pain Management multi-item measure, the Communication about Medicine

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multi-item measure, the Staff Responsiveness multi-item measure, the Cleanliness item, the Quiet item, and the Recommendation item. Active IVR was more positive than Mail Only for the Communication with Nurses multi-item measure, the Discharge Information multi-item measure, and the Quiet item. Mixed Mode was significantly more positive than Mail Only for the Cleanliness item and the Quiet item.

Table 2 (below) presents mode adjustments derived from the HCAHPS Mode Experiment for the best category ("top-box") proportion in models that include patient-mix adjustment. As an example, a patient-mix adjusted score of 84.2% "always" for the Communication with Nurses multi-item measure for a survey conducted by Telephone Only mode would be further adjusted to (84.2% - 4.0% = ) 80.2% in order to account for the fact that 80.2% is the corresponding expected score for that multi-item measure had the survey been conducted in Mail Only mode. Here, 4.0% represents the increase in the proportion of patients responding "always" that would be expected from the same patients had they been surveyed by Telephone Only mode

(when compared to the reference mode of Mail Only). Similarly, Table 3 (below)presents mode adjustments for the lowest category ("bottom-box") proportions. As an example, a patient-mix adjusted score of 7.2% "never" or "sometimes" for the Communication with Nurses multi-item measure for a survey conducted by Telephone Only mode would be further adjusted to (7.2% - 0.8% = ) 6.4% in order to account for the fact that 6.4% is the corresponding expected score for that multi-item measure had the survey been conducted in Mail Only mode. Here, 0.8% represents the increase in the proportion of patients responding "never" or "sometimes" that would be expected from the same patients had they been surveyed by Telephone Only mode (when compared to the reference mode of Mail Only). In this same example, 100.0%- 80.2% (adjusted top-box)-6.4% (adjusted bottom-box)=13.4% would be the fully adjusted score for the "middle-box" category, here corresponding to "usually" for Communication with Nurses.

Table 2: Mode Adjustments of Top Category ("Top-Box") Percentages (after PMA) to Adjust Other Modes to a Reference of Mail

PHONE ONLY MIXED ACTIVE IVR Composites **Communication with Nurses** (Always) -4.0% -0.3% -1.8% **Communication with Doctors** (Always) -1.3% 1.0% -0.3% Responsiveness of Hospital Staff (Always) -4.7% 0.1% -1.9% Pain Management (Always) -4.7% -2.3% -3.4% **Communication about Medicines** (Always) -3.9% -0.9% -1.6% Discharge information (Yes) -1.3% 0.2% -3.2% Individual Report Items **CLEANLINESS** (Always) -5.5%
-2.1% -1.9% QUIET (Always) -6.3% -3.1% -10.2% Global Items **RECOMMEND HOSPITAL** (Definitely Yes) -4.4% -1.4% -2.2% HOSPITAL RATING (9 or 10) -2.8% -1.8% -1.6% Table 3: Mode Adjustments of Bottom Category ("Bottom-Box") Percentages (after PMA) to Adjust Other Modes to a Reference of Mail PHONE ONLY MIXED ACTIVE IVR Composites **Communication with Nurses** (Always) -0.8% -0.5% -0.6% **Communication with Doctors** (Always) -2.2% -1.4% -1.2% Responsiveness of Hospital Staff (Always) -0.2% -1.9% -1.4% Pain Management (Always) -0.6% -0.9% -1.3% **Communication about Medicines** (Always) 0.5% -1.4% -1.5% Discharge information (Yes) 1.3% -0.2% 3.2% Individual Report Items CLEANLINESS

(Always) 1.0% 0.4% 0.6% QUIET (Always) -1.4% 0.9% 1.4% Global Items **RECOMMEND HOSPITAL** (Definitely Yes) 0.4% -0.4% 0.1% -1.1% 0.8% HOSPITAL RATING (9 or 10) 0.9% Patient-mix Adjustment Results and Model

All candidate patient-mix adjustors were statistically significant predictors of at least one reported HCAHPS outcome and each had at least as much average explanatory power as PMA variables that have been previously recommended for use in HCAHPS PMA (O'Malley et al., 2005). Age had a significantly nonlinear relationship with 8 of 10 reported outcomes, but education and self-rated health status were well characterized by linear scoring of the ordinal categories. Evaluations of care increased with self-rated health and age (at least through age 74), and decreased with educational attainment. Maternity service had generally more positive evaluations than medical and surgical services. Evaluations were generally lower for those admitted through the ER. Percentile response order (relative lag time) findings showed that late responders tended to provide less positive evaluations than earlier responders.

The final PMA model includes all eight candidate PMA variables as follows: linear self-reported health status, linear education, service line, categorical age, ER admission source, response percentile, service by linear age interactions, and primary language other than English.

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**Nonresponse Findings** 

Although there was evidence of selective nonresponse, the PMA model employed was found to effectively account for any nonresponse bias that could have been addressed through nonresponse weighting. Therefore, no further weighting or adjustment for nonresponse is needed.

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Integrated Patient-mix and Mode Adjustment

Patient-mix and survey mode adjustments are applied sequentially to the raw HCAHPS scores. Survey responses first undergo patient-mix adjustment using the model specified above, adjusting to the unweighted mean of all responding patients in the given public reporting period, which is typically four calendar quarters. It bears mentioning that the exact values of PMA coefficients used for adjustment are not based on the values observed in the HCAHPS Mode Experiment but are re-estimated each reporting period based on the empirical relationship observed between PMA variables and HCAHPS outcomes in that period.

## TYPE SCORE

Rate/proportion

## ALGORITHM

NOTE: For the complete response, please see, "ADDITIONAL, A.1" (HCAHPS Survey, NQF 0166 Appendix A.1: Supplemental Materials.)

SCORING AND PATIENT-MIX ADJUSTMENTS

Data timeframe

• 12 months of data on a "rolling" basis

Sampling rates

• Monthly samples must be weighted to control for varying sampling rates throughout the year in order to make the combined monthly samples representative of the full population of discharges

**Global rating** 

• Measured by the overall rating of the hospital and the extent to which patients are willing to recommend the hospital (Q18 & Q19)

Domains of care

- Communication with doctors (Q5, Q6, & Q7)
- Communication with nurses (Q1, Q2, & Q3)
- Responsiveness of the hospital staff (Q4, Q10, & Q11)
- Communication about medicines (Q12, Q13, & Q14)
- Cleanliness and quiet of physical environment (Q8 & Q9)
- Discharge information (Q15, Q16, & Q17)

Production of scores—Global ratings

• Overall rating of the hospital

For this item, respondents are asked, "Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital?" The scoring on this item will represent the proportion of respondents who gave a rating of 0-7, 8-9, or 10 to the hospital.

The steps to calculate a hospital's score for "overall rating" follow:

Step 1 – Assign appropriate sampling weight to each case

CMS expects that most hospitals will sample a fixed number of discharges each month to reach the target of 300 completes annually. However, the monthly population of discharges from which these fixed-sized samples are drawn will vary throughout the year. There are more total discharges in some months than others in most hospitals. Thus sampling rates will vary from month to month. To make the combined monthly samples representative of the full population of discharges for the year, it is necessary to adjust for the different monthly sampling rates. Appropriate sampling weights can be assigned to each case to make the combined monthly samples representative of the total population of annual discharges. This will be done as follows:

Calculate the expansion weight for each month (Em).

Em = (Population size for the month) / (Sample size for the month)

Calculate the mean expansion weight for the number of months covered in the score (e.g., 12 months).

E = (Sum of Em) / (number of months)

Calculate the relative weight for each month as the expansion weight for the month divided by the mean expansion weight.

Wm = Em / E

Assign a sampling weight to each case (Wi) based on the month in which the person was discharged and corresponding value of Wm.

Step 2 – Identify relevant cases

Include only cases where survey status is a completed survey.

Include only cases with non-missing values on the overall rating question.

Step 3 – Calculate the proportion of cases in each response category

Proportion of respondents who gave the hospital an overall rating of 0-7:

The numerator is the number of respondents for whom the overall rating (Xi) is 0-7. Each case is weighted by the appropriate sampling weight for the month the person was discharged.

The denominator is the total number of respondents (each weighted by the appropriate sampling weight for the month the person was discharged).

The proportion can be defined as follows:

Let X1i = 1 when Xi is 0-7

= 0 otherwise

P1 = (Sum of WiX1i) / sum of Wi

Proportion of respondents who gave the hospital an overall rating of 8 or 9:

The numerator is the number of respondents for whom the overall rating (Xi) is 8 or 9. Each case is weighted by the appropriate sampling weight for the month the person was discharged.

The denominator is the total number of respondents (each weighted by the appropriate sampling weight for the month the Person was discharged).

The proportion can be defined as follows:

Let X2i = 1 when Xi is 8 or 9

= 0 otherwise

P2 = (Sum of WiX2i) / Sum of Wi

Proportion of respondents who gave the hospital an overall rating of 10:

The numerator is the number of respondents for whom the overall rating (Xi) is 10. Each case is weighted by the appropriate sampling weight for the month the person was discharged.

The denominator is the total number of respondents (each weighted by the appropriate sampling weight for the month the person was discharged).

The proportion can be defined as follows:

Let X3i = 1 when Xi is 10

= 0 otherwise

P3 = (Sum of WiX3i) / Sum of Wi

• Willingness to recommend the hospital

For this item, respondents are asked, "Would you recommend this hospital to your friends and family?" to which they can respond "definitely no," "probably no," "probably yes," or "definitely yes." A hospital's score is the proportion of cases in each response category. The approach to the production of a hospital's score on this item follows the same steps noted for "overall rating of the hospital."

Production of scores—Domain ratings

There are six domain-level multi-item measures included in the HCAHPS measure: communication with doctors, communication with nurses, responsiveness of hospital staff, communication about medicines, cleanliness and quiet of the hospital environment, and discharge information. The steps to calculate multi-item measure scores follow:

• Communication with doctors

This multi-item measure is produced by combining responses to three questions that ask:

o "During this hospital stay, how often did doctors listen carefully to you?"

o "During this hospital stay, how often did doctors explain things in a way you could understand?"

o "During this hospital stay, how often did doctors treat you with courtesy and respect?"

Respondents can answer "never," "sometimes," "usually," or "always" to each. A hospital's score on the "doctor communication" multi-item measure is the proportion of cases in each response category.

The steps to calculate a hospital's multi-item measure score follow:

Step 1 – Calculate the proportion of cases in each response category for each question

Follow the same steps for calculating the proportion of cases in a response category discussed above for "overall rating of the hospital" to obtain proportions for the first question:

P11 = Proportion of respondents who said "never" to the first question

P12 = Proportion of respondents who said "sometimes" to the first question

P13 = Proportion of respondents who said "usually" to the first question

P14 = Proportion of respondents who said "always" to the first question

Follow the same steps for calculating the proportion of cases in a response category discussed above for "overall rating of the hospital" to obtain proportions for the second question:

P21 = Proportion of respondents who said "never" to the second question

P22 = Proportion of respondents who said "sometimes" to the second question

P23 = Proportion of respondents who said "usually" to the second question

P24 = Proportion of respondents who said "always" to the second question

Follow the same steps for calculating the proportion of cases in a response category discussed above for "overall rating of the hospital" to obtain proportions for the third question:

P31 = Proportion of respondents who said "never" to the third question

P32 = Proportion of respondents who said "sometimes" to the third question

P33 = Proportion of respondents who said "usually" to the third question

P34 = Proportion of respondents who said "always" to the third question

Step 2 – Combine responses from the questions to form the multi-item measure.

Calculate the average proportion responding to each category across the three questions in the multi-item measure:

PC1 = Multi-item measure proportion who said "never" = (P11 + P21 + P31) / 3

PC2 = Multi-item measure proportion who said "sometimes" = (P12 + P22 + P32) / 3

PC3 = Multi-item measure proportion who said "usually" = (P13 + P23 + P33) / 3

PC4 = Multi-item measure proportion who said "always" = (P14 + P24 + P34) / 3

• Communication with nurses

This multi-item measure is produced by combining responses to three questions that ask:

o "During this hospital stay, how often did nurses listen carefully to you?"

o "During this hospital stay, how often did nurses explain things in a way you could understand?"

o "During this hospital stay, how often did nurses treat you with courtesy and respect?" Respondents can answer "never," "sometimes," "usually," or "always" to each. The steps to calculate a hospital's multi-item measure score for this domain are the same as for "doctor communication."

• Responsiveness of hospital staff

This multi-item measure is produced by combining responses to two questions that ask:

[A screener question identifies patients who needed help getting to the bathroom or using a bedpan]

o "During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted?"

o "How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?"

Respondents can answer "never," "sometimes," "usually," or "always" to each of the two nonscreener questions. The steps to calculate a hospital's multi-item measure score are the same as for "doctor communication," except that only respondents who answered "yes" to the screener question (i.e., they needed help getting to the bathroom or using a bedpan) are included in calculating the proportions for the second question. [The two questions are equally weighted in calculating the multi-item measure, because CMS views them as equally important, even though there will be fewer respondents to the second question.]

• Communication about medicines

This multi-item measure is produced by combining responses to two questions that ask:

[A screener question identifies patients who were given medicine they had not taken before during their hospital stay]

o "Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?"

o "Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?"

Respondents can answer "never," "sometimes," "usually," or "always" to each of the two (nonscreener) questions. The steps to calculate a hospital's multi-item measure score are the same as for "doctor communication," except that only respondents who answered "yes" to the screener question (i.e., they were given medicine they had not taken before) are included in calculating the proportions.

• Cleanliness and quiet of the hospital environment

This multi-item measure is produced by combining responses to two questions that ask:

o "During this hospital stay, how often were your room and bathroom kept clean?" (note addition of quote)

o "During this hospital stay, how often was the area around your room quiet at night?"

Respondents can answer "never," "sometimes," "usually," or "always" to each. The steps to calculate a hospital's multi-item measure score are the same as for "doctor communication."

• Discharge information

This multi-item measure is produced by combining responses to two questions that ask:

[A screener question identifies patients discharged to home]

o "During your hospital stay, did hospital staff talk with you about whether you would have the help you needed when you left the hospital?"

o "During your hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?"

Respondents can answer "yes" or "no" to each. The steps to calculate a hospital's multi-item measure score are the same as for "doctor communication," except that only respondents who answered "yes" to the screener question (i.e., they were discharged to home) are included in calculating the proportions.

Patient-Mix Adjustment

Specifications 4.5 and 4.6 provide for the steps to producing raw hospital scores. Final scores shall include a patient-mix adjustment and adjustment for mode effects to better ensure the comparability of scores across hospitals—that is, the purpose of adjusting for patient mix is to estimate how different hospitals would be rated if they all provided care to comparable groups of patients.

• The following variables shall be used in the patient-mix adjustment model for HCAHPS:

o Service Line and Gender (Female Medical, Male Medical, Female Surgical, Male Surgical, and Maternity)

o Age (specified as a categorical variable)

o Education (specified as a linear variable)

o Self-reported general health status (specified as a linear variable)

o Language other than English spoken at home

o Interaction of age by service

The patient-mix adjustment shall be a regression methodology also referred to as covariance adjustment. As an example:

Let represent the response to item i of respondent j from hospital p (after recoding, if any, has been performed). The model for adjustment of a single item i is of the form:

where is a regression coefficient vector, is a covariate vector consisting of six or more adjuster covariates (as described above), is an intercept parameter for hospital p, and is the error term. The estimates are given by the following equation:

where is the vector of intercepts, is the vector of responses, and the covariate matrix is:

where the columns of are the vectors of values of each of the adjuster covariates, and is a vector of indicators for being discharged from hospital p, p = 1, 2, ... P, with entries equal to 1 for respondents in hospital p and 0 for others.

The estimated intercepts are shifted by a constant amount to force their mean to equal the mean of the unadjusted hospital means (to make it easier to compare adjusted and unadjusted means), giving adjusted hospital means:

For single-item responses, these adjusted means are reported. For composites, the several adjusted hospital means are combined using the weighted mean.

# 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

## STEWARD

Centers for Medicare & Medicaid Services

## DESCRIPTION

This is a survey-based measure and one of the family of surveys called CAHPS Surveys (Consumer Assessment of Healthcare Providers and Systems)that are focused on patient experience. The questionnaire asks End Stage Renal Disease (ESRD) patients receiving in-center hemodialysis care about the services and quality of care that they experience. Patients assess their dialysis providers, including nephrologists and medical and non-medical staff, the quality of dialysis care they receive, and information sharing about their disease. The survey is conducted twice a year, in the spring and fall with adult in-center hemodialysis patients. Publicly-reported measures focus on the proportion of survey respondents at each facility who choose the most favorable responses.

Three multi-item measures:

- a. M1: Nephrologists' Communication and Caring (NCC)
- b. M2: Quality of Dialysis Center Care and Operations (QDCCO)
- c. M3: Providing Information to Patients (PIP)

Three Global items:

- a. M4: Rating of the nephrologist
- b. M5: Rating of dialysis center staff
- c. M6: Rating of the dialysis facility

The first three measures are created from six or more questions from the survey that are reported as one measure score. The three global items are single-item measures using a scale of 0 to 10 to report the respondent's assessment.

The results are reported on Dialysis Facility Compare (DFC) on the Medicare.gov website.

#### түре

Outcome: PRO-PM

## DATA SOURCE

Instrument-Based Data

## LEVEL

Facility, Other, Population: Regional and State

## SETTING

Post-Acute Care

## NUMERATOR STATEMENT

There are a total of six ICH CAHPS measures. Three of them are multi-item measures and three are global ratings. Each measure is composed of the responses for all individual questions included in the measure. Missing data for individual survey questions are not included in the

calculations. Only data from a "completed survey" is used in the calculations. Each measure score is at the facility level and averages the proportion of respondents who chose each answer option for all items in the measure. Each global rating is be scored based on the number of respondents in the distribution of top responses; e.g., the percentage of patients rating the facility a "9" or "10" on a 0 to 10 scale (with 10 being the best).

#### NUMERATOR DETAILS

## Multi-Item Measures

Each of the multi-items measures is produced by combining responses to all of the questions included in the measure.

Step 1 – Identify relevant cases: include only cases where survey status is a "completed survey" and include only cases with non-missing values on each of the individual questions.

Step 2 - Calculate the proportion of cases in each of the response categories for each question.

Step 3 – Combine responses from each of the questions to form the measure by calculating the average proportion responding to each category across all of the questions in the measure.

Measure: M1 - Nephrologists' Communication – Q3,Q4,Q5,Q6,Q7, and Q9;

Measure: M2 - Quality of Dialysis Center Care and Operations:

q10,Q11,Q12,Q13,Q14,Q15,Q16,Q17,Q21,Q22,Q24,Q25,Q26,Q27,Q33,Q34, and Q43

Measure: M3 - Providing Information to Patients: Q19,Q28,Q29,Q30,Q31,Q36,Q38,Q39,and Q40

The measures include a "top-box" score which reflects the average proportion of respondents who chose the most favorable option in answering questions in the measure. The "middle-box" score refers to the average proportion of respondents who chose mid-level responses. Items with a binary response will not have a middle box score. The "bottom-box" score refers to the average proportion of respondents who chose least favorable responses.

**Global Ratings:** 

Global Item – M4 - Rating of nephrologists : Q8

Global Item – M5 - Rating of the dialysis center staff: Q32

Global Item – M6 - Rating of the dialysis facility: Q35

Step 1 – Identify relevant cases: Include only cases where survey status is a completed survey and include only cases with non-missing values on the overall rating question.

Step 2 – Calculate the proportion of cases in each of three re-coded response categories that represent top-,middle-, and bottom-box scores

The numerator is the number of respondents for whom the global rating (Xi) is 0-6.

The denominator is the total number of respondents that responded to this question (Wi)

Proportion of respondents who gave a rating of 0-6 (bottom box score):

The numerator is the number of respondents for whom the global rating (Xi) is 0-6.

The denominator is the total number of respondents (Wi).

The proportion can be defined as follows:

Let X1i = 1 when Xi is 0-6

= 0 otherwise

P1 = (SumiX1i) / SumiWi

Proportion of respondents who gave a rating of 7 or 8 (middle box score):

The numerator is the number of respondents for whom the global rating (Xi) is 7 or 8.

The denominator is the total number of respondents (Wi).

The proportion can be defined as follows:

Let X2i = 1 when Xi is 7 or 8

= 0 otherwise

P2 = (SumiX2i) / SumiWi

Proportion of respondents who gave a global rating of 9 or 10:

The numerator is the number of respondents for whom the global rating (Xi) is 9 or 10.

The denominator is the total number of respondents.

The proportion can be defined as follows:

Let X3i = 1 when Xi is 9 or 10

= 0 otherwise

P3 = (SumiX3i) / SumiWi

A facility's score on the global rating item is the proportion of cases in each response category. Star Ratings

A linear mean is also calculated on the same question items above. Rather than recoding the item into a binary response, all levels for an item are used. The item is then transformed on a 0 to 100 scale and an average is calculated. This puts all question items, regardless of the number of responses, on the same 0 to 100 scale. A factor analysis is then conducted on each facility's linear means and assigns them to one of five groupings. The group with the lowest linear means gets 1-star. The group with the next highest linear means gets 2-stars. And the process repeats until you get to the fifth group with the highest possible linear means which gets 5-stars. A Star Rating is generated for each of the three global items as well as each of the three multi-item measures. Finally, an overall Star Rating is calculated which is a simple average of the six previous Star Ratings, rounded up. i.e. if a facility had 3 3-stars and 3 4-stars, the overall Star Rating would be (3+3+3+4+4+4)/6 = 3.5, which is rounded up to 4-stars.

## DENOMINATOR STATEMENT

Patients receiving in-center hemodialysis at sampled facility for the past 3 months or longer are included in the sample frame.

The denominator for each question is composed of the sample members that responded to the particular question.

Proxy respondents are not allowed.

Only complete surveys are used. A complete survey is defined as one where the sampled patient answered at least 50 percent of the questions that are applicable to all sample patients: Q1-Q20, Q22, Q23, Q25-Q37, Q39-Q41 (Appendix provides more details about these questions.)

#### DENOMINATOR DETAILS

See information in S.6 for details.

## EXCLUSIONS

Exclusions:

a. Patients less than 18 years of age

- b. Patients not receiving dialysis at sampled facility for 3 months or more
- c. Patients who are receiving hospice care
- d. Any surveys completed by a proxy (mail only mode or mixed mode)

e. Any ineligible patients due to death, institutionalization, language barrier, physically or mentally incapable.

## **EXCLUSION DETAILS**

All data for measure calculations is based on surveys that are completed by any of the approved modes: telephone only, mail only or mixed mail/telephone follow up. A survey is considered complete if at least 50 percent of the core survey questions are answered by the respondent. Missing data for individual survey questions are not included in the calculations.

## **RISK ADJUSTMENT**

Other: The ICH CAHPS survey data is adjusted for public reporting using survey mode and 13 patient characteristics. Usually patient experience surveys are adjusted for factors not under the control of the provider that impact response tendencies. This is called patient mix or case mix adjustment. We conduct these adjustments so meaningful comparisons between ICH facilities can be made. The 2014 Mode Experiment was conducted to determine the set of patient mix adjusters. A re-evaluation of patient mix was made in 2018 and it was determined to retain the original patient mix adjusters. The current patient mix adjusters are: Overall health; Overall mental health; Heart disease; Deaf or serious difficulty hearing; Blind or serious difficulty seeing; Difficulty concentrating, remembering, or making decisions; Difficulty dressing or bathing; Age; Sex; Education; Does the patient speak a language other than English at home; Did someone help the patient complete this survey; Total number of years on dialysis. The coefficients for patient mix adjustment are published on the survey website after each Dialysis Facility Compare refresh. They can be found at: https://ichcahps.org/Home.aspx in the Quick Links section.

#### STRATIFICATION

N/A

#### TYPE SCORE

Rate/proportion

## ALGORITHM

1. Only surveys that meet the completeness criteria of greater than or equal to 50% will be included in the calculation of measures/global ratings.

2. Each of the three multi-item measures consists of 6 or more questions that are reported as one measure score. Scores are created by first determining the proportion of answers to each response option for all questions in the measure. The final measure score averages the proportion of those responding to each answer choice in all questions. Only questions that are answered by survey respondents will be included in the calculation of measure scores.

3. Statistical adjustments are made for mode of administration, and the set of patient-mix characteristics noted in S.11a. The statistically adjusted score for the three ratings questions and a given individual survey question that is included in one of the three ICH CAHPS Survey multiitem measures is the sum of a series of products in the equation shown below.

y + a1(h1 - m1) + a2(h2 - m2) + a3(h3 - m3) + ... + a28(h28 - m28) + a29\*h29 + a30\*h30

# where

is the facility's adjusted score (top or bottom box) for a ratings question or the individual ICH CAHPS question included in the multi-item measure.

y is the facility's "raw score," or mean on the respective unadjusted top or bottom box ICH CAHPS ratings question or question included in the multi-item measure.

a1 to a28 are the national-level patient characteristic adjustments, for the global ratings questions and individual questions that comprise the multi-item measures.

a29 to a30 are the national-level survey mode adjustments for the global ratings questions and the individual questions that comprise the multi-item measures.

h1 to h28 are the facility's mean proportions of patients with each of the patient characteristics in the same row.

h29 to h30 are the facility's proportion for a given mode. This value will always be 0 or 1 because within a given facility all surveys are completed by either phone, mail, or mixed mode.

m1 to m28 are the national mean proportions of patients with each of the patient characteristics.

## 0517 CAHPS Home Health Care Survey (experience with care)

#### STEWARD

Centers for Medicare & Medicaid Services

# DESCRIPTION

The Consumer Assessment of Healthcare Providers and Systems (CAHPS<sup>®</sup>) Home Health Care Survey, also referred as the "CAHPS Home Health Care Survey" or "Home Health CAHPS" or "HHCAHPS" is a standardized survey instrument and data collection methodology for measuring home health patients 'perspectives on their home health care in Medicare-certified home health care agencies. AHRQ and CMS participated in the development of the Home Health CAHPS to measure the experiences of those receiving home health care with these three goals in mind:

(1) To produce comparable data on patients' perspectives on care that allow objective and meaningful comparisons between home health agencies on domains that are important to consumers,

(2) To create incentives for agencies to improve their quality of care through public reporting of survey results, and

(3) To enhance public accountability in health care by increasing the transparency of the quality of care provided in return for public investment.

#### ТҮРЕ

Outcome: PRO-PM

#### DATA SOURCE

Instrument-Based Data

## LEVEL

Facility

## SETTING

Home Care

## NUMERATOR STATEMENT

The numerator statement is that each measure encompasses the responses for all questions that make up the particular measure. Missing data for individual survey questions are not included in the calculations. Only data from a completed survey are used in the calculations. The measures scores averages the proportion of those responding to each answer choice in all questions. Each global rating is scored based on the number of the respondents in the distribution of top responses, such as the percentage of patients rating a home health agency with a 9 or a 10, where 10 is the highest quality responses on a scale from 0 to 10.see S2.

## NUMERATOR DETAILS

Please note that the HHCAHPS Protocols and Guidelines Manual, Version 11 (January 2019), at https://homehealthcahps.org has full details about these measures and calculations. Missing data for individual survey questions are not included in the calculation of the HHCAHPS agency-level measures.

Only data from a "completed survey" is used in the calculations. A survey is considered complete if at least 50 percent of the "core" HHCAHPS survey questions are answered by the respondent. The core questions are 1-25. Questions 26-34 are "About You" questions.

The three HHCAHPS measures that consist of multiple survey items are the Care of Patients (Q9, Q16, Q19, and Q24), Communication between Providers and Patients (Q2, 15, Q17, Q18, Q22, and Q23), and Specific Care Issues (Q3, Q4, Q5, Q10, Q12, Q13, and Q14). The question items within each measure are individually patient-mix adjusted and then averaged and then weighted so as to give each question item equivalent influence within the measure.

The five publicly reported HHCAHPS measures are the three multi-item measures and two global measures called "Overall Rating of Care" (Q20) and "Would You Recommend the Home Health Agency to Family and Friends" (Q22).

Home health agencies sample a fixed number of patients every month on a continuous basis to reach the target of 300 completes in a 12-month period. The sampling rates may change from quarter to quarter to ensure that a sufficient number of patients are surveyed over the year and based on the number of eligible home health patients each month/quarter.

**Global Item Measures** 

There are two global measures: the "Overall Rating of Care" measure (Q20) and the "Willingness to Recommend the Home Health Agency to Family and Friends" (Q25) measure.

**Overall Rating of Care** 

In Q20, respondents are asked "Using any number from 0–10, where 0 is the worst home health care possible, and 10 is the best home health care possible, what number would you use to rate your care from this agency's home health care providers?"

The scoring for this measure represents the proportion of respondents who gave a rating of 9 or 10. The steps for calculating the "Overall Rating of Care" score are shown below.

Step 1: Calculate the proportion "P" of survey responses in the quarter who answered Q20 with an overall rating of 9 or 10.

The proportion P is defined as follows: P = X/Y, where

- the numerator X is the number of respondents for whom the overall rating is 9 or 10, and
- the denominator Y is the total number of respondents who answered Q20.

Willingness to Recommend the Home Health Agency to Family and Friends

Respondents are asked, "Would you recommend this home health agency to your family and friends if they needed home health care?"

The scoring for Q25 represents the proportion of respondents who answered "Definitely Yes." The steps for calculating the "Willingness to Recommend" score are:

Step 1: Calculate the proportion "P" of cases in the quarter who answered "Definitely Yes" to Q25.

The proportion P is defined as follows: P = X/Y, where

- the numerator X is the number of respondents who answered "Definitely Yes" to Q25 and
- the denominator Y is the total number of respondents who answered Q25.

The Three Measures that consist of Multiple Survey Items on the HHCAHPS Survey

As previously stated, the three measures including multiple items are: (1) Care of Patients, (2) Communication between Providers and Patients, and (3) Specific Care Issues (pain, safety & medication). The calculation of the scores for these three measures follow.

For each of the three measures, include only cases where the survey status is a completed survey.

For each of the three measures, include only cases with non-missing values on the specific questions in the calculations.

Measure 1: Care of Patients

The Care of Patients measure is produced by combining responses to four questions:

Q9 "In the last 2 months of care, how often did home health providers from the agency seem informed and up-to-date about all the care or treatment you got at home? "

Response Category: Never, Sometimes, Usually, or Always

Q16 "In the last 2 months of care, how often did home health providers from this agency treat you as gently as possible?"

Response Category: Never, Sometimes, Usually, or Always

Q19 "In the last 2 months of care, how often did home health providers from this agency treat you with courtesy and respect?"

Response Category: Never, Sometimes, Usually, or Always

Q24 "In the last 2 months of care, did you have any problems with the care you got through this agency?"

Response Category: Yes or No

The basic steps in calculating an agency's score for the Care of Patients measure:

Step 1 – Calculate the proportion of cases answering "always" or "yes" for each question similar to how the proportion was calculated for "overall rating of agency care" measure above:

P1 = Proportion of respondents who said "always" to Q9

P2 = Proportion of respondents who said "always" to Q16

P3 = Proportion of respondents who said "always" to Q19

P4 = Proportion of respondents who said "yes" to Q24

Step 2 – Combine responses from Q9, Q16, Q19, and Q24 to form the Care of Patients measure

Calculate the average proportion responding to "always" and "yes."

Care of Patients = Proportion who said "always" and "yes" = (P1 + P2 + P3 + P4)/4

Measure 2: Communication Between Providers and Patients

The Communication Between Providers and Patients is produced by combining responses to six questions:

Q2 "When you first started getting home health care from this agency, did someone from the agency tell you what care and services you would get?"

Response Category: Yes or No

Q15 "In the last two months of care, how often did home health providers from this agency keep you informed about when they would arrive at your home?"

Response Category: Never, Sometimes, Usually, or Always

Q17 "In the last two months of care, how often did home health providers from this agency explain things in a way that was easy to understand?"

Response Category: Never, Sometimes, Usually, or Always

Q18 "In the last two months of care, how often did home health providers from this agency listen carefully to you?"

Response Category: Never, Sometimes, Usually, or Always

Q22 "In the last two months of care, when you contacted this agency's office did you get the help or advice you needed?"

Response Category: Yes or No

Q23 "When you contacted this agency's office, how long did it take for you to get the help or advice you needed?" Response Category: Same day/1-5 days/6-14 days/more than 14 days. "Same Day" is the answer of choice.

Response Category: Yes or No

The basic steps in calculating an agency's score for the Communication between Providers and Patients are:

Step 1 – Calculate the proportion of cases in each of the categories.

P1 = Proportion of respondents who said "yes" to Q2

P2 = Proportion of respondents who said "always" to Q15

P3 = Proportion of respondents who said "always" to Q17

P4 = Proportion of respondents who said "always" to Q18

P5 = Proportion of respondents who said "yes" to Q22

P6 = Proportion of respondents who said "yes" (did receive help same day) to Q23

Step 2 – Combine responses from the six questions to form the measure

Calculate the average proportion responding "always" and "yes"

Communication = Measure proportion who said "always" and "yes" = (P1 + P2 + P3 + P4 + P5 + P6)/6

Measure 3: Specific Care Issues

The Specific Care Issues measure is produced by combining responses to seven questions:

Q3 "When you first started getting home health care from this agency, did someone from the agency talk with you about how to set up your home so you can move around safely?"

Response Category: Yes or No

Q4 "When you started getting home health care from this agency, did someone from the agency ask to see all the prescription medicines you were taking?"

Response Category: Yes or No

Q5 "When you started getting home health care from this agency, did someone from the agency ask to see all the prescription medicines you were taking?"

Response Category: Yes or No

Q10 "In the last two months of care, did you and a home health provider from this agency talk about pain?"

Response Category: Yes or No

Q12 "In the last two months of care, did home health providers from this agency talk with you about the purpose for taking your new or changed prescription medicines?"

Response Category: Yes or No

Q13 "In the last two months of care, did home health providers from the agency talk with you about when to take these medicines?"

Response Category: Yes or No

Q14 "In the last two months of care, did home health providers from this agency talk with you about the important side effects of these medicines?"

Response Category: Yes or No

Step 1 – Calculate the proportion of cases with "yes" responses in each question

P1 = Proportion of respondents who said "yes" to Q3

P2 = Proportion of respondents who said "yes" to Q4

P3 = Proportion of respondents who said "yes" to Q5

P4 = Proportion of respondents who said "yes" to Q10

P5 = Proportion of respondents who said "yes" to Q12

P6 = Proportion of respondents who said "yes" to Q13

P7 = Proportion of respondents who said "yes" to Q14

Step 2 – Combine "yes" responses from the seven questions to form the measure

Calculate the average proportion responding "yes" in the seven questions

Specific Care Issues = Measure proportion who said "yes" = (P1 + P2 + P3 + P4 + P5 + P6 + P7)/7

#### DENOMINATOR STATEMENT

For each of the proportions described in S.5 the denominator is the number of respondents who replied to the question.

#### DENOMINATOR DETAILS

The target population is composed of patients whose home health care was paid for by Medicare or Medicaid. To be included a patient must also have had at least one home health visit for skilled nursing care, physical therapy, occupational therapy, or speech therapy during the sample month. In addition they must have had at least two home health visits for skilled nursing care, physical therapy, occupational therapy, or speech therapy during the lookback period (includes the sample month and the preceding month.)

Patients must also meet the following criteria:

- They must be at least 18 years of age by the end of the sample month;
- They are not currently receiving hospice care; and are not deceased;
- They must have received home visits for services other than routine maternity care in the sample month.

All of these survey criteria are spelled out in the HHCAHPS Protocols and Guidelines Manual, Version 11 (January 2019), at https://homehealthcahps.org with full details, explanations of lessons learned in the national implementation of the HHCAHPS Survey in the past ten years.

## **EXCLUSIONS**

Numerator and Denominator Exclusions:

• Patients under 18 years of age at any time during their stay are excluded.

• Patients who received fewer than 2 visits from home health agency personnel during a 2month look-back period are excluded. The 2-month look-back period is defined as the 2-months prior to and including the last day in the sample month.

• Patients have been previously selected for an HHCAHPS sample during any month in the current quarter, or during the last 5 months, are excluded.

- Patients who are currently receiving hospice, or are discharged to hospice, are excluded.
- All routine maternity patients are excluded.
- All "No publicity" status patients are excluded.
- Patients receiving only non-skilled care are excluded.
- Patients who reside in a state where their health condition exclude them from surveys.
- Patients who are decedents at the time of the sample are excluded.

# EXCLUSION DETAILS

The following guidance shows the denominator for computing response rates on the HHCAHPS Survey. Specific codes designating ineligible (i.e., excluded) patients are identified in the exhibit below and defined in the diagram that follows.

How Response Rates Are Calculated:

The total number of completed surveys is divided by the total number of surveys fielded minus the total number of ineligible surveys.

Definition of disposition codes follows:

**HHCAHPS Survey Disposition Codes** 

Code Description

110 Completed Mail Survey

The respondent answered at least 50 percent of the questions based on the specific completeness criteria. Assign this code for mail-only cases if the sample member responded to the questionnaire mailing and for mixed-mode cases if the sample member responded by mail.

# 120 Completed Phone Interview

The respondent answered at least 50 percent of the questions based on the specific completeness criteria. Assign this code if the interview was completed by phone and for mixed-mode cases if the sample member responded by phone.

210 Ineligible: Deceased

Assign this code if the sample member is reported as deceased during the course of the survey period.

220 Ineligible: Does Not Meet Eligible Population Criteria[2]

Assign this code if it is determined during the data collection period that the sample member does not meet all of the required eligibility criteria for being included in the survey sample. This includes the following:

• The sample member is under age 18.

• The sample member's home health care was not paid for by either Medicare or Medicaid.

• The sample member reports that he or she did not have at least one skilled care visit by the sample HHA during the sample month.

- The sample member reports that the home health visits she received were for routine maternity care only.
- It is reported that the sample member was discharged to hospice care during the sample month.
- The sample member answers "No" to Q1 and no additional questions in the survey instrument are answered.

A full listing of eligibility criteria is provided in Chapter IV of this manual.

230 Ineligible: Language Barrier

Assign this code to sample members who do not speak any of the HHCAHPS Survey language(s) which the vendor is administering for that HHA. The language barrier code only applies to the sample member and should not be assigned until a determination is made that the sample member cannot speak the language(s) being administered.

240 Ineligible: Mentally or Physically Incapacitated/No Proxy Available

Assign this code if it is determined that the sample member is unable to complete the survey because he or she is mentally or physically incapable and no proxy is available to complete the survey on his or her behalf. This includes sample members who are visually impaired (for mail surveys only) or hearing impaired (for telephone surveys only).

310 Break-Off

Assign this code if the sample member completes some responses but not enough to meet the completeness criteria.

320 Refusal

Assign this code if the sample member indicates either in writing or verbally (for telephone administration) that he or she does not wish to participate in the survey.

330 Bad Address/Undeliverable Mail

This code should be assigned only when using the mail-only mode. It should be assigned if it is determined that the sample member's address is bad (e.g., the questionnaire is returned by the Post Office as undeliverable with no forwarding address).

340 Wrong, Disconnected, or No Telephone Number

This code should be used in telephone-only or mixed-mode survey administration. Because the telephone follow-up represents the last attempt to reach the sample member for mixed-mode survey administration, this code should be used even if it is determined that the mailing address is also bad.

This code should be assigned if it is determined that the telephone number is bad (disconnected, no telephone number available, etc.).

350 No Response After Maximum Attempts

This code can be used in all three approved data collection modes. It should be assigned when the contact information for the sample member is assumed to be viable, but the sample member does not respond to the survey/cannot be reached during the data collection period.

This code should be assigned to completed surveys received after the data collection period for the sample month ends.

Mail-Only Mode

• This code should be assigned if the sample member's address is viable but he or she does not respond to either the first or second questionnaire mailing during the data collection

period. Assign this code only if work on the case has not resulted in a completed survey or other final disposition code.

• This code should be assigned if the initial questionnaire is returned blank and the second questionnaire is never returned.

Telephone-Only Mode

• This code should be assigned if it is determined that the telephone number is viable but the maximum number of telephone attempts (five) did not result in a completed interview or other final disposition code.

Mixed Mode

• This code should be assigned if it is determined that the address and telephone number are viable but the maximum number of contact attempts (i.e., the questionnaire mailing and five telephone attempts) did not result in a completed survey or another final disposition code.

This information can be found on pages 107-122 in the HHCAHPS Protocols and Guidelines Manual, Version 11 (January 2019), for download at https://homehealthcahps.org. The Manual has full details.

**RISK ADJUSTMENT** 

Other: The patient mix adjustment factors are derived from identified patient characteristics that have been determined to impact response tendencies. The patient-mix regression results indicate the tendency of patients with particular characteristics to respond more positively or negatively to HHCAHPS Survey questions. Patient-mix adjustment factors are derived directly from these data OLS regression results.

# STRATIFICATION

N/A

## TYPE SCORE

Rate/proportion

## ALGORITHM

Only surveys that meet the completeness criteria, which requires that 50% or more of the questions applicable to all sample members are answered, are included in the calculation of the measures. Each of the multi-item measures consist of four of more questions that are reported as one measure score. The final measure score averages the proportion of those responding to each answer choice in all of the survey questions that are associated with that measure score. Only questions that are answered by respondents are included in the calculation of the measure scores. The data are adjusted for patient mix so that all data are comparable across all of the home health agencies.

## 2286 Functional Change: Change in Self Care Score

#### STEWARD

Uniform Data System for Medical Rehabilitation

## DESCRIPTION

Change in rasch derived values of self-care function from admission to discharge among adults receiving inpatient medical rehabilitation and discharged alive. The timeframe for the measure is 12 months. The measure includes the following 8 items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

#### ТҮРЕ

Outcome

## DATA SOURCE

Instrument-Based Data

## LEVEL

Facility, Other

## SETTING

Inpatient/Hospital, Post-Acute Care

#### NUMERATOR STATEMENT

Average change in rasch derived self-care score from admission to discharge at the facility level. Items at admission and discharge include: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. Average is calculated as: ((sum of change at the patient level for all items (Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) / total number of patients)).

#### NUMERATOR DETAILS

For Inpatient Rehabilitation Facilities (IRFs) data collection currently occurs as required by the Centers for Medicare and Medicaid Services (CMS) reimbursement using the mandated payment document, the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). Embedded in the IRF-PAI is the FIM® Instrument. The FIM® Instrument is a criterion referenced tool with 18 items that measure patient physical and cognitive functional status and patient burden of care (level of dependence/need for helper assistance). Each item is rated on a scale of 1 (most dependent) to 7 (completely independent). For the purposes of this measure, a subset of 8 FIM<sup>®</sup> items has been tested and validated which comprise the self-care measure; those items are: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. Rasch analysis was performed on the 8 items and the difference in the rasch derived values (defined in S.2b) from admission to discharge reflect the change at the patient level. The numerator of the measure is the facility's average change. While the IRF-PAI is specific to inpatient rehabilitation facilities, the measure can be used in all post-acute care venues. The FIM® instrument can be assessed in all venues of care and has been tested and validated for use in inpatient medical rehabilitation, long term acute care facilities (LTAC), skilled nursing facilities (SNF) and home health. At present, numerous LTACs and SNFs

utilize the FIM<sup>®</sup> instrument (www.udsmr.org), thus the self-care measure is applicable for use in IRF, SNF, LTAC and other venues where patient functional change is anticipated.

# DENOMINATOR STATEMENT

Facility adjusted expected change in rasch derived self-care values, adjusted at the Case Mix Group (CMG) level.

## DENOMINATOR DETAILS

To calculate the facility adjusted expected self-care change in rasch derived values, indirect standardization is used, which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission (in essence, patient severity). Patients within the same CMG are expected to have similar resource utilization needs and similar outcomes. There are three steps to classifying a patient into a CMG at admission:

1. Identify the patient's impairment group code (IGC).

2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM<sup>®</sup> items as indicated on the CMS IRF-PAI v. 20 instrument (attached).

3. Calculate the cognitive FIM<sup>®</sup> rating (as indicated on the CMS IRF\_PAI v. 20 instrument) and the patient age at admission. (This step is not required for all CMGs.)

See file uploaded in S.15 for calculations.

While CMGs are only present for patients admitted to an IRF, the same procedure can be used for patients receiving care at a LTAC facility and/or a SNF, with groupings specific to those venues of care.

#### EXCLUSIONS

National values used in the CMG-adjustment procedure will not include cases who died in the IRF or cases less than 18 years old. It is standard to exclude cases who died during rehabilitation as this is a highly atypical outcome, in addition, minors are excluded as well. The measure testing file includes further explanation regarding the exclusion criteria as well as references.

## EXCLUSION DETAILS

Patient date of birth (DOB) and discharge setting are both variables collected in the IRF-PAI. Age can be calculated from DOB and patient date of admission (also collected in the IRF-PAI). In the variable discharge setting, there is a specific category for 'died' (code: 11). Date of birth, date of admission and discharge setting (including died as a category) are also assessed in the LTAC and SNF.

#### **RISK ADJUSTMENT**

Stratification by risk category/subgroup

## STRATIFICATION

While the measure can be stratified by specific impairment type (using IGC), the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding cases who died and excluding patient under age 18 years.

## TYPE SCORE

Ratio

## ALGORITHM

1. Target population: Inpatient rehabilitation facility patients, skilled nursing facility short term patients, long term acute care facility patients, and home health patients.

2. Exclusions: Age less than 18 and cases who died during the episode of care.

3. Cases meeting target process: All remaining cases.

4. Outcome: Ratio of facility level average self-care change (rasch derived values) to facility CMG adjusted expected self-care change.

5. Risk adjustment: CMG adjustment using indirect standardization of the proportion of cases at the facility by CMG, and CMG specific national average of rasch derived value of self-care change.

## 2321 Functional Change: Change in Mobility Score

#### STEWARD

Uniform Data System for Medical Rehabilitation

## DESCRIPTION

Change in rasch derived values of mobility function from admission to discharge among adults aged 18 and older receiving inpatient medical rehabilitation at a post acute care facility who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility items:1. Transfer Bed/Chair/Wheelchair, 2. Transfer Toilet, 3. Locomotion, 4. Stairs.

#### TYPE

Outcome

#### DATA SOURCE

Instrument-Based Data, Other

#### LEVEL

Facility, Other

## SETTING

Inpatient/Hospital, Post-Acute Care

#### NUMERATOR STATEMENT

Average change in rasch derived mobility function score from admission to discharge at the facility level. Includes the following items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level/total number of patients). Patient less than 18 years of age at admission to the facility or patients who died within the facility are excluded.

#### NUMERATOR DETAILS

For Inpatient Rehabilitation Facilities (IRFs) data collection is presently required for payment reimbursement by the Centers for Medicare and Medicaid Services (CMS) using the mandated Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). Embedded in the IRF-PAI is the FIM® Instrument. The FIM® Instrument is a criterion referenced tool with 18 items that measures patient physical and cognitive function, need for helper assistance, burden of care/level of dependence. Each item is rated on a scale of 1 (most dependent) to 7 (completely independent). For the purposes of this measure, a subset of 4 FIM® items has been tested and validated as the Change in Mobility measure; the items are: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Rasch analysis was performed on the items and the difference in the rasch derived values (defined in S.2b) from admission to discharge reflect the change at the patient level. The numerator of the measure is the average change in mobility score at the facility level.

While the IRF-PAI is specific to inpatient rehabilitation facilities, the change in mobility measure can be used in all post-acute care venues. The FIM<sup>®</sup> instrument is routinely used for patient functional assessment in all venues of care and has been tested and validated for use in IRFs,

skilled nursing facilities (SNFs) and long term acute care facilities (LTAC) (www.udsmr.org), therefore this measure is not specific for inpatient medical rehabilitation use only.

## DENOMINATOR STATEMENT

Facility adjusted expected change in rasch derived mobility values, adjusted at the Case Mix Group (CMG) level.

## DENOMINATOR DETAILS

To calculate the facility adjusted expected change in rasch derived mobility values, indirect standardization was used, which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission, in essence, patient severity. Patients within the same CMG are expected to have similar resource utilization needs and similar functional outcomes. There are three steps to classifying a patient into a CMG at admission:

1. Identify the patient's impairment group code (IGC).

2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM<sup>®</sup> items.

3. Calculate the cognitive FIM<sup>®</sup> rating and the patient's age at admission. (This step is not required for all CMGs.)

See file uploaded in S.2b for calculations or 'CMG Version 3.00 [ZIP, 9.02mb]' at the following link for more details:

https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/CMG.html

## EXCLUSIONS

National values used in the CMG adjustment procedure will not include cases who died in the IRF or patients less than 18 years of age at admission. Cases who died during rehabilitation are not typical patients and are routinely omitted from reports and published research on rehabilitation outcomes. Further details and references related to the exclusion criteria can be found in the Measure Testing form.

#### **EXCLUSION DETAILS**

Patient date of birth (DOB), date of admission and discharge setting variables are collected in the IRF-PAI. Age can be calculated from DOB and admission date. The variable discharge setting includes a category for 'died' which is indicated as a code of '11'. Patient date of birth, admission date and discharge setting are also documented in SNFs and LTAC facilities.

#### RISK ADJUSTMENT

Stratification by risk category/subgroup

# STRATIFICATION

While the measure can be stratified by specific impairment type (IGC), the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

## TYPE SCORE

Ratio

## ALGORITHM

1. Target population: patients receiving care at an inpatient medical rehabilitation facility, a skilled nursing facility, or a long term acute care facility.

2. Exclusions: Age less than 18 years and patients who died during the episode of care.

3. Cases meeting target process: All remaining cases.

4. Outcome: Ratio of facility level average mobility change (rasch derived values) to facility CMG adjusted expected mobility change.

5. Risk adjustment: CMG adjustment using indirect standardization of the proportion of cases at the facility by CMG, and CMG specific national average of rasch derived value of mobility change.

# 2548 Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

## STEWARD

Agency for Healthcare Research and Quality

## DESCRIPTION

The Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey is a standardized survey instrument that asks parents and guardians (henceforth referred to as parents) of children under 18 years old to report on their and their child's experiences with inpatient hospital care.

The performance measures of the Child HCAHPS survey consist of 39 items organized by overarching groups into the following 18 composite and single-item measures:

Communication with Parent

- 1. Communication between you and your child's nurses (3 items)
- 2. Communication between you and your child's doctors (3 items)
- 3. Communication about your child's medicines (4 items)
- 4. Keeping you informed about your child's care (2 items)
- 5. Privacy when talking with doctors, nurses, and other providers (1 item)
- 6. Preparing you and your child to leave the hospital (5 items)
- 7. Keeping you informed about your child's care in the Emergency Room (1 item)

Communication with Child

- 8. How well nurses communicate with your child (3 items)
- 9. How well doctors communicate with your child (3 items)

10. Involving teens in their care (3 items)

Attention to Safety and Comfort

11. Preventing mistakes and helping you report concerns (2 items)

- 12. Responsiveness to the call button (1 item)
- 13. Helping your child feel comfortable (3 items)

14. Paying attention to your child's pain (1 item)

Hospital Environment

15.Cleanliness of hospital room (1 item)

16.Quietness of hospital room (1 item)

Global Rating

17. Overall rating (1 item)

18.Recommend hospital (1 item)

We recommend that the scores for the Child HCAHPS composite and single-item measures be calculated using a top-box scoring method. The top box score refers to the percentage of respondents who answered survey items using the best possible response option. The measure time frame is 12 months. A more detailed description of the Child HCAHPS measure can be found in the Detailed Measure Specifications (Appendix A).

TYPE

Outcome

#### DATA SOURCE

Claims

## LEVEL

Facility

# SETTING

Inpatient/Hospital

#### NUMERATOR STATEMENT

Using the top-box scoring method, the numerator of the top-box score for a measure consists of the number of respondents with a completed survey who gave the best possible answer for the item(s) in a measure.

For example, the top-box numerator for the communication between you and your child's nurses composite is the number of respondents who answered "Always" to questions about how well nurses communicated well with them.

#### NUMERATOR DETAILS

#### SURVEY

The numerator is the number of parents who return a completed survey. A survey is considered complete if responses are available for half of the key survey items. For more information about the key items in Child HCAHPS, see Survey Items in Domain-Level Composite and Single-Item Measures (Appendix I).

MEASURE 1: Communication between you and your child's nurses

The numerator is the percentage number of respondents who answered "Always" to questions about how well nurses communicated well with them.

MEASURE 2: Communication between you and your child's doctors

The numerator is the number of respondents who answered "Always" to questions about how well doctors communicated well with them.

MEASURE 3: Communication about your child's medicines

The numerator is the number of respondents who answered "Yes, Definitely" to questions about whether providers communicated well about their child's medicines.

MEASURE 4: Keeping you informed about your child's care

The numerator is the number of respondents who answered "Always" to questions about whether providers kept them informed about their child's care.

MEASURE 5: Privacy when talking with doctors, nurses, and other providers

This numerator is the number of respondents who answered "Always" to a question about whether they were given as much privacy as they wanted when discussing their child's care with providers.

MEASURE 6: Preparing you and your child to leave the hospital

The numerator is the number of respondents who answered "Yes, Definitely" to questions about whether providers prepared them and their child to leave the hospital.

MEASURE 7: Keeping you informed about your child's care in the Emergency Room

The numerator is the number of respondents who answered "Yes, Definitely" to a question about whether they were kept informed about their child's care in the Emergency Room.

MEASURE 8: How well nurses communicate with your child

The numerator is the number of respondents who answered "Always" to questions about whether nurses communicated well with their child.

MEASURE 9: How well doctors communicate with your child

The numerator is the number of respondents who answered "Always" to questions about whether doctors communicated well with their child.

MEASURE 10: Involving teens in their care

The numerator is the number of respondents who answered "Always" or "Yes, Definitely" to questions about whether providers involved teens in their care.

MEASURE 11: Preventing mistakes and helping you report concerns

The numerator is the number of respondents who answered "Always" or "Yes, Definitely" to questions about whether providers prevented mistakes and helped them report concerns.

MEASURE 12: Responsiveness to the call button

The numerator is the number of respondents who answered "Always" to a question about how often providers were responsive to the call button.

MEASURE 13: Helping your child feel comfortable

The numerator is the number of respondents who answered "Always" or "Yes, Definitely" to questions about whether providers helped their child feel comfortable.

MEASURE 14: Paying attention to your child's pain

The numerator is the number of respondents who answered "Yes, Definitely" to a question about whether providers and hospital staff paid attention to their child's pain.

MEASURE 15: Cleanliness of hospital room

The numerator is the number of respondents who answered "Always" to a question about how often their child's room and bathroom were kept clean.

MEASURE 16: Quietness of hospital room

The numerator is the number of respondents who answered "Always" to a question about how often their child's room was quiet at night.

MEASURE 17: Overall rating

The numerator is the number of respondents who gave their hospital a rating of 9 or 10 on a scale from 0 (worst hospital) to 10 (best hospital).

MEASURE 18: Recommend hospital

The numerator is the number of respondents who answered "Yes, Definitely" to a question about whether they would recommend the hospital.

# DENOMINATOR STATEMENT

The denominator for each single-item measure is the number of respondents with a completed survey who responded to the item. The denominator for each composite measure is the number

of respondents with a completed survey who responded to at least one of the items within the measure. The target population for the survey is parents of children under 18 years old who have been discharged from the hospital during the target 12-month time frame.

## DENOMINATOR DETAILS

## SURVEY

The denominator for the survey is all parents of patients who meet the following criteria:

- 1. Children under 18 years old
- 2. Admission includes at least one overnight stay in the hospital
- 3. Non-psychiatric MS-DRG/principal diagnosis at discharge
- 4. Alive at time of discharge

MEASURE 1: Communication between you and your child's nurses

The denominator is the total number of respondents with completed surveys who have given a response to at least one of the following items: Q13, Q14, and Q15.

MEASURE 2: Communication between you and your child's doctors

The denominator is the total number of respondents with completed surveys who have given a response to at least one of the following items: Q16, Q17, and Q18.

MEASURE 3: Communication about your child's medicines

The denominator is the total number of completed surveys with at least one response to any of the following items: Q4, Q5, Q38, and Q39.

MEASURE 4: Providers keep you informed about your child's care

The denominator is the total number of completed surveys with at least one response to either of the following items: Q22 and Q24.

MEASURE 5: Privacy when talking with providers

The denominator is the total number of surveys with a response to the following item: Q19.

MEASURE 6: Preparing you and your child to leave the hospital

The denominator is the total number of completed surveys with at least one response to any of the following items: Q35, Q36, Q40, Q41, and Q42.

MEASURE 7: Keeping you informed about your child's care in the Emergency Room

The denominator is the total number of completed surveys with a response to the following item: Q3.

MEASURE 8: How well nurses communicate with your child

The denominator is the total number of completed surveys with at least one response to any of the following items: Q7, Q8, and Q9.

MEASURE 9: How well doctors communicate with your child

The denominator is the total number of completed surveys with at least one response to any of the following items: Q10, Q11, and Q12.

MEASURE 10: Involving teens in their care

The denominator is the total number of completed surveys with at least one response to any of the following items: Q44, Q45, and Q46.

MEASURE 11: Preventing mistakes and helping you report concerns

The denominator is the total number of completed surveys with at least one response to either of the following items: Q28 and Q29.

MEASURE 12: Responsiveness to the call button

The denominator is the total number of completed surveys with a response to the following item: Q26.

MEASURE 13: Helping your child feel comfortable

The denominator is the total number of completed surveys with at least one response to any of the following items: Q20, Q21, and Q34.

MEASURE 14: Paying attention to your child's pain

The denominator is the total number of completed surveys with a response to the following item: Q31.

MEASURE 15: Cleanliness of hospital room

The denominator is the total number of completed surveys with a response to the following item: Q32.

MEASURE 16: Quietness of hospital room

The denominator is the total number of completed surveys with a response to the following item: Q33.

MEASURE 17: Overall rating

The denominator is the total number of completed surveys with a response to the following item: Q47.

MEASURE 18: Recommend hospital

The denominator is the total number of completed surveys with a response to the following item: Q48.

## EXCLUSIONS

## SURVEY AND MEASURES 1-18

Exclude parents of certain patients from the measure (numerator and denominator) based on clinical and non-clinical criteria:

- 1. "No-publicity" patients
- 2. Court/law enforcement patients
- 3. Patients with a foreign home addresses
- 4. Patients discharged to hospice care (hospice-home or hospice-medical facility)
- 5. Patients who are excluded because of state regulations
- 6. Patients who are wards of the state
- 7. Healthy newborns
- 8. Maternity-stay patients
- 9. Patients admitted for observation
- 10. Patients discharged to skilled nursing facilities
- 11. Patients who are emancipated minors

**MEASURES 1-18** 

Exclude respondents from the numerator and denominator of a measure if they have completed survey items in the measure using multiple marks (i.e., they gave multiple answers to an individual question).

**MEASURES 8-9** 

Exclude the following respondents from the numerator and denominator:

1. All those who answered "No" to screener question 6 (Is your child able to talk with nurses and doctors about his or her health care?)

2. All those whose child was under 3 years old at discharge as determined using administrative data

## **MEASURE 10**

Exclude the following respondents from the numerator and denominator:

1. All those who answered "No" in screener question 43 (During this hospital stay, was your child 13 years old or older?)

2. All those whose child was under 13 years old at discharge as determined using administrative data

3. All those who answered "No" in screener question 6 (Is your child able to talk with nurses and doctors about his or her health care?)

## MEASURE 12

Exclude the following respondents from the numerator and denominator:

1. All those who answered "No" in screener question 25 (During this hospital stay, did you or your child ever press the call button?)

# **MEASURE 14**

Exclude the following respondents from the numerator and denominator:

1. All those who answered "No" in screener question 30 (During this hospital stay, did your child have pain that needed medicine or other treatment?)

## EXCLUSION DETAILS

"No-publicity" patients are defined as those whose parents voluntarily sign a "no-publicity" request while hospitalized or directly request that a hospital or survey vendor not contact them ("Do Not Call List").

Court/law enforcement patients (i.e., prisoners) are excluded from the sample frame because of the logistical difficulties of administering the survey in a timely manner and regulations governing surveys of this population. These individuals can be identified by the admission source (UB-04 field location 15) "8 – Court/law enforcement" or patient discharge status code (UB-04 field location 17) "21 – Discharged/transferred to court/law enforcement." This exclusion does not include patients residing in halfway houses.

Patients with a foreign home address are excluded because of the logistical difficulty and added expense of calling or mailing outside of the United States. (The US territories—American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands—are not considered foreign addresses and are not excluded.)

Patients discharged to hospice care are excluded because of the greater likelihood that they will die before the survey process can be completed. Patients with a discharge status code (UB-04 field location 17) of "50 – Hospice – home" or "51 – Hospice – medical facility" should not be included in the sample frame.

Some state regulations place further restrictions on which patients may be contacted after discharge. It is the responsibility of the hospital/survey vendor to identify any applicable laws or regulations and to exclude those patients as required in the state in which the hospital operates.

Patients who are wards of the state are excluded because they do not have parents to assess their experiences in the hospital.

Healthy newborns are excluded because their care may be closely associated with a mother's obstetric care and thus may not reflect a pediatric hospital's quality of care. Healthy newborns are identified based on administrative billing codes; see Codes to Identify Healthy Newborns for Exclusion in the Data Dictionary Code Table.

Maternity-stay patients are excluded because care related to pregnancy does not generally fall within the purview of pediatric providers.

Observation patients are excluded because their hospital stay is generally short and does not meet the criteria for an inpatient stay.

Patients discharged to skilled nursing facilities are excluded because of concerns that parents would not be able to adequately distinguish the care received at the two facilities and also might be more difficult to locate. Patients with a discharge status code (UB-04 field location 17) of "03 – Skilled Nursing Facility," "61 – SNF Swing bed within Hospital," or "64 – Certified Medicaid Nursing Facility" should not be included in the sample frame.

Patients who are emancipated minors are excluded because they do not have parents/guardians to assess their experiences in the hospital.

Note: Patients should be included in the Child HCAHPS sample frame unless the hospital/survey vendor has positive evidence that they are ineligible or fall within an excluded category. If information is missing on ANY variable that affects survey eligibility when the sample frame is constructed, the patient should not be excluded in the sample frame because of that variable.

## **RISK ADJUSTMENT**

Statistical Risk Model

#### STRATIFICATION

Stratification is not required. However, users of the survey may choose to stratify scores. Variables commonly used to stratify inpatient patient experience of care measures include service (e.g., medical versus surgical) or condition (e.g., patients with the primary diagnosis of asthma).

## TYPE SCORE

Rate/proportion

## ALGORITHM

The Child HCAHPS survey includes three types of measures: global measures, domain-level composites, and domain-level single items. The production of unadjusted hospital scores for each measure and use of adjustments to better ensure the comparability of scores across hospitals are discussed below.

## ASSIGN APPROPRIATE SAMPLING WEIGHT TO EACH CASE

Prior to calculating any of the measure scores, it may be necessary to calculate sampling weights that are applicable to all of the measures. Some hospitals will sample a constant proportion of patients for each month, in which case sampling weights are not needed. Alternatively, some

hospitals will sample a fixed number of discharges each month to reach the annual target of 300 completed surveys. However, the monthly population of discharges from which these fixedsized samples are drawn will vary throughout the year because there are more total discharges in some months than others in most hospitals. In such a case, sampling rates will vary from month to month. To make the combined monthly samples representative of the full population of discharges for the year, it is necessary to adjust for the different monthly sampling rates. Appropriate sampling weights can be assigned to each case to make the combined monthly samples representative of the total population of annual discharges. This is done using the approach below. For a more detailed description, see the production of hospital scores section of the Detailed Measure Specifications (Appendix A).

Step 1 – Calculate the expansion weight for each month

Expansion weight = (Population size for the month) / (Sample size for the month)

Step 2 – Calculate the mean expansion weight for the number of months covered by the score (e.g., 12 months)

Step 3 – Calculate the relative weight for each month as the expansion weight for the month divided by the mean expansion weight

Step 4 – Assign a sampling weight to each case based on the month in which the person was discharged and the corresponding value of the mean expansion weight

## **GLOBAL MEASURES**

The global measures consist of an overall rating of the hospital and an item about willingness to recommend the hospital. The approach for producing scores for these items is below.

Overall Rating of the Hospital.

For this item, respondents are asked, "Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your child's stay?" The scoring on this item represents the proportion of respondents who gave ratings of 0-6, 7-8, or 9-10. The top-box score is the proportion of respondents who gave ratings of 9-10.

The steps to calculate a hospital's score, including the top-box score, are as follows:

Step 1 – Identify relevant cases

Include only cases with non-missing values on the overall rating question.

Step 2 – Calculate the proportion of cases in each response category

(1) Proportion of respondents who gave the hospital an overall rating of 0-6 (P1):

The numerator is the number of respondents for whom the overall rating is 0-6. Each case is weighted by the appropriate sampling weight for the discharge month.

The denominator is the total number of respondents, each weighted by the appropriate sampling

weight for the discharge month.

(2) Proportion of respondents who gave the hospital an overall rating of 9 or 10 (P3):

The numerator is the number of respondents for whom the overall rating is 9 or 10. Each case is weighted by the appropriate sampling weight for the discharge month.

The denominator is the total number of respondents, each weighted by the appropriate sampling

weight for the discharge month.

(3) Proportion of respondents who gave the hospital an overall rating of 7 or 8 (P2)

The proportion can be defined as follows:

P2 = 1 - P1 - P3

A hospital's top-box score on the overall rating item is equal to P3, the proportion of respondents who gave ratings of 9-10 to the hospital. The proportion of cases in the other categories may be informative for hospitals' quality improvement efforts.

# Willingness to Recommend the Hospital

For this item, respondents are asked, "Would you recommend this hospital to your friends and family?" Response options are "definitely no," "probably no," "probably yes," or "definitely yes." A hospital's score is the proportion of cases in each response category. The hospital's top-box score is the proportion of cases in which the response is "definitely yes." Production of a hospital's score on this item follows the same steps discussed above.

# DOMAIN-LEVEL COMPOSITES

There are 10 domain-level composites included in Child HCAHPS; see the Data Dictionary Code Table for survey items in domain-level composite measures. Composite scores are generated by calculating top-box proportions—the proportion of responses in the most positive category. Production of composite scores is described below.

Composite example: Communication between you and your child's doctors

This composite is produced by combining responses to three questions:

• "During this hospital stay, how often did your child's doctors listen carefully to you?"

• "During this hospital stay, how often did your child's doctors explain things to you in a way that

was easy to understand?"

• "During this hospital stay, how often did your child's doctors treat you with courtesy and respect?"

Response options for each question are "never," "sometimes," "usually," or "always." The basic steps to calculate a hospital's composite score are as follows:

Step 1 – Calculate the proportion of cases in the "always" response category for each question:

- P11 = Proportion of respondents who said "always" to the first question
- P12 = Proportion of respondents who said "always" to the second question

• P13 = Proportion of respondents who said "always" to the third question

Step 2 – Combine responses from the three questions to form the top-box proportion for the composite:

• PC1 = Composite proportion who said "always" = (P11 + P12 + P13) / 3

The most positive response categories for the composites are listed below:

- 1. Nurse-parent communication: Always
- 2. Doctor-parent communication: Always
- 3. Communication about medicines: Yes, definitely
- 4. Informed about child's care: Always
- 5. Preparing to leave hospital: Yes, definitely
- 6. Nurse-child communication: Always
- 7. Doctor-child communication: Always
- 8. Involving teens in care: Always/Yes, definitely
- 9. Mistakes and concerns: Always/Yes, definitely
- 10.Child comfort: Always/Yes, definitely

Production of a hospital's scores on these composites follows the same steps discussed above; see Survey Items in the Data Dictionary Code Table for the list of items that comprise each composite.

# DOMAIN-LEVEL SINGLE ITEMS

There are eight domain-level single items included in Child HCAHPS; see Survey Items in the Data Dictionary Code Table for single-item measures. Scores are generated by calculating top-box proportions. Production of item scores is described below.

Example of domain-level single item: "During this hospital stay, how often were you given as much privacy as you wanted when discussing your child's care with providers?"

Response options are "never," "sometimes," "usually," or "always". To determine a hospital's score, calculate the proportion of cases in the "always" response category for this question.

The most positive response categories for the single items are listed below:

- 1. Privacy with providers: Always
- 2. Informed in emergency room: Always
- 3. Call button: Always
- 4. Child pain: Always
- 5. Cleanliness: Always
- 6. Quietness: Always

Production of a hospital's scores on these items follows the same approach described above.

The discussion above describes the steps used to produce unadjusted hospital-level scores. Adjusted scores are used when comparing hospitals.

# CASE-MIX ADJUSTMENT

One of the methodological issues associated with making comparisons across hospitals is the need to adjust appropriately for case-mix differences. Case-mix refers to patient characteristics, such as demographic characteristics and health status, that are not under the control of the hospital and may affect measures of outcomes or processes. Systematic effects of this sort create the potential for a hospital's ratings to be higher or lower because of the characteristics of its patient population, rather than because of the quality of care it provides, making comparisons of unadjusted scores misleading. The basic goal of adjusting for case-mix is to estimate how different hospitals would be rated if they all provided care to comparable groups of patients. Detailed instructions regarding how to use the case-mix adjustment model can be found in Case-Mix Adjustment Methodology (Appendix K).

# 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

# STEWARD

Centers for Medicare & Medicaid Services

#### DESCRIPTION

This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission.

## түре

Outcome

### DATA SOURCE

Instrument-Based Data

# LEVEL

Facility

# SETTING

Post-Acute Care

# NUMERATOR STATEMENT

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score.

## NUMERATOR DETAILS

Eight mobility activities (listed below) are each scored by a clinician based on a patient's ability to complete the activity. The scores for the 8 mobility activities are summed to obtain a mobility score at the time of admission and discharge. The change in mobility is the difference between the discharge mobility score and the admission mobility score.

The 8 mobility items are:

GG0170A. Roll left and right

GG0170B. Sit to lying

GG0170C. Lying to sitting on side of bed

GG0170D. Sit to stand

GG0170E. Chair/bed-to-chair transfer

GG0170F. Toilet transfer

GG0170J. Walk 50 feet with two turns

GG0170K. Walk 150 feet

Each patient's ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

10 = Not attempted due to environmental limitations

88 = Not attempted due to medical condition or safety concerns.

The performance period is 24 months for reporting on CMS's LTCH Compare website.

#### DENOMINATOR STATEMENT

The target population (denominator) for this quality measure is the number of LTCH patients requiring ventilator support at the time of admission to the LTCH.

# DENOMINATOR DETAILS

The denominator includes all LTCH patients requiring ventilator support on admission who are discharged during the performance period, including patients age 21 and older with all payer sources. Patients are selected based on submitted LTCH Care Data Set Admission and Discharge assessment forms.

#### **EXCLUSIONS**

This quality measure has following patient-level exclusion criteria:

1) Patients with incomplete stays:

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute-care setting (Inpatient Prospective Payment System or Inpatient Psychiatric Hospital or unit) because of a medical emergency or psychiatric condition; patients transferred to another LTCH; patients who leave the LTCH against medical advice; patients who die; and patients with a length of stay less than 3 days.

2) Patients discharged to hospice:

Rationale: Patients discharged to hospice are excluded because functional improvement may not be a goal for these patients.

3) Patients with progressive neurological conditions, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, and Huntington's chorea:

Rationale: These patients are excluded because they may have functional decline or less predictable function trajectories.

4) Patients in coma, persistent vegetative state, complete tetraplegia, and locked-in syndrome:

Rationale: The patients are excluded because they may have limited or less predictable mobility recovery.

5) Patients younger than age 21:

Rationale: There is only limited evidence published about functional outcomes for individuals younger than 21.

6) Patients who are coded as independent on all the mobility items at admission:

Rationale: These patients are excluded because no improvement in mobility skills can be measured with the mobility items used in this quality measure.

Facility-level quality measure exclusion: For LTCHs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

# **EXCLUSION DETAILS**

For each of the following exclusion criteria, we provide the data collection items used to identify patient records to be excluded. These items are on the LTCH CARE Data Set Version 4.00.

1) Patients with incomplete stays include patients who are unexpectedly discharged to an acutecare setting (Inpatient Prospective Payment System or Inpatient Psychiatric Hospital or unit) because of a medical emergency or psychiatric condition; patients transferred to another LTCH; patients who leave the LTCH against medical advice; patients who die; and patients with a length of stay less than 3 days.

Items used to identify these patient records:

A2110. Discharge Location

04 = Hospital emergency department

05 = Short-stay acute hospital (IPPS)

06 = Long-term care hospital (LTCH)

08 = Psychiatric hospital or unit

12 = Discharged Against Medical Advice

A0250. Reason for Assessment

11 = Unplanned discharge

12 = Expired

Patients with a length of stay less than 3 days:

We calculate length of stay using the following items on the LTCH CARE Data Set.

A0220. Admission Date

A0270. Discharge Date

Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay less than 3 days are excluded.

2) Patients discharged to hospice

Items used to identify these patient records:

A2110. Discharge Location

10 = Hospice

3) Patients with progressive neurological conditions, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, and Huntington's chorea are excluded because these patients may have less predictable mobility recovery or functional decline may be expected.

Items used to identify these patient records:

I5450. Amyotrophic Lateral Sclerosis = 1

I5200. Multiple Sclerosis = 1, or

I5300. Parkinson's Disease = 1, or

I5250. Huntington's Disease = 1.

4) Patients in coma, persistent vegetative state, severe anoxic brain damage, cerebral edema, or compression of brain, complete tetraplegia, and locked-in syndrome are excluded, because they may have limited or less predictable mobility recovery.

Items used to identify these patient records:

B0100. Comatose = 1, or;

I5101. Complete Tetraplegia = 1, or;

I5460. Locked-In State = 1, or;

15470. Severe Anoxic Brain Damage, Cerebral Edema, or Compression of Brain.

5) Patients younger than 21 at the time of admission

Items used to identify these patient records:

A0900. Birth Date

A0220. Admission Date

6) Patients who are coded as independent (score = 06) on all the mobility items at admission

Items used to identify these patient records at admission:

GG0170A. Roll left and right = 06, and;

GG0170B. Sit to lying = 06, and;

GG0170C. Lying to sitting on side of bed = 06, and;

GG0170D. Sit to stand, = 06 and,

GG0170E. Chair/bed-to-chair transfer, = 06, and;

GG0170F. Toilet transfer, = 06, and;

GG0170J. Walk 50 feet with two turns = 06, and;

GG0170K. Walk 150 feet = 06.

### **RISK ADJUSTMENT**

Statistical Risk Model

### STRATIFICATION

N/A

# TYPE SCORE

Continuous variable, e.g. average

### ALGORITHM

We provide the detailed calculation algorithm in an attachment entitled "LTCH Detailed Function QM Specifications 2632 01-07-2019" included in the Appendix.

The detailed calculation algorithm is provided to the public in the document entitled LTCH Measure Calculations and Reporting User's Manual. The current version of this document is

available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/LTCH-Quality-Reporting/LTCH-Quality-Reporting-Measures-Information.html.

The following are the key steps used to calculate the measure:

1) Sum the scores of the admission mobility items to create an admission mobility score for each patient. Mobility items that contained 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns) or were skipped, dashed, or missing are recoded to 01. Dependent (range: 8 to 48).

2) Sum the scores of the discharge mobility items to create a discharge mobility score for each patient. Mobility items that contained 'activity not attempted' values (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns) or were skipped, dashed, or missing are recoded to 01. Dependent (range: 8 to 48).

3) Identify the records of patients who meet the exclusion criteria and exclude these patient records from analyses.

4) Calculate the difference between the admission mobility score (from step 1) and the discharge mobility score (from step 2) for each patient to create a change in mobility score for each patient.

5) Calculate an expected change in mobility score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).

6) Calculate an average observed change in mobility score for each LTCH (using the patient data calculated in step 4). This is the facility-level observed change in mobility score.

7) Calculate an average expected change in mobility score for each LTCH (using the patient data calculated in step 5). This is the facility-level expected change in mobility score.

8) Subtract the facility-level expected change score from the facility-level observed change score to determine the difference in scores (difference value). A difference value that is 0 indicates the observed and expected scores are equal. An observed minus expected difference value that is higher than 0 (positive) indicates that the observed change score is greater (better) than the expected change score. An observed minus expected difference value that is less than 0 (negative) indicates that the observed change score is lower (worse) than the expected change score.

9) Add the national average change in mobility score to each LTCH's difference value (from step8). This is the risk-adjusted mean change in mobility score.

Each patient's ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

The 8 mobility items are:

GG0170A. Roll left and right

- GG0170B. Sit to lying
- GG0170C. Lying to sitting on side of bed
- GG0170D. Sit to stand

GG0170E. Chair/bed-to-chair transfer

GG0170F. Toilet transfer

- GG0170J. Walk 50 feet with two turns
- GG0170K. Walk 150 feet

# 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

# STEWARD

Centers for Medicare & Medicaid Services

# DESCRIPTION

This measure estimates the risk-adjusted mean change in self-care score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.

# TYPE

Outcome

# DATA SOURCE

Instrument-Based Data

# LEVEL

Facility

# SETTING

Post-Acute Care

# NUMERATOR STATEMENT

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in self-care score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients age 21 or older. The change in self-care score is calculated as the difference between the discharge self-care score and the admission self-care score.

# NUMERATOR DETAILS

Seven self-care activities are each scored based on a patient's ability to complete the activity. The scores for the seven activities are summed to obtain a self-care score at the time of admission and at the time of discharge. The change in self-care is the difference between the discharge self-care score and the admission self-care score.

The 7 self-care items are:

GG0130A. Eating

GG0130B. Oral hygiene

GG0130C. Toileting hygiene

GG0130E. Shower/bathe self

GG0130F. Upper body dressing

GG0130G. Lower body dressing

GG0130H. Putting on/taking off footwear

Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

10 = Not attempted due to environmental limitations

88 = Not attempted due to medical condition or safety concerns.

The performance period is 12 months for reporting on CMS's IRF Compare website.

# DENOMINATOR STATEMENT

The denominator is the number of Inpatient Rehabilitation Facility Medicare patient stays, except those that meet the exclusion criteria.

# DENOMINATOR DETAILS

The denominator is the number of Inpatient Rehabilitation Facility Medicare Part A and Medicare Advantage patient stays, except those that meet the exclusion criteria.

#### **EXCLUSIONS**

This quality measure has six patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients who are independent with all self-care activities at the time of admission.

Rationale: Patients who are independent with all the self-care items at the time of admission are assigned the highest score on all the self-care items, and thus, would not be able to show functional improvement on this same set of items at discharge.

3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; or severe anoxic brain damage, cerebral edema or compression of the brain.

Rationale: These patients are excluded because they may have limited or less predictable selfcare improvement with the selected self-care items.

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

5) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

# **EXCLUSION DETAILS**

The following items are used to identify which patients are excluded from the quality measure calculations.

These data elements are included on the current version of the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI), which is available at:

http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/IRFPAI.html

It can be challenging to gather accurate discharge functional status data for patients who experience incomplete stays. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients discharged to a hospice; patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

Items used to identify these patient records:

1) Patients with incomplete stays.

Patients with a length of stay less than 3 days: We calculate length of stay using the following items on the IRF-PAI.

Item 12. Admission Date.

Item 40. Discharge Date.

Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of less than 3 days are excluded.

Item 41. Patient discharged against medical advice. This item is used to identify patients discharged against medical advice.

Patient records with a response of "Yes = 1" are excluded.

Item 44C. Was the patient discharged alive? This item is used to identify patients who died during the IRF stay.

Patient records with a response of "No=0" are excluded.

44D. Patient's discharge destination/living setting. This item is used to identify patients with an incomplete stay.

Short-term General Hospital = 02

Long-Term Care Hospital = 63

Inpatient Psychiatric Facility = 65

Critical Access Hospital = 66.

2) Patients who are independent with all self-care activities at the time of admission: Patients who are independent with all the self-care items at the time of admission are assigned the highest score on all the self-care items, and thus, would not be able to show functional improvement (i.e., a higher score) on this same set of items at discharge.

Self-care items

GG0130A. Eating = 06, and

GG0130B. Oral hygiene = 06, and

GG0130C. Toileting hygiene = 06, and

GG0130E. Shower/bathe self = 06, and

GG0130F. Upper body dressing = 06, and

GG0130G. Lower body dressing = 06, and

GG0130H. Putting on/taking off footwear = 06.

3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; and locked-in syndrome; and severe anoxic brain damage, cerebral edema or compression of the brain.

The following items will be used to identify patients with these conditions:

21A. Impairment Group.

0004.1221 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C1-C4

0004.1222 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C5-C8

0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C1-C4

0004.2222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C5-C8

22. Etiologic Diagnosis.

This item is used to determine a patient's etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude the records of patients with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5. Locked-in state

24. Comorbid Conditions.

This item is used to exclude selected comorbidities. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude the records of patients with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5. Locked-in state

4) Patients younger than age 21.

These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

5) Patients discharged to hospice

44D. Patient's discharge destination/living setting.

This item is used to identify patients discharged to hospice. The following responses are used:

Hospice (home) = 50

Hospice (institutional facility) = 51

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

The following items are used to identify and exclude the records of patients who are not Medicare Part A and Medicare Advantage beneficiaries:

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

# **RISK ADJUSTMENT**

Statistical Risk Model

### STRATIFICATION

N/A

# TYPE SCORE

Continuous variable, e.g. average

## ALGORITHM

We provide the detailed calculation algorithm in an attachment entitled "IRF Detailed Function QM Specifications 2633 01-07-2019" included in the Appendix.

The detailed calculation algorithm is provided to the public in the document entitled IRF Measure Calculations and Reporting User's Manual. The current version of this document is available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/IRF-Quality-Reporting-Program-Measures-Information-.html

The following are the key steps used to calculate the measure:

1) Sum the scores of the admission self-care items to create an admission self-care score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded. (range: 7 to 42).

2) Sum the scores of the discharge self-care items to create a discharge self-care score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes (' $^{\prime}$ ) and missing data ('-') are recoded. (range: 7 to 42).

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Calculate the difference between the admission self-care score (from step 1) and the discharge self-care score (from step 2) for each patient to create a change in self-care score for each patient.

5) Calculate an expected change in self-care score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).

6) Calculate an average change in self-care score for each IRF. This is the facility-level observed change in self-care score.

7) Calculate an average expected change in self-care score for each IRF. This is the facility-level expected change in self-care score.

8) Subtract the facility-level expected change score from the facility -level observed change score to determine the difference in scores (difference value). A difference value that is 0 indicates the observed and expected scores are equal. An observed minus expected difference value that is higher than 0 (positive value) indicates that the observed change score is greater (better) than the expected change score. An observed minus expected difference value that is less than 0 (negative value) indicates that the observed change score is lower (worse) than the expected change score.

9) Add the national average change in self-care score to each IRF's difference value (from step8). This is the risk-adjusted mean change in self-care score.

Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

The 7 self-care items are:

GG0130A. Eating

GG0130B. Oral hygiene

GG0130C. Toileting hygiene

GG0130E. Shower/bathe self

GG0130F. Upper body dressing

GG0130G. Lower body dressing

GG0130H. Putting on/taking off footwear

# 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

# STEWARD

Centers for Medicare & Medicaid Services

# DESCRIPTION

This measure estimates the mean risk-adjusted mean change in mobility score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.

# TYPE

Outcome

# DATA SOURCE

Instrument-Based Data

#### LEVEL

Facility

# SETTING

Post-Acute Care

## NUMERATOR STATEMENT

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in mobility score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients age 21 and older. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score.

# NUMERATOR DETAILS

Seventeen mobility activities are each scored based on a patient's ability to complete the activity. The scores for the activities are summed to obtain a mobility score at the time of admission and at the time of discharge. The change in mobility is the difference between the discharge mobility score and the admission mobility score.

The mobility items are:

GG0170A. Roll left and right

GG0170B. Sit to lying

GG0170C. Lying to sitting on side of bed

GG0170D. Sit to stand

GG0170E. Chair/bed-to-chair transfer

GG0170F. Toilet transfer

GG0170G. Car transfer

GG0170I. Walk 10 feet

GG0170J. Walk 50 feet with two turns

GG0170K. Walk 150 feet

GG0170L. Walking 10 feet on uneven surfaces

GG1070M. 1 step (curb)

GG0170N. 4 steps

GG01700. 12 steps

GG0170P. Picking up object

GG0170R. Wheel 50 feet with two turns (for patients who do not walk at admission and discharge)

GG0170S. Wheel 150 feet (for patients who do not walk at admission and discharge) Each patient's ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

If the patient did not attempt the activity, the reason that activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

10 = Not attempted due to environmental limitations

88 = Not attempted due to medical condition or safety concerns.

The performance period is 12 months for reporting on CMS's IRF Compare website.

# DENOMINATOR STATEMENT

The denominator is the number of Inpatient Rehabilitation Facility Medicare Part A and Medicare Advantage patient stays, except those that meet the exclusion criteria.

# DENOMINATOR DETAILS

The denominator is the number of Inpatient Rehabilitation Facility Medicare Part A and Medicare Advantage patient stays, except those that meet the exclusion criteria.

# EXCLUSIONS

This quality measure has six patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients who are independent with all mobility activities at the time of admission.

Rationale: Patients who are independent with all the mobility items (with the exception of the wheelchair items GG0170R and GG0170S) at the time of admission are assigned the highest score on all the mobility items, and thus, would not be able to show functional improvement on this same set of items at discharge.

3) Patients with the following medical conditions on admission: coma, persistent vegetative state; complete quadriplegia; locked-in syndrome or severe anoxic brain damage, cerebral edema or compression of brain.

Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected mobility items.

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

5) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

## EXCLUSION DETAILS

The following items are used to identify which patients are excluded from the quality measure calculations.

These data elements are included on the current version of the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI), which is available at:

http://www.cms.gov/Medicare/Medicare-Fee-for-Service-

Payment/InpatientRehabFacPPS/IRFPAI.html

It can be challenging to gather accurate discharge functional status data for patients who experience incomplete stays. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients discharged to a hospice; patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

Items used to identify these patient records:

1) Patients with incomplete stays.

Patients with a length of stay less than 3 days: We calculate length of stay using the following items on the IRF-PAI.

Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of less than 3 days are excluded.

Item 12. Admission Date.

Item 40. Discharge Date.

Item 41. Patient discharged against medical advice. This item is used to identify patients discharged against medical advice.

Patient records with a response of "Yes = 1" are excluded.

Item 44C. Was the patient discharged alive? This item is used to identify patients who died during the IRF stay.

Patient records with a response of "No = 0" are excluded.

44D. Patient's discharge destination/living setting.

This item is used to identify an incomplete stay. Specifically, the following responses will be used to identity patients with incomplete stays:

Short-term General Hospital = 02

Long-Term Care Hospital = 63

Inpatient Psychiatric Facility = 65

Critical Access Hospital = 66.

2) Patients who are independent with all mobility activities at the time of admission.

Patients who are independent with all the mobility items at the time of admission are assigned the highest score on all the mobility items, thus, would not be able to show functional improvement (i.e., a higher score) on this same set of items at discharge. The following items and scores are used to identify and exclude patient records:

Mobility items

GG0170A. Roll left and right = 06, and

GG0170B. Sit to lying = 06, and

GG0170C. Lying to sitting on side of bed = 06, and

GG0170D. Sit to stand = 06, and

GG0170E. Chair/bed-to-chair transfer = 06, and

GG0170F. Toilet transfer = 06, and

GG0170G. Car transfer = 06, and

GG0170I. Walk 10 feet = 06, and

GG0170J. Walk 50 feet with two turns = 06, and

GG0170K. Walk 150 feet = 06, and

GG0170L. Walking 10 feet on uneven surfaces = 06, and

GG0170M. 1 step (curb) = 06, and

GG0170N. 4 steps = 06, and

GG01700. 12 steps = 06, and

GG0170P. Picking up object = 06.

3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; and severe anoxic brain damage, cerebral edema or compression of the brain.

The following items will be used to identify patients with these conditions:

21A. Impairment Group.

0004.1221 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C1-C4 0004.1222 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C5-C8 0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C1-C4

0004.2222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C5-C8

22. Etiologic Diagnosis.

This item is used to determine a patient's etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude records of patients with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5. Locked-in state

24. Comorbid Conditions.

This item is used to exclude selected comorbidities. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to exclude records of patients with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5. Locked-in state

4) Patients younger than age 21. These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

5) Patients discharged to hospice.

44D. Patient's discharge destination/living setting.

This item is used to identify patients discharged to hospice. The following responses are used:

Hospice (home) = 50

Hospice (institutional facility) = 51

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

## **RISK ADJUSTMENT**

Statistical Risk Model

# STRATIFICATION

N/A

# TYPE SCORE

Continuous variable, e.g. average

## ALGORITHM

We provide the detailed calculation algorithm in an attachment entitled "IRF Detailed Function QM Specifications 2634 01-07-2019" included in the Appendix.

The detailed calculation algorithm is provided to the public in the document entitled IRF Measure Calculations and Reporting User's Manual. The current version of this document is available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/IRF-Quality-Reporting-Program-Measures-Information-.html

The following are key steps used to calculate the measure:

1) Sum the scores of the admission mobility items to create an admission mobility score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded, and for patients who do not walk on admission and discharge, walking items have been recoded to use wheelchair mobility item codes. (range: 15 to 90).

2) Sum the scores of the discharge mobility items to create a discharge mobility score for each patient, after 'activity not attempted' values (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded. As described in step 1, for patients who do not walk on admission and discharge, use wheelchair mobility item codes instead of walking codes. (range: 15 to 90).

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Calculate the difference between the admission mobility score (from step 1) and the discharge mobility score (from step 2) for each patient to create a change in mobility score for each patient.

5) Calculate an expected change in mobility score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).

6) Calculate an average observed change in mobility score for each IRF (using the patient data calculated in step 4). This is the facility-level observed change in mobility score.

7) Calculate an average expected change in mobility score for each IRF (using the patient data from step 5). This is the facility-level expected change in mobility score.

8) Subtract the facility-level expected change score from the facility-level observed change score to determine the difference in scores (difference value). A difference value that is 0 indicates the observed and expected scores are equal. An observed minus expected difference value that is higher than 0 (positive) indicates that the observed change score is greater (better) than the expected change score. An observed minus expected difference value that is less than 0 (negative) indicates that the observed change score is lower (worse) than the expected change score.

9) Add the national average change in mobility score to each IRF's difference value (from step 8). This is the risk-adjusted mean change in mobility score.

Each patient's ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

The mobility items are:

GG0170A. Roll left and right

GG0170B. Sit to lying

GG0170C. Lying to sitting on side of bed

GG0170D. Sit to stand

GG0170E. Chair/bed-to-chair transfer

GG0170F. Toilet transfer

GG0170G. Car transfer

GG0170I. Walk 10 feet

GG0170J. Walk 50 feet with two turns

GG0170K. Walk 150 feet

GG0170L. Walking 10 feet on uneven surfaces

GG1070M. 1 step (curb)

GG0170N. 4 steps

GG01700. 12 steps

GG0170P. Picking up object

GG0170R. Wheel 50 feet with two turns (for patients who do not walk at admission and discharge)

GG0170S. Wheel 150 feet (for patients who do not walk at admission and discharge)

# 2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

## STEWARD

Centers for Medicare & Medicaid Services

# DESCRIPTION

This measure estimates the percentage of IRF patients who meet or exceed an expected discharge self-care score.

## түре

Outcome

### DATA SOURCE

Instrument-Based Data

#### LEVEL

Facility

## SETTING

Post-Acute Care

# NUMERATOR STATEMENT

The numerator is the number of patients in an IRF with an observed discharge self-care score that is equal to or higher than the calculated expected discharge self-care score.

## NUMERATOR DETAILS

Seven self-care activities are each scored based on a patient's ability to complete the activity. The scores for the seven activities are summed to obtain a self-care score at the time discharge.

The 7 self-care items are:

GG0130A. Eating

GG0130B. Oral hygiene

GG0130C. Toileting hygiene

GG0130E. Shower/bathe self

GG0130F. Upper body dressing

GG0130G. Lower body dressing

GG0130H. Putting on/taking off footwear

Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

10 = Not attempted due to environmental limitations

88 = Not attempted due to medical condition or safety concerns.

The performance period is 12 months for reporting on CMS's IRF Compare website.

# DENOMINATOR STATEMENT

Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

# DENOMINATOR DETAILS

The denominator is Inpatient Rehabilitation Facility patients are at least age 21 of age, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

### **EXCLUSIONS**

This quality measure has five patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; or severe anoxic brain damage, cerebral edema or compression of the brain.

Rationale: These patients are excluded because they may have limited or less predictable selfcare improvement with the selected self-care items.

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

4) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

5) Patients not covered by the Medicare Part A and Medicare Advantage program.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

### **EXCLUSION DETAILS**

The following data elements are used to identify which patients are excluded from the quality measure calculation. These data elements are included on the current version of the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI), which is available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/IRFPAI.html

It can be challenging to gather accurate discharge functional status data for patients who experience incomplete stays. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients discharged to a hospice; patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

Items used to identify these patient records:

1) Patients with incomplete stays.

Patients with a length of stay less than 3 days: We calculate length of stay using the following items on the IRF-PAI.

Item 12. Admission Date.

Item 40. Discharge Date.

Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of less than 3 days are excluded.

Item 41. Patient discharged against medical advice. This item is used to identify patients discharged against medical advice.

Patient records with a response of "Yes = 1" are excluded.

Item 44C. Was the patient discharged alive? This item is used to identify patients who died during the IRF stay.

Patient records with a response of "No=0" are excluded.

44D. Patient's discharge destination/living setting. This item is used to identify patients with an incomplete stay. Specifically, the following responses will be used to identify incomplete stays:

Short-term General Hospital = 02.

Long-term Care Hospital = 63.

Inpatient Psychiatric Facility = 65.

Critical Access Hospital = 66.

2) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; and locked-in syndrome; and severe anoxic brain damage, cerebral edema or compression of the brain.

The following items will be used to identify patients with these conditions:

21. Impairment Group

0004.1221 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C1-C4

0004.1222 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C5-C8

0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C1-C4

0004.2222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C5-C8

22. Etiologic Diagnosis.

This item is used to determine a patient's etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude patient records with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx (1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5 Locked-in state

24. Comorbid Conditions.

This item is used to exclude selected comorbidities. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude patient records with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx (1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5 Locked-in state

3) Patients younger than age 21.

These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

4) Patients discharged to hospice

44D. Patient's discharge destination/living setting.

This item is used to identify patients discharged to hospice. The following responses are used:

Hospice (home) = 50

Hospice (institutional facility) = 51

5) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

The following items are used to identify and exclude the records of patients who are not Medicare Part A and Medicare Advantage beneficiaries:

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

### **RISK ADJUSTMENT**

Statistical Risk Model

# STRATIFICATION

N/A

# TYPE SCORE

Rate/proportion

# ALGORITHM

We provide the detailed calculation algorithm in an attachment entitled "IRF Detailed Function QM Specifications 2635 01-07-2019" included in the Appendix.

The detailed calculation algorithm is provided to the public in the document entitled IRF Measure Calculations and Reporting User's Manual. The current version of this document is available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/IRF-Quality-Reporting-Program-Measures-Information-.html

The following are the key steps used to calculate the measure:

1) Sum the scores of the discharge self-care items to create a discharge self-care score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes (' $^{\prime}$ ) and missing data ('-') are recoded. (range: 7 to 42). This is the patient's observed discharge score.

2) Calculate an expected discharge self-care score for each IRF patient using coefficients from a statistical model that estimates the average effect of the risk factors (patient demographic and admission clinical characteristics) across all IRFs.

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Compare each patient's observed and expected discharge self-care score and classify the difference as

a) Observed discharge score is equal to or higher than the expected discharge score, or

b) observed discharge score is lower than the expected discharge score.

5) The numerator is the total number of patients who do not meet the exclusion criteria and who have observed discharge scores that are the same as or higher than the expected discharge score.

6) The denominator is the total number of patients in the IRF who do not meet the exclusion criteria.

7) The percent is calculated as the numerator divided by the denominator and then multiplied by 100.

Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

The 7 self-care items are:

GG0130A. Eating

GG0130B. Oral hygiene

GG0130C. Toileting hygiene

GG0130E. Shower/bathe self

GG0130F. Upper body dressing

GG0130G. Lower body dressing

GG0130H. Putting on/taking off footwear

# 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

## STEWARD

Centers for Medicare & Medicaid Services

# DESCRIPTION

This measure estimates the percentage of IRF patients who meet or exceed an expected discharge mobility score.

# TYPE

Outcome

#### DATA SOURCE

Instrument-Based Data

#### LEVEL

Facility

## SETTING

Post-Acute Care

# NUMERATOR STATEMENT

The numerator is the number of patients in an IRF with an observed discharge mobility score that is equal to or higher than a calculated expected discharge mobility score.

## NUMERATOR DETAILS

Seventeen mobility activities are each scored based on a patient's ability to complete the activity. The scores for the activities are summed to obtain an observed mobility score at the time of discharge.

The mobility items are: GG0170A. Roll left and right GG0170B. Sit to lying GG0170C. Lying to sitting on side of bed GG0170D. Sit to stand GG0170E. Chair/bed-to-chair transfer GG0170F. Toilet transfer GG0170G. Car transfer GG0170J. Walk 10 feet GG0170J. Walk 10 feet GG0170J. Walk 50 feet with two turns GG0170K. Walk 150 feet GG0170L. Walking 10 feet on uneven surfaces GG1070M. 1 step (curb) GG0170N. 4 steps GG01700. 12 steps

GG0170P. Picking up object

GG0170R. Wheel 50 feet with two turns (for patients who do not walk on admission and discharge)

GG0170S. Wheel 150 feet (for patients who do not walk on admission and discharge)

Each patient's ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

10 = Not attempted due to environmental limitations

88 = Not attempted due to medical condition or safety concerns.

The performance period is 12 months for reporting on CMS's IRF Compare website.

# DENOMINATOR STATEMENT

IRF patients included in this measure are at least 21 years of age, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

# DENOMINATOR DETAILS

The denominator is IRF patients who are age 21 and older, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

### EXCLUSIONS

This quality measure has five patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients with the following medical conditions on admission: coma, persistent vegetative state, complete quadriplegia, locked-in syndrome, or severe anoxic brain damage, cerebral edema or compression of brain.

Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected items.

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

4) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

5) Patients who are not Medicare Part A or Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

# EXCLUSION DETAILS

The following items are used to identify which patients are excluded from the quality measure calculation:

1) Patients with incomplete stays.

Item 12. Admission Date.

Item 40. Discharge Date.

These items are used to calculate length of stay. Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of less than 3 days are excluded.

Item 41. Patient discharged against medical advice.

This item is used to identify patients discharged against medical advice.

Patient records with a response of "Yes = 1" are excluded.

Item 44C. Was the patient discharged alive?

This item is used to identify patients who died during the IRF stay.

Patient records with a response of "No = 0" are excluded.

44D. Patient's discharge destination/living setting.

This item is used to identify an incomplete stay. Specifically, the following responses will be used to identity patients with incomplete stays:

Short-term General Hospital = 02

Long-Term Care Hospital = 63

Inpatient Psychiatric Facility = 65

Critical Access Hospital = 66.

2) Patients with the following medical conditions on admission: coma, persistent vegetative state, complete quadriplegia, locked-in syndrome, and severe anoxic brain damage, cerebral edema or compression of brain.

The following items will be used to identify patients with these conditions:

21. Impairment Group.

The records of patients with the following impairment group codes are excluded:

0004.1221 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C1-C4

0004.1222 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C5-C8

0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C1-C4

0004.2222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C5-C8

22. Etiologic Diagnosis.

This item is used to determine a patient's etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude patient records with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx (1-8) or unspecified level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5 Locked-in state

24. Comorbid Conditions.

This item is used to exclude selected comorbidities. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude patient records with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx (1-8) or unspecified level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5 Locked-in state

3) Patients younger than age 21.

These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

# 6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

4) Patients discharged to hospice

44D. Patient's discharge destination/living setting.

This item is used to identify patients discharged to hospice. The following responses are used:

Hospice (home) = 50

Hospice (institutional facility) = 51

5) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

The following items are used to identify and exclude the records of patients who are not Medicare Part A and Medicare Advantage beneficiaries:

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

## **RISK ADJUSTMENT**

Statistical Risk Model

## STRATIFICATION

N/A

# TYPE SCORE

Rate/proportion

# ALGORITHM

We provide the detailed calculation algorithm in an attachment entitled "IRF Detailed Function QM Specifications 2636 01-07-2019" included in the Appendix.

The detailed calculation algorithm is provided to the public in the document entitled IRF Measure Calculations and Reporting User's Manual. The current version of this document is available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/IRF-Quality-Reporting-Program-Measures-Information-.html

The following are the key steps used to calculate the measure:

1) Sum the scores of the discharge mobility items to create a discharge mobility score for each patient, after 'activity did not occur' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded, and for patients who do not walk on admission and discharge, walking items have been recoded to use wheelchair mobility item codes. (range: 15 to 90). This is the patient's observed discharge score.

2) Calculate an expected discharge mobility score for each IRF patient using coefficients from a statistical model that estimates the average predictive effect of the patient demographic and admission clinical characteristics across all IRFs.

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Compare each patient's observed and expected discharge mobility score and classify the difference as

a) Observed discharge score is equal to or higher than the expected discharge score, or

b) Observed discharge score is lower than the expected discharge score.

5) The denominator is the total number of patients who do not meet the exclusion criteria and who have observed discharge scores that are the same as or higher than the expected discharge score.

6) The denominator is the total number of patients in the IRF who do not meet the exclusion criteria.

7) The percent is calculated as the numerator divided by the denominator and then multiplied by 100.

Each patient's ability to complete each mobility activity item is rated by clinicians using the following 6-level rating scale:

level 06 - Independent

- level 05 Setup or clean up assistance
- level 04 Supervision or touching assistance
- level 03 Partial/moderate assistance
- level 02 Substantial/maximal assistance
- level 01 Dependent
- The mobility items are:
- GG0170A. Roll left and right
- GG0170B. Sit to lying
- GG0170C. Lying to sitting on side of bed
- GG0170D. Sit to stand
- GG0170E. Chair/bed-to-chair transfer
- GG0170F. Toilet transfer
- GG0170G. Car transfer
- GG0170I. Walk 10 feet
- GG0170J. Walk 50 feet with two turns
- GG0170K. Walk 150 feet
- GG0170L. Walking 10 feet on uneven surfaces
- GG1070M. 1 step (curb)
- GG0170N. 4 steps
- GG01700. 12 steps
- GG0170P. Picking up object
- GG0170R. Wheel 50 feet with two turns (for patients who are not walking on admission and discharge)
- GG0170S. Wheel 150 feet (for patients who are not walking on admission and discharge)

# 3227 CollaborRATE Shared Decision Making Score

### STEWARD

The Dartmouth Institute for Health Policy & Clinical Practice

## DESCRIPTION

CollaboRATE is a patient-reported measure of shared decision making which contains three brief questions that patients, their parents, or their representatives complete following a clinical encounter. The CollaboRATE measure provides a performance score representing the percentage of adults 18 and older who experience a high level of shared decision making.

The measure was developed to be generic and designed so that it could apply to all clinical encounters, irrespective of the condition or the patient group. The measure asks the patient to evaluate the 'effort made' to inform, to listen to issues that matter to the patient, and to include those issues in choosing 'next steps'. The items were co-developed with patients using cognitive interview methods.

CollaboRATE is designed for use in routine health care delivery. The brevity and the ease of completion were purposeful so the measure could be used as a performance metric for shared decision making.

# TYPE

Outcome: PRO-PM

#### DATA SOURCE

Instrument-Based Data

## LEVEL

Clinician: Group/Practice

## SETTING

Inpatient/Hospital, Outpatient Services

# NUMERATOR STATEMENT

Shared decision making; top-box scores represent the proportion of patients perceiving a high level of shared decision-making.

### NUMERATOR DETAILS

The numerator consists of those cases (i.e. patient responses) where perfect scores are given on all three CollaboRATE items; cases with perfect scores are coded '1', whereas all other patient scores are coded '0' in a dichotomous top score outcome variable.

#### DENOMINATOR STATEMENT

The denominator consists of all patients who complete the three CollaboRATE items. The denominator may include patients of any demographic or clinical background, as the measure is generic and applicable to a variety of clinical situations.

#### DENOMINATOR DETAILS

CollaboRATE is applicable to all patients; the denominator therefore consists of all complete responses.

# **EXCLUSIONS**

All patients are eligible to complete collaboRATE. Only incomplete collaboRATE responses should be excluded from the denominator.

## EXCLUSION DETAILS

Exclude from the denominator any cases in which there are missing responses on any of the three collaboRATE items.

#### **RISK ADJUSTMENT**

Statistical Risk Model

# STRATIFICATION

We do not stratify by patient or provider level characteristics, although there may be analytic interest in these variables. If responses are collected for patients of all ages, it may be appropriate to stratify by pediatric and adult patients.

# TYPE SCORE

Rate/proportion

#### ALGORITHM

To calculate CollaboRATE Performance Score:

Exclude cases (i.e. patient survey responses) where a response to one or more of the CollaboRATE questions is missing. Code each case as either '1', if the response to all three CollaboRATE items was 9, or '0' if the response to any of the three CollaboRATE items was less than 9. To case-mix adjust scores, conduct logistic regression analysis with the binary collaboRATE score outcome as the dependent variable and independent variables including patient age and patient gender; predict probabilities at the medical group level based on this model. These probabilities are the CollaboRATE performance scores for each medical group. Higher scores represent more shared decision making. This number also corresponds to the case-mix adjusted proportion of patients who perceive 'gold standard' shared decision making.

# 3461 Functional Status Change for Patients with Neck Impairments

#### STEWARD

Focus on Therapeutic Outcomes

## DESCRIPTION

This is a patient-reported outcome performance measure (PRO-PM) consisting of a patientreported outcome measure (PROM) of risk-adjusted change in functional status (FS) for patients aged 14 years and older with neck impairments. The change in FS is assessed using the Neck FS PROM. The measure is adjusted to patient characteristics known to be associated with FS outcomes (risk adjusted) and used as a performance measure (PM) at the patient, individual clinician, and clinic levels to assess quality.

The Neck FS PROM is an item-response theory-based computer adaptive test (CAT) for patients with impairments related to neck problems. Specific ICD-10-CM codes are described in the denominator section.

The Neck PRO-PM is publically available in the CAT version on the FOTO website at no charge. The Neck FS PROM is also available at no charge for public use as a 10-item short form (static/paper-pencil). CAT administration is preferred as it reduces patient response burden by administrating the minimum number of items needed to achieve the targeted measurement accuracy. Scores are reported on a 0 to 100 scale with higher scores indicating better functional status. The Neck FS PROM maps to the Mobility and Self-care constructs within the Activities and Participation domain of the International Classification of Functioning, Disability and Health.

#### ТҮРЕ

Outcomes: PRO-PM

### DATA SOURCE

Instrument-Based Data

## LEVEL

Clinician: Group/Practice, Clinician: Individual

## SETTING

**Outpatient Services** 

### NUMERATOR STATEMENT

The numerator is based on residual scores (actual change scores - predicted change after risk adjustment) of patients receiving care for neck impairments and who: a) completed the Neck PRO-PM at admission and at the end of the episode of care; and b) were discharged from care.

## NUMERATOR DETAILS

Patient Level: The residual functional status score for the individual patient (the residual score is the actual change score - predicted change after risk adjustment).

Clinician Level: The average of residuals in functional status scores in patients who were treated by the clinician in a 12 month period.

Clinic Level: The average of residuals in functional status scores in patients who were treated by the clinic in a 12 month period.

Further details are provided in the Measure Testing Form

### DENOMINATOR STATEMENT

All patients 14 years and older with a neck impairment who have initiated an episode of care and completed the neck functional status PROM at admission and discharge.

## DENOMINATOR DETAILS

All patients 14 years and older with a neck impairment who have an episode of care and completed the neck functional status PROM at admission and discharge.

An episode is considered completed and the patient discharged when the clinician ceases to provide care for the neck impairment as signified by a discharge from that care. For clinicians who use the FOTO system, the completion of an episode is formally signified when the clinician or clinician's representative completes a short process called a FOTO Staff Discharge which includes completing data fields for the date of the last care visit and the total number of visits used in the episode of care.

The ICD-10-CM codes relevant for this measure are included below.

G54.2; G54.8; G55; G89.29; M05.69; M05.79; M05.89; M06.08; M06.28; M06.38; M06.88; M08.08; M08.1; M08.28; M08.48; M08.88; M08.98; M11.08; M11.18; M11.28; M11.88; M12.08; M12.18; M12.28; M12.48; M12.58; M12.88; M13.0; M13.88; M14.68; M14.88; M15.0; M15.3; M15.4; M15.8; M15.9; M19.90; M19.91; M19.92; M19.93; M24.08; M24.10; M24.28; M24.80; M24.9; M25.28; M25.30; M25.50; M25.60; M25.78; M25.80; M25.9; M32.10; M32.19; M32.8; M32.9; M40.03; M40.12; M40.13; M40.202; M40.203; M40.292; M40.293; M41.112; M41.113; M41.122; M41.123; M41.22; M41.23; M41.41; M41.42; M41.43; M41.52; M41.53; M41.82; M41.83; M42.01; M42.02; M42.03; M42.11; M42.12; M42.13; M43.01; M43.02; M43.03; M43.11; M43.12; M43.13; M43.21; M43.22; M43.23; M43.3; M43.4; M43.5X2; M43.5X3; M43.6; M43.8X1; M43.8X2; M43.8X3; M45.1; M45.2; M45.3; M46.01; M46.02; M46.03; M46.21; M46.22; M46.23; M46.31; M46.32; M46.33; M46.41; M46.42; M46.43; M46.51; M46.52; M46.53; M46.81; M46.82; M46.83; M46.91; M46.92; M46.93; M47.11; M47.12; M47.13; M47.21; M47.22; M47.23; M47.811; M47.812; M47.813; M47.891; M47.892; M47.893; M48.01; M48.02; M48.03; M48.11; M48.12; M48.13; M48.21; M48.22; M48.23; M48.31; M48.32; M48.33; M48.41; M48.42; M48.43; M48.51; M48.52; M48.53; M48.8X1; M48.8X2; M48.8X3; M49.81; M49.82; M49.83; M50.00; M50.01; M50.020; M50.021; M50.022; M50.023; M50.03; M50.10; M50.11; M50.120; M50.121; M50.122; M50.123; M50.13; M50.20; M50.21; M50.220; M50.221; M50.222; M50.223; M50.23; M50.30; M50.31; M50.320; M50.321; M50.322; M50.323; M50.33; M50.80; M50.81; M50.820; M50.821; M50.822; M50.823; M50.83; M50.90; M50.91; M50.920; M50.921; M50.922; M50.923; M50.93; M53.0; M53.1; M53.2X1; M53.2X2; M53.2X3; M53.81; M53.82; M53.83; M54.11; M54.12; M54.13; M54.2; M54.81; M54.89; M54.9; M62.830; M62.838; M62.89; M63.88; M65.28; M65.88; M66.18; M70.88; M70.98; M71.48; M71.58; M71.88; M79.12; M79.7; M80.08; M80.88; M81.0; M81.6; M81.8; M85.88; M89.8X8; M93.28; M93.88; M93.98; M95.3; M96.1; M99.01; M99.11; M99.21; M99.31; M99.41; M99.51; M99.61; M99.71; M99.81; Q76.1; Q76.2; Q76.3; Q76.411; Q76.412; Q76.413; Q76.49; R25.2; R29.3; R29.898; R29.91; R51; S12.000; S12.001; S12.01; S12.02; S12.030; S12.031; S12.040; s12.041; s12.090; s12.091; s12.100; s12.101; s12.110; s12.111; s12.112; s12.120; s12.121; s12.130; s12.131; s12.14; s12.150; s12.151; s12.190; s12.191; s12.200; s12.201; s12.230; S12.231; S12.24; S12.250; S12.251; S12.290; S12.291; S12.300; S12.301; S12.330; S12.331;
S12.34; S12.350; S12.351; S12.390; S12.391; S12.400; S12.401; S12.430; S12.431; S12.44; S12.450; S12.451; S12.490; S12.491; S12.500; S12.501; S12.530; S12.531; S12.54; S12.550; S12.551; S12.590; S12.591; S12.600; S12.601; S12.630; S12.631; S12.64; S12.650; S12.651; S12.690; S12.691; S12.8; S12.9; S13.0; S13.100; S13.101; S13.110; S13.111; S13.120; S13.121; S13.130; S13.131; S13.140; S13.141; S13.150; S13.151; S13.160; S13.161; S13.170; S13.171; S13.180; S13.181; S13.20; S13.29; S13.4; S13.5; S13.8; S13.9; S14.2; S14.8; S14.9; S16.1; S16.2; S16.8; S16.9; S19.80; S19.89; T85.850; Z82.61 FOR ICD-10 CODES WITH DESCRIPTORS PLEASE SEE CODE BOOK ATTACHED IN SECTION S2b

#### **EXCLUSIONS**

Patients who are not being treated for a neck impairment. Patients who are less than 14 years of age.

#### **EXCLUSION DETAILS**

N/A

#### **RISK ADJUSTMENT**

Statistical Risk Model

#### STRATIFICATION

The methods used to develop the FOTO risk-adjustment neck model were the same as the methods described in detail in a recent publication by Deutscher et at, 2018 [Deutscher D, Werneke MW, Hayes D, et al. Impact of Risk-Adjustment on Provider Ranking for Patients With Low Back Pain Receiving Physical Therapy. J Orthop Sports Phys Ther. 2018;1-35.] Briefly, we used data from adult patients with neck pain treated in outpatient physical therapy clinics during 2016, that had complete outcomes data at admission and discharge, to develop the risk-adjustment model. The data included the following patient factors that could be evaluated for inclusion in a model for risk-adjustment: FS at admission (continuous); age (continuous); sex (male/female); acuity as number of days from onset of the treated condition (6 categories); type of payer (10 categories); number of related surgeries (4 categories); exercise history (3 categories); use of medication at intake for the treatment of LBP (yes/no); previous treatment for LBP (yes/no); treatment post-surgery (lumbar fusion, laminectomy or other); and 31 comorbidities.

#### TYPE SCORE

Continuous variable, e.g. average

#### ALGORITHM

A Residual score is defined as an actual change score minus the risk-adjusted predicted change score. The Residual(s) are calculated at three levels:

- Patient Level: The residual Neck FS Change score for the individual patient.
- Individual Clinician Level: The average of residuals for change in Neck FS scores in patients who were treated by a clinician in a 12-month time period.
- Clinic Level: The average of residuals for change in Neck FS scores in patients who were treated within a clinic in a 12-month time period.

# Appendix E1: Related and Competing Measures (tabular version)

# Comparison of NQF 2286 and NQF 2633

|                          | 2286 Functional Change: Change in Self Care Score   | 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Self-Care Score for Medical Rehabilitation<br>Patients  |
|--------------------------|---|---|
| Steward                  | Uniform Data System for Medical Rehabilitation  | Centers for Medicare & Medicaid Services  |
| Description              | Change in rasch derived values of self-care function from admission<br>to discharge among adult patients treated at an inpatient<br>rehabilitation facility who were discharged alive. The timeframe for<br>the measure is 12 months. The measure includes the following 8<br>items: Feeding, Grooming, Dressing Upper Body, Dressing Lower<br>Body, Toileting, Bowel, Expression, and Memory.  | This measure estimates the risk-adjusted mean change in self-care<br>score between admission and discharge for Inpatient Rehabilitatior<br>Facility (IRF) Medicare patients.  |
| Туре                     | Outcome   | Outcome   |
| Data Source              | Instrument-Based Data, Other  | Instrument-Based Data   |
| Level                    | Facility, Other   | Facility  |
| Setting                  | Inpatient/Hospital  | Post-Acute Care   |
| Numerator<br>Statement   | Average change in rasch derived self-care functional score from<br>admission to discharge at the facility level, including items:<br>Feeding, Grooming, Dressing Upper Body, Dressing Lower Body,<br>Toileting, Bowel, Expression, and Memory. Average is calculated as:<br>(sum of change at the patient level for all items (Feeding,<br>Grooming, Dressing Upper Body, Dressing Lower Body, Toileting,<br>Bowel, Expression, and Memory) / total number of patients).  | The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in self-care score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare patients age 21 or older. The change in self-care score is calculated as the difference between the discharge self-care score and the admission self-care score.   |
| Numerator<br>Details     | For Inpatient Rehabilitation Facilities (IRFs) data collection currently occurs as required by the Centers for Medicare and Medicaid Services (CMS) reimbursement using the mandated payment document, the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). Embedded in the IRF-PAI is the FIM® Instrument. The FIM® Instrument is a criterion referenced tool with 18 items that measure patient physical and cognitive functional status and patient burden of care (level of dependence/need for helper assistance). Each item is rated on a scale of 1 (most dependent) to 7 (completely independent). For the purposes of this measure, a subset of 8 FIM® items has been tested and validated which comprise the self-care measure; those items are: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. Rasch analysis was performed on the 8 items and the difference in the rasch derived values (defined in S.2b) from admission to discharge reflect the change at the patient level. The numerator of the measure is the facility's average change. While the IRF-PAI is specific to inpatient rehabilitation facilities, the measure can be used in all post-acute care venues. The FIM® instrument can be assessed in all venues of care and has been tested and validated for use in inpatient medical rehabilitation, long term acute care facilities (LTAC), skilled nursing facilities (SNF) and home health. At present, numerous LTACs and SNFs utilize the FIM® instrument (www.udsmr.org), thus the self-care measure is applicable for use in IRF, SNF, LTAC and other venues where patient functional change is anticipated. | Seven self-care activities are each scored based on a patient's<br>ability to complete the activity. The scores for the seven activities<br>are summed to obtain a self-care score at the time of admission<br>and at the time of discharge. The change in self-care is the<br>difference between the discharge self-care score and the admission<br>self-care score.<br>The 7 self-care items are:<br>GG0130A. Eating<br>GG0130B. Oral hygiene<br>GG0130C. Toileting hygiene<br>GG0130F. Upper body dressing<br>GG0130G. Lower body dressing<br>GG0130G. Lower body dressing<br>GG0130H. Putting on/taking off footwear<br>Each patient's ability to complete each self-care activity (item) is<br>rated by a clinician using the following 6-level rating scale:<br>level 06 - Independent<br>level 05 - Setup or clean up assistance<br>level 04 - Supervision or touching assistance<br>level 03 - Partial/moderate assistance<br>level 01 - Dependent<br>If the patient did not attempt the activity, the reason that the<br>activity did not occur is reported as:<br>07 = Patient refused<br>09 = Not applicable<br>10 = Not attempted due to environmental limitations<br>88 = Not attempted due to medical condition or safety concerns.<br>The performance period is 12 months for reporting on CMS's IRF<br>Compare website. |
| Denominator<br>Statement | Facility adjusted adjusted expected change in rasch derived values,<br>adjusted at the Case Mix Group level.  | The denominator is the number of Inpatient Rehabilitation Facility<br>Medicare patient stays, except those that meet the exclusion<br>criteria.   |
| Denominator<br>Details   | To calculate the facility adjusted expected self-care change in rasch<br>derived values, indirect standardization is used, which weights<br>national CMG-specific values by facility-specific CMG proportions.<br>CMG-adjustment derives the expected value based on the case mix<br>and severity mix of each facility. The case-mix group (CMG)<br>classification system groups similarly impaired patients based on<br>functional status at admission (in essence, patient severity).<br>Patients within the same CMG are expected to have similar<br>resource utilization needs and similar outcomes. There are three<br>steps to classifying a patient into a CMG at admission:<br>1. Identify the patient's impairment group code (IGC).<br>2. Calculate the patient's weighted motor index score, calculated<br>from 12 of the 13 motor FIM® items as indicated on the CMS IRF-<br>PAI v. 20 instrument (attached).<br>3. Calculate the cognitive FIM® rating (as indicated on the CMS<br>IRF_PAI v. 20 instrument) and the patient age at admission. (This<br>step is not required for all CMGs.)<br>See file uploaded in S.15 for calculations.<br>While CMGs are only present for patients admitted to an IRF, the<br>same procedure can be used for patients receiving care at a LTAC<br>facility and/or a SNF, with groupings specific to those venues of  | The denominator is the number of Inpatient Rehabilitation Facility<br>Medicare Part A and Medicare Advantage patient stays, except<br>those that meet the exclusion criteria.   |
| Exclusions               | care.<br>National values used in the CMG-adjustment procedure will not<br>include cases who died in the IRF or cases less than 18 years old. It<br>is standard to exclude cases who died during rehabilitation as this is<br>a highly atypical outcome, in addition, minors are excluded as well.   | This quality measure has six patient-level exclusion criteria:<br>1) Patients with incomplete stays.<br>Rationale: When a patient has an incomplete stay, for example, the<br>patients leave urgently due to a medical emergency, it can be   |

|                      | 2286 Functional Change: Change in Self Care Score  | 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Self-Care Score for Medical Rehabilitation<br>Patients  |
|----------------------|--|---|
|                      | The measure testing file includes further explanation regarding the exclusion criteria as well as references.  | <ul> <li>challenging to gather accurate discharge functional status data.</li> <li>Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.</li> <li>2) Patients who are independent with all self-care activities at the time of admission.</li> <li>Rationale: Patients who are independent with all the self-care items at the time of admission are assigned the highest score on all the self-care items, and thus, would not be able to show functional improvement on this same set of items at discharge.</li> <li>3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; or severe anoxic brain damage, cerebral edema or compression of the brain.</li> <li>Rationale: These patients are excluded because they may have limited or less predictable self-care improvement with the selected self-care items.</li> <li>4) Patients younger than age 21.</li> <li>Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.</li> <li>5) Patients discharged to Hospice.</li> <li>6) Patients does may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.</li> <li>6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.</li> <li>Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.</li> <li>Facility-level quality measure exclusion: For IRFs with fewer than 20</li> </ul>   |
| Exclusion<br>Details | Patient date of birth (DOB) and discharge setting are both variables collected in the IRF-PAI. Age can be calculated from DOB and patient date of admission (also collected in the IRF-PAI). In the variable discharge setting, there is a specific category for 'died' (code: 11). Date of birth, date of admission and discharge setting (including died as a category) are also assessed in the LTAC and SNF. | patient stays, data for this quality measure are not publicly<br>reported.<br>The following items are used to identify which patients are<br>excluded from the quality measure calculations.<br>These data elements are included on the current version of the<br>Inpatient Rehabilitation Facility Patient Assessment Instrument<br>(IRF-PAI), which is available at:<br>http://www.cms.gov/Medicare/Medicare-Fee-for-Service-<br>Payment/InpatientRehabFacPPS/IRFPAI.html<br>It can be challenging to gather accurate discharge functional status<br>data for patients who experience incomplete stays. Patients with<br>incomplete stays include patients who are unexpectedly discharged<br>to an acute care setting (Short-stay Acute Hospital, Critical Access<br>Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital);<br>patients discharged to a hospice; patients who die or leave an<br>Inpatient Rehabilitation Facility (IRF) against medical advice; and<br>patients with a length of stay less than 3 days.<br>Items used to identify these patient records:<br>1) Patients with incomplete stays.<br>Patients with a length of stay less than 3 days: We calculate length<br>of stay using the following items on the IRF-PAI.<br>Item 12. Admission Date.<br>Item 40. Discharge Date.<br>Length of stay is calculated as the Discharge Date minus the<br>Admission Date (Discharge Date - Admission Date). Patient records<br>with a length of stay of less than 3 days are excluded.<br>Item 41. Patient discharged against medical advice.<br>Patient records with a response of "Yes = 1" are excluded.<br>Item 42C. Was the patient discharged alive? This item is used to<br>identify patients who died during the IRF stay.<br>Patient records with a response of "No=0" are excluded.<br>ADD. Patient's discharge destination/living setting. This item is used<br>to identify patients with an incomplete stay.<br>Short-term General Hospital = 02<br>Long-Term Care Hospital = 63<br>Inpatient Psychiatric Facility = 65<br>Critical Access Hospital = 66.<br>2) Patients who are independent with all self-care activities at the<br>time of admission: Patien |

|                                      | 2286 Functional Change: Change in Self Care Score  | 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Self-Care Score for Medical Rehabilitation<br>Patients   |
|--------------------------------------|--|--|
|                                      |  | Measure: Change in Self-Care Score for Medical Rehabilitation<br>Patients         GG0130H. Putting on/taking off footwear = 06.         3) Patients with the following medical conditions on admission:<br>coma; persistent vegetative state; complete quadriplegia; and<br>locked-in syndrome; and severe anoxic brain damage, cerebral<br>edema or compression of the brain.         The following items will be used to identify patients with these<br>conditions:       21A. Impairment Group.         0004.1221 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia<br>Complete, C1-C4       0004.1222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia<br>Complete, C5-C8         0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia<br>Complete, C5-C8       0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia<br>Complete, C5-C8         0004.2222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia<br>Complete, C5-C8       0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia<br>Complete, C5-C8         22. Etiologic Diagnosis.       This item is used to determine a patient's etiologic problem that lext<br>to the condition for which the patient is receiving rehabilitation.         The following Hierarchical Condition Categories (HCCs) and<br>International Classification of Diseases, Tenth Revision, Clinical<br>Modification (ICD-10-CM) codes will be used to identify and exclude<br>the records of patients with these conditions:         HCC 80. Coma, Brain Compression/Anoxic Damage<br>ICD-10-CM. 682.51 Quadriplegia, C5-C7 complete<br>ICD-10-CM. 683.5. Locked-in state<br>24. Comorbid Conditions.         This item is used to exclude selected comorbidities. The following<br>Hierarchical Condition Categories (HCCs) and International<br>Classificati |
|                                      |  | <ul> <li>6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.</li> <li>The following items are used to identify and exclude the records of patients who are not Medicare Part A and Medicare Advantage beneficiaries:</li> <li>20A. Primary Source = 99 - Not Listed AND</li> <li>20B. Secondary Source = 99 - Not Listed</li> </ul>  |
| Risk<br>Adjustment<br>Stratification | Stratification by risk category/subgroup<br>While the measure can be stratified by specific impairment type<br>(using IGC), the CMG adjustment procedure allows for the measure<br>to be complete, accurate, and valid for all patients within the<br>facility, excluding cases who died and excluding patient under age<br>18 years.  | Statistical Risk Model   |
| Type Score<br>Algorithm              | Ratio1. Target population: Inpatient rehabilitation facility patients,<br>skilled nursing facility short term patients, long term acute care<br>facility patients, and home health patients.2. Exclusions: Age less than 18 and cases who died during the<br>episode of care.3. Cases meeting target process: All remaining cases.4. Outcome: Ratio of facility level average self-care change (rasch<br>derived values) to facility CMG adjusted expected self-care change.5. Risk adjustment: CMG adjustment using indirect standardization<br>of the proportion of cases at the facility by CMG, and CMG specific<br>national average of rasch derived value of self-care change. | Continuous variable, e.g. average<br>We provide the detailed calculation algorithm in an attachment<br>entitled "IRF Detailed Function QM Specifications 2633 01-07-2019"<br>included in the Appendix.<br>The detailed calculation algorithm is provided to the public in the<br>document entitled IRF Measure Calculations and Reporting User's<br>Manual. The current version of this document is available at:<br>https://www.cms.gov/Medicare/Quality-Initiatives-Patient-<br>Assessment-Instruments/IRF-Quality-Reporting/IRF-Quality-<br>Reporting-Program-Measures-Informationhtml<br>The following are the key steps used to calculate the measure:<br>1) Sum the scores of the admission self-care items to create an<br>admission self-care score for each patient, after 'activity not  |

| 2286 Functional Change: Change in Self Care Score | 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Self-Care Score for Medical Rehabilitation<br>Patients  |
|---|---|
|   | <ul> <li>attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded. (range: 7 to 42).</li> <li>2) Sum the scores of the discharge self-care items to create a discharge self-care score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded. (range: 7 to 42).</li> <li>3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.</li> <li>4) Calculate the difference between the admission self-care score (from step 1) and the discharge self-care score for each patient.</li> </ul> |
|   | <ul> <li>5) Calculate an expected change in self-care score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).</li> <li>6) Calculate an average change in self-care score for each IRF. This is the facility-level observed change in self-care score.</li> <li>7) Calculate an average expected change in self-care score for each IRF. This is the facility-level expected change in self-care score.</li> <li>8) Subtract the facility-level expected change score from the facility -level observed change score to determine the difference in scores (difference value). A difference value that is 0 indicates the observed and expected scores are equal. An observed minus expected difference value that is higher than 0 (positive value) indicates that the observed change score is greater (better) than</li> </ul>   |
|   | <ul> <li>the expected change score. An observed minus expected difference value that is less than 0 (negative value) indicates that the observed change score is lower (worse) than the expected change score.</li> <li>9) Add the national average change in self-care score to each IRF's difference value (from step 8). This is the risk-adjusted mean change in self-care score.</li> <li>Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale: level 06 - Independent level 05 - Setup or clean up assistance level 04 - Supervision or touching assistance</li> </ul>  |
|   | level 03 - Partial/moderate assistance<br>level 02 - Substantial/maximal assistance<br>level 01 - Dependent<br>The 7 self-care items are:<br>GG0130A. Eating<br>GG0130B. Oral hygiene<br>GG0130C. Toileting hygiene<br>GG0130C. Toileting hygiene<br>GG0130F. Upper body dressing<br>GG0130G. Lower body dressing<br>GG0130H. Putting on/taking off footwear  |

# Comparison of NQF 2321 and NQF 2634

|                          | 2321 Functional Change: Change in Mobility Score  | 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Mobility Score for Medical Rehabilitation<br>Patients   |
|--------------------------|---|---|
| Steward                  | Uniform Data System for Medical Rehabilitation  | Centers for Medicare & Medicaid Services  |
| Description              | Change in rasch derived values of mobility function from admission<br>to discharge among adult inpatient rehabilitation facility patients<br>aged 18 years and older who were discharged alive. The timeframe<br>for the measure is 12 months. The measure includes the following<br>4 mobility FIM <sup>®</sup> items:Transfer Bed/Chair/Wheelchair, Transfer<br>Toilet, Locomotion and Stairs.  | This measure estimates the mean risk-adjusted mean change in<br>mobility score between admission and discharge for Inpatient<br>Rehabilitation Facility (IRF) Medicare Part A and Medicare<br>Advantage patients.   |
| Туре                     | Outcome   | Outcome   |
| Data Source              | Instrument-Based Data, Other  | Instrument-Based Data   |
| Level                    | Facility, Other   | Facility  |
| Setting                  | Inpatient/Hospital, Post-Acute Care   | Post-Acute Care   |
| Numerator<br>Statement   | Average change in rasch derived mobility function score from<br>admission to discharge at the facility level. Includes the following<br>items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion<br>and Stairs. Average is calculated as: (sum of change at the patient<br>level/total number of patients). Patient less than 18 years of age at<br>admission to the facility or patients who died within the facility are<br>excluded.  | The measure does not have a simple form for the numerator and<br>denominator. This measure estimates the risk-adjusted change in<br>mobility score between admission and discharge among Inpatient<br>Rehabilitation Facility (IRF) Medicare Part A and Medicare<br>Advantage patients age 21 and older. The change in mobility score<br>is calculated as the difference between the discharge mobility scor<br>and the admission mobility score.   |
| Numerator<br>Details     | For Inpatient Rehabilitation Facilities (IRFs) data collection is<br>presently required for payment reimbursement by the Centers for<br>Medicare and Medicaid Services (CMS) using the mandated<br>Inpatient Rehabilitation Facility Patient Assessment Instrument. The<br>FIM® Instrument is a criterion referenced tool with 18 items that<br>measures patient physical and cognitive function, need for helper<br>assistance, burden of care/level of dependence. Each item is rated<br>on a scale of 1 (most dependent) to 7 (completely independent).<br>For the purposes of this measure, a subset of 4 FIM® items has<br>been tested and validated as the Change in Mobility measure; the<br>items are: Transfer Bed/Chair/Wheelchair, Transfer Toilet,<br>Locomotion and Stairs. Rasch analysis was performed on the items<br>and the difference in the rasch derived values (defined in S.2b)<br>from admission to discharge reflect the change at the patient level.<br>The numerator of the measure is the average change in mobility<br>score at the facility level.<br>While the IRF-PAI is specific to inpatient rehabilitation facilities, the<br>change in mobility measure can be used in all post-acute care<br>venues. The FIM® instrument is routinely used for patient<br>functional assessment in all venues of care and has been tested and<br>validated for use in IRFs, skilled nursing facilities (SNFs) and long<br>term acute care facilities (LTAC) (www.udsmr.org), therefore this<br>measure is not specific for inpatient medical rehabilitation use<br>only. | Seventeen mobility activities are each scored based on a patient's<br>ability to complete the activity. The scores for the activities are<br>summed to obtain a mobility score at the time of admission and at<br>the time of discharge. The change in mobility is the difference<br>between the discharge mobility score and the admission mobility<br>score.<br>The mobility items are:<br>GG0170A. Roll left and right<br>GG0170E. Sit to lying<br>GG0170E. Chair/bed-to-chair transfer<br>GG0170F. Toilet transfer<br>GG0170F. Toilet transfer<br>GG0170F. Toilet transfer<br>GG0170F. Toilet transfer<br>GG0170L. Walk 10 feet<br>GG0170L. Walk 10 feet<br>GG0170L. Walk 150 feet with two turns<br>GG0170N. 4 steps<br>GG0170N. 4 steps<br>GG0170P. Picking up object<br>GG0170P. Picking up object<br>GG0170S. Wheel 50 feet with two turns (for patients who do not<br>walk at admission and discharge)<br>GG0170S. Wheel 150 feet (for patients who do not walk at<br>admission and discharge)<br>Each patient's ability to complete each mobility activity (item) is<br>rated by a clinician using the following 6-level rating scale:<br>level 06 - Independent<br>level 05 - Setup or clean up assistance<br>level 03 - Partial/moderate assistance<br>level 03 - Partial/moderate assistance<br>level 03 - Partial/moderate assistance<br>level 04 - Supervision or touching assistance<br>level 03 - Partial/moderate assistance<br>level 04 - Dependent<br>If the patient did not attempt the activity, the reason that activity<br>did not occur is reported as:<br>07 = Patient refused<br>09 = Not applicable<br>10 = Not attempted due to environmental limitations<br>88 = Not attempted due to medical condition or safety concerns.<br>The performance period is 12 months for reporting on CMS's IRF |
| Denominator<br>Statement | Facility adjusted expected change in rasch derived mobility values, adjusted at the Case Mix Group (CMG) level.   | Compare website.<br>The denominator is the number of Inpatient Rehabilitation Facility<br>Medicare Part A and Medicare Advantage patient stays, except  |
| Denominator<br>Details   | To calculate the facility adjusted expected change in rasch derived<br>mobility values, indirect standardization was used, which weights<br>national CMG-specific values by facility-specific CMG proportions.<br>CMG-adjustment derives the expected value based on the case mix<br>and severity mix of each facility. The case-mix group (CMG)<br>classification system groups similarly impaired patients based on<br>functional status at admission, in essence, patient severity. Patients<br>within the same CMG are expected to have similar resource  | those that meet the exclusion criteria.<br>The denominator is the number of Inpatient Rehabilitation Facility<br>Medicare Part A and Medicare Advantage patient stays, except<br>those that meet the exclusion criteria.  |

|                      | 2321 Functional Change: Change in Mobility Score  | 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Mobility Score for Medical Rehabilitation<br>Patients   |
|----------------------|---|---|
|                      | <ul> <li>utilization needs and similar functional outcomes. There are three steps to classifying a patient into a CMG at admission:</li> <li>1. Identify the patient's impairment group code (IGC).</li> <li>2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM® items.</li> <li>3. Calculate the cognitive FIM® rating and the patient's age at admission. (This step is not required for all CMGs.)</li> <li>See file uploaded in S.2b for calculations or 'CMG Version 3.00 [ZIP, 9.02mb]' at the following link for more details: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/CMG.html</li> </ul> |   |
| Exclusions           | National values used in the CMG adjustment procedure will not<br>include cases who died in the IRF or patients less than 18 years of<br>age at admission. Cases who died during rehabilitation are not<br>typical patients and are routinely omitted from reports and<br>published research on rehabilitation outcomes. Further details and<br>references related to the exclusion criteria can be found in the<br>Measure Testing form.  | This quality measure has six patient-level exclusion criteria:<br>1) Patients with incomplete stays.<br>Rationale: When a patient has an incomplete stay, for example, the<br>patients leave urgently due to a medical emergency, it can be<br>challenging to gather accurate discharge functional status data.<br>Patients with incomplete stays include patients who are<br>unexpectedly discharged to an acute care setting (Short-stay Acute<br>Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or<br>Long-term Care Hospital); patients who die or leave an Inpatient<br>Rehabilitation Facility (IRF) against medical advice; and patients<br>with a length of stay less than 3 days.<br>2) Patients who are independent with all mobility activities at the<br>time of admission.<br>Rationale: Patients who are independent with all the mobility items<br>(with the exception of the wheelchair items GG0170R and<br>GG0170S) at the time of admission are assigned the highest score<br>on all the mobility items, and thus, would not be able to show<br>functional improvement on this same set of items at discharge.  |
|                      |   | <ul> <li>3) Patients with the following medical conditions on admission:<br/>coma, persistent vegetative state; complete quadriplegia; locked-in<br/>syndrome or severe anoxic brain damage, cerebral edema or<br/>compression of brain.</li> <li>Rationale: These patients are excluded because they may have<br/>limited or less predictable mobility improvement with the selected<br/>mobility items.</li> <li>4) Patients younger than age 21.</li> <li>Rationale: There is only limited evidence published about functional<br/>outcomes for individuals with Medicare who are younger than 21.</li> <li>5) Patients discharged to hospice.</li> <li>Rationale: Patient goals may change during the IRF stay, and<br/>functional improvement may no longer be a goal for a patient<br/>discharged to hospice.</li> <li>6) Patients who are not Medicare Part A and Medicare Advantage<br/>beneficiaries.</li> <li>Rationale: IRF-PAI data for patients not covered by the Medicare<br/>program are not submitted to the Centers for Medicare and<br/>Medicaid Services.</li> <li>Facility-level quality measure exclusion: For IRFs with fewer than 20<br/>patient stays, data for this quality measure are not publicly<br/>reported.</li> </ul>   |
| Exclusion<br>Details | Patient date of birth (DOB), date of admission and discharge setting<br>variables are collected in the IRF-PAI. Age can be calculated from<br>DOB and admission date. The variable discharge setting includes a<br>category for 'died' which is indicated as a code of '11'. Patient date<br>of birth, admission date and discharge setting are also documented<br>in SNFs and LTAC facilities.   | The following items are used to identify which patients are<br>excluded from the quality measure calculations.<br>These data elements are included on the current version of the<br>Inpatient Rehabilitation Facility Patient Assessment Instrument<br>(IRF-PAI), which is available at:<br>http://www.cms.gov/Medicare/Medicare-Fee-for-Service-<br>Payment/InpatientRehabFacPPS/IRFPAI.html<br>It can be challenging to gather accurate discharge functional status<br>data for patients who experience incomplete stays. Patients with<br>incomplete stays include patients who are unexpectedly discharged<br>to an acute care setting (Short-stay Acute Hospital, Critical Access<br>Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital);<br>patients discharged to a hospice; patients who die or leave an<br>Inpatient Rehabilitation Facility (IRF) against medical advice; and<br>patients with a length of stay less than 3 days.<br>Items used to identify these patient records:<br>1) Patients with incomplete stays.<br>Patients with a length of stay less than 3 days: We calculate length<br>of stay using the following items on the IRF-PAI.<br>Length of stay is calculated as the Discharge Date minus the<br>Admission Date (Discharge Date - Admission Date). Patient records<br>with a length of stay of less than 3 days are excluded.<br>Item 12. Admission Date. |

| 2321 Functional Change: Change in Mobility Score | 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Mobility Score for Medical Rehabilitation<br>Patients   |
|--|---|
|  | Item 41. Patient discharged against medical advice. This item is used to identify patients discharged against medical advice.   |
|  | Patient records with a response of "Yes = 1" are excluded.  |
|  | Item 44C. Was the patient discharged alive? This item is used to identify patients who died during the IRF stay.  |
|  | Patient records with a response of "No = 0" are excluded.   |
|  | 44D. Patient's discharge destination/living setting.  |
|  | This item is used to identify an incomplete stay. Specifically, the following responses will be used to identity patients with incomplete stays:  |
|  | Short-term General Hospital = 02  |
|  | Long-Term Care Hospital = 63  |
|  | Inpatient Psychiatric Facility = 65   |
|  | Critical Access Hospital = 66.  |
|  | 2) Patients who are independent with all mobility activities at the time of admission.  |
|  | Patients who are independent with all the mobility items at the time of admission are assigned the highest score on all the mobility items, thus, would not be able to show functional improvement (i.e., a higher score) on this same set of items at discharge. The following items and scores are used to identify and exclude patient records:  |
|  | Mobility items  |
|  | GG0170A. Roll left and right = 06, and  |
|  | GG0170B. Sit to lying = 06, and   |
|  | GG0170C. Lying to sitting on side of bed = 06, and  |
|  | GG0170D. Sit to stand = 06, and   |
|  | GG0170E. Chair/bed-to-chair transfer = 06, and  |
|  | GG0170F. Toilet transfer = 06, and<br>GG0170G. Car transfer = 06, and   |
|  | GG0170I. Walk 10 feet = 06, and   |
|  | GG0170J. Walk 50 feet with two turns = 06, and  |
|  | GG0170K. Walk 150 feet = 06, and  |
|  | GG0170L. Walking 10 feet on uneven surfaces = 06, and   |
|  | GG0170M. 1 step (curb) = 06, and  |
|  | GG0170N. 4 steps = 06, and  |
|  | GG0170O. 12 steps = 06, and   |
|  | GG0170P. Picking up object = 06.  |
|  | 3) Patients with the following medical conditions on admission:<br>coma; persistent vegetative state; complete quadriplegia; locked-in<br>syndrome; and severe anoxic brain damage, cerebral edema or<br>compression of the brain.  |
|  | The following items will be used to identify patients with these conditions:  |
|  | 21A. Impairment Group.  |
|  | 0004.1221 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia  |
|  | Complete, C1-C4<br>0004.1222 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia<br>Complete, C5-C8  |
|  | 0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia<br>Complete, C1-C4   |
|  | 0004.2222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia<br>Complete, C5-C8   |
|  | 22. Etiologic Diagnosis.  |
|  | This item is used to determine a patient's etiologic problem that led<br>to the condition for which the patient is receiving rehabilitation.<br>The following Hierarchical Condition Categories (HCCs) and<br>International Classification of Diseases, Tenth Revision, Clinical<br>Modification (ICD-10-CM) codes will be used to identify and exclude<br>records of patients with these conditions: |
|  | records of patients with these conditions:<br>HCC 80. Coma, Brain Compression/Anoxic Damage   |
|  | ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete  |
|  | ICD-10-CM. G82.53 Quadriplegia, C1-C4 complete  |
|  | ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter,  |
|  | or sequela  |
|  | ICD-10-CM. G83.5. Locked-in state<br>24. Comorbid Conditions.   |
|  | This item is used to exclude selected comorbidities. The following  |
|  | Hierarchical Condition Categories (HCCs) and International<br>Classification of Diseases, Tenth Revision, Clinical Modification (ICD-   |

|                    | 2321 Functional Change: Change in Mobility Score   | 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Mobility Score for Medical Rehabilitation  |
|--------------------|--|--|
|                    |  | Patients<br>10-CM) codes will be used to exclude records of patients with these  |
|                    |  | conditions:  |
|                    |  | HCC 80. Coma, Brain Compression/Anoxic Damage  |
|                    |  | ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete   |
|                    |  | ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete   |
|                    |  | ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela  |
|                    |  | ICD-10-CM. G83.5. Locked-in state  |
|                    |  | 4) Patients younger than age 21. These items are used to calculate   |
|                    |  | age, and patients who are younger than 21 years of age at the time of admission are excluded.  |
|                    |  | 6. Birth Date  |
|                    |  | 12. Admission Date   |
|                    |  | Age is calculated as the Admission Date minus the Birth Date<br>(Admission Date - Birth Date). Patients younger than 21 are<br>excluded.   |
|                    |  | 5) Patients discharged to hospice.   |
|                    |  | 44D. Patient's discharge destination/living setting.   |
|                    |  | This item is used to identify patients discharged to hospice. The following responses are used:  |
|                    |  | Hospice (home) = 50  |
|                    |  | Hospice (institutional facility) = 51  |
|                    |  | 6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries   |
|                    |  | 20A. Primary Source = 99 - Not Listed AND  |
|                    |  | 20B. Secondary Source = 99 - Not Listed  |
| Risk<br>Adjustment | Stratification by risk category/subgroup   | Statistical Risk Model   |
| Stratification     | While the measure can be stratified by specific impairment type (IGC), the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.   | N/A  |
| Type Score         | Ratio  | Continuous variable, e.g. average  |
| Algorithm          | 1. Target population: patients receiving care at an inpatient medical rehabilitation facility, a skilled nursing facility, or a long term acute care facility.   | We provide the detailed calculation algorithm in an attachment<br>entitled "IRF Detailed Function QM Specifications 2634 01-07-2019"<br>included in the Appendix.  |
|                    | 2. Exclusions: Age less than 18 years and patients who died during the episode of care.  | The detailed calculation algorithm is provided to the public in the document entitled IRF Measure Calculations and Reporting User's  |
|                    | <ol> <li>Cases meeting target process: All remaining cases.</li> <li>Outcome: Ratio of facility level average mobility change (rasch derived values) to facility CMG adjusted expected mobility change.</li> <li>Risk adjustment: CMG adjustment using indirect standardization</li> </ol> | Manual. The current version of this document is available at:<br>https://www.cms.gov/Medicare/Quality-Initiatives-Patient-<br>Assessment-Instruments/IRF-Quality-Reporting/IRF-Quality-<br>Reporting-Program-Measures-Informationhtml  |
|                    | of the proportion of cases at the facility by CMG, and CMG specific  | The following are key steps used to calculate the measure:   |
|                    | national average of rasch derived value of mobility change.  | 1) Sum the scores of the admission mobility items to create an admission mobility score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded, and for patients who do not walk on admission and discharge, walking items have been recoded to use wheelchair mobility item codes. (range: 15 to 90).           |
|                    |  | 2) Sum the scores of the discharge mobility items to create a discharge mobility score for each patient, after 'activity not attempted' values (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded. As described in step 1, for patients who do not walk on admission and discharge, use wheelchair mobility item codes instead of walking codes. (range: 1) to 90). |
|                    |  | <ul> <li>3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.</li> <li>4) Colorable to the difference between the educiation methility exceeded.</li> </ul>   |
|                    |  | <ul> <li>4) Calculate the difference between the admission mobility score<br/>(from step 1) and the discharge mobility score (from step 2) for<br/>each patient to create a change in mobility score for each patient.</li> <li>5) Calculate an expected change in mobility score for each patient</li> </ul>  |
|                    |  | using regression coefficients from national data and each patient's admission characteristics (risk adjustors).  |
|                    |  | 6) Calculate an average observed change in mobility score for each IRF (using the patient data calculated in step 4). This is the facility-level observed change in mobility score.  |

| 2321 Functional Change: Change in Mobility Score | 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome<br>Measure: Change in Mobility Score for Medical Rehabilitation<br>Patients  |
|--|--|
|  | 7) Calculate an average expected change in mobility score for each<br>IRF (using the patient data from step 5). This is the facility-level<br>expected change in mobility score.   |
|  | 8) Subtract the facility-level expected change score from the facility-level observed change score to determine the difference in scores (difference value). A difference value that is 0 indicates the observed and expected scores are equal. An observed minus expected difference value that is higher than 0 (positive) indicates that the observed change score is greater (better) than the expected change score. An observed minus expected difference value that is less than 0 (negative) indicates that the observed change score. |
|  | 9) Add the national average change in mobility score to each IRF's difference value (from step 8). This is the risk-adjusted mean change in mobility score.  |
|  | Each patient's ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:   |
|  | level 06 - Independent   |
|  | level 05 - Setup or clean up assistance  |
|  | level 04 - Supervision or touching assistance  |
|  | level 03 - Partial/moderate assistance   |
|  | level 02 - Substantial/maximal assistance  |
|  | level 01 - Dependent   |
|  | The mobility items are:  |
|  | GG0170A. Roll left and right   |
|  | GG0170B. Sit to lying  |
|  | GG0170C. Lying to sitting on side of bed   |
|  | GG0170D. Sit to stand  |
|  | GG0170E. Chair/bed-to-chair transfer   |
|  | GG0170F. Toilet transfer   |
|  | GG0170G. Car transfer  |
|  | GG0170I. Walk 10 feet  |
|  | GG0170J. Walk 50 feet with two turns   |
|  | GG0170K. Walk 150 feet   |
|  | GG0170L. Walking 10 feet on uneven surfaces  |
|  | GG1070M. 1 step (curb)   |
|  | GG0170N. 4 steps   |
|  | GG01700. 12 steps  |
|  | GG0170P. Picking up object   |
|  | GG0170R. Wheel 50 feet with two turns (for patients who do not walk at admission and discharge)  |
|  | GG0170S. Wheel 150 feet (for patients who do not walk at admission and discharge)  |

# Comparison of NQF 3227 and NQF 2962

|                         | 3227 CollaboRATE Shared Decision Making Score  | 2962 Shared Decision Making Process   |
|-------------------------|--|---|
| Steward                 | The Dartmouth Institute for Health Policy & Clinical Practice  | Massachusetts General Hospital  |
| Description             | CollaboRATE is a patient-reported measure of shared decision<br>making which contains three brief questions that patients, their<br>parents, or their representatives complete following a clinical<br>encounter. The CollaboRATE measure provides a performance<br>score representing the percentage of adults 18 and older who<br>experience a high level of shared decision making.<br>The measure was developed to be generic and designed so that it<br>could apply to all clinical encounters, irrespective of the condition<br>or the patient group. The measure asks the patient to evaluate the<br>'effort made' to inform, to listen to issues that matter to the<br>patient, and to include those issues in choosing 'next steps'. The<br>items were co-developed with patients using cognitive interview<br>methods.<br>CollaboRATE is designed for use in routine health care delivery. The<br>brevity and the ease of completion were purposeful, so the<br>measure could be used as a performance metric for shared<br>decision making. | This measure assesses the extent to which health care providers<br>actually involve patients in a decision-making process when there is<br>more than one reasonable option. This proposal is to focus on<br>patients who have undergone any one of 7 common, important<br>surgical procedures: total replacement of the knee or hip, lower<br>back surgery for spinal stenosis of herniated disc, radical<br>prostatectomy for prostate cancer, mastectomy for early stage<br>breast cancer or percutaneous coronary intervention (PCI) for<br>stable angina. Patients answer four questions (scored 0 to 4) about<br>their interactions with providers about the decision to have the<br>procedure, and the measure of the extent to which a provider or<br>provider group is practicing shared decision making for a particular<br>procedure is the average score from their responding patients who<br>had the procedure.  |
| Туре                    | Outcome: PRO-PM  | Outcome: PRO-PM   |
| Data Source             | Instrument-Based Data  | Instrument-Based Data   |
| Level                   | Clinician: Group/Practice  | Clinician: Group/Practice   |
| Setting                 | Inpatient/Hospital, Outpatient Services  | Outpatient Services   |
| Numerator<br>Statement  | Shared decision making; top-box scores represent the proportion of patients perceiving a high level of shared decision-making.   | Patient answers to four questions about whether not 4 essential<br>elements of shared decision making (laying out options, discussing<br>the reasons to have the intervention and not to have the<br>intervention, and asking for patient input) were part of the<br>interactions with providers when the decision was made to have<br>the procedure.   |
| Numerator<br>Details    | The numerator consists of those cases (i.e. patient responses)<br>where perfect scores are given on all three CollaboRATE items;<br>cases with perfect scores are coded '1', whereas all other patient<br>scores are coded '0' in a dichotomous top score outcome variable.  | <ul> <li>All responding patients will answer four questions about their presurgical interactions with their providers:</li> <li>1. How much did a doctor (or health care provider) talk with you about the reasons you might want to (HAVE INTERVENTION)— a lot, some, a little, or not at all?</li> <li>2. How much did a doctor (or other health care provider) talk with you about reasons you might not want to (HAVE INTERVENTION)—a lot, some, a little or not at all?</li> <li>3. Did any of your doctors ask you if you wanted to (HAVE INTERVENTION)? (YES/NO)</li> <li>4. Did any of your doctors (or health care providers) explain that you could choose whether or not to (HAVE INTERVENTION)? (YES/NO)</li> <li>OR: "Did any of your doctors (or health care providers) explain that there were choices in what you could do to treat your [condition]? (YES/NO)</li> <li>SCORING: 1 POINT EACH FOR ANSWERING "A LOT" OR "SOME" TO QUESTIONS 1 AND 2; 1 POINT EACH FOR ANSWERING "YES" TO QUESTIONS 3 AND 4. TOTAL SCORE = 0 TO 4.</li> <li>Score for a provider or provider group is simply the average score for their responding patients. This will be a continuous number from 0 to 4.</li> <li>All responding patients who have undergone one of the following 7</li> </ul> |
| Statement               | CollaboRATE items. The denominator may include patients of any demographic or clinical background, as the measure is generic and applicable to a variety of clinical situations.   | surgical procedures: back surgery for a herniated disc; back surgery<br>for spinal stenosis; knee replacement for osteoarthritis of the knee;<br>hip replacement for osteoarthritis of the hip; radical prostatectomy<br>for prostate cancer; percutaneous coronary intervention (PCI) for<br>stable angina, and mastectomy for early stage breast cancer.  |
| Denominator<br>Details  | CollaboRATE is applicable to all patients; the denominator therefore consists of all complete responses.   | See S2. There is an attached sheet with ICD 10 and CPT codes needed to identify eligible patients.  |
| Exclusions              | All patients are eligible to complete collaboRATE. Only incomplete<br>collaboRATE responses should be excluded from the denominator.   | For back, hip, knee, and prostate surgery patients, there are no<br>exclusions, so long as the surgery is for the designated condition.<br>PCI patients who had a heart attack within 4 weeks of the PCI<br>procedure are excluded, as are those who have had previous<br>coronary artery procedures (either PCI or CABG).<br>For patients who have mastectomy, patients who had had a prior<br>lumpectomy for breast cancer in the same breast and patients who<br>have not been diagnosed with breast cancer (who are having<br>prophylactic mastectomies) are excluded.  |
| Exclusion<br>Details    | Exclude from the denominator any cases in which there are missing responses on any of the three collaboRATE items.   | Included in attached file   |
| Risk<br>Adjustment      | Statistical Risk Model   | N/A   |
| Stratification          | We do not stratify by patient or provider level characteristics,<br>although there may be analytic interest in these variables. If<br>responses are collected for patients of all ages, it may be<br>appropriate to stratify by pediatric and adult patients.  | N/A   |
|                         |  |   |
| Type Score<br>Algorithm | Rate/proportion  | Continuous variable, e.g. average<br>All responding patients will answer four questions about their pre-  |

| 3227 CollaboRATE Shared Decision Making Score                        | 2962 Shared Decision Making Process  |
|--|--|
| Exclude cases (i.e. patient survey responses) where a response to    | <ol> <li>How much did a doctor (or health care provider) talk with</li></ol>   |
| one or more of the CollaboRATE questions is missing. Code each       | you about the reasons you might want to (HAVE INTERVENTION)—   |
| case as either '1', if the response to all three CollaboRATE items   | a lot, some, a little, or not at all? <li>How much did a doctor (or other health care provider) talk</li>                                  |
| was 9, or '0' if the response to any of the three CollaboRATE items  | with you about reasons you might not want to (HAVE   |
| was less than 9. To case-mix adjust scores, conduct logistic         | INTERVENTION)—a lot, some, a little or not at all? <li>Did any of your doctors ask you if you wanted to (HAVE</li>                         |
| regression analysis with the binary collaboRATE score outcome as     | INTERVENTION)? (YES/NO) <li>Did any of your doctors (or health care providers) explain that you</li>                                       |
| the dependent variable and independent variables including           | could choose whether or not to (HAVE INTERVENTION)? (YES/NO) <li>OR: "Did any of your doctors (or health care providers) explain that</li> |
| patient age and patient gender; predict probabilities at the medical | there were choices in what you could do to treat your [condition]?   |
| group level based on this model. These probabilities are the         | (YES/NO) <li>SCORING: 1 POINT EACH FOR ANSWERING "A LOT" OR "SOME" TO</li>   |
| CollaboRATE performance scores for each medical group. Higher        | QUESTIONS 1 AND 2; 1 POINT EACH FOR ANSWERING "YES" TO   |
| scores represent more shared decision making. This number also       | QUESTIONS 3 AND 4. TOTAL SCORE = 0 TO 4. <li>Score for a provider or provider group is simply the average score</li>                       |
| corresponds to the case-mix adjusted proportion of patients who      | for their responding patients. This will be a continuous number  |
| perceive 'gold standard' shared decision making.                     | from 0 to 4.   |

# Comparison of NQF 3461 and NQF 0428

|  | 3461 Functional Status Change for Patients with Neck Impairments  | 0428 Functional Status Change for Patients with General<br>Orthopaedic Impairments   |
|--|---|--|
| Steward  | Focus on Therapeutic Outcomes, Inc.   | Focus on Therapeutic Outcomes, Inc.  |
| Description  | This is a patient-reported outcome performance measure (PRO-<br>PM) consisting of a patient-reported outcome measure (PROM) of<br>risk-adjusted change in functional status (FS) for patients aged 14<br>years and older with neck impairments. The change in FS is<br>assessed using the Neck FS PROM. The measure is adjusted to<br>patient characteristics known to be associated with FS outcomes<br>(risk adjusted) and used as a performance measure (PM) at the<br>patient, individual clinician, and clinic levels to assess quality.<br>The Neck FS PROM is an item-response theory-based computer<br>adaptive test (CAT) for patients with impairments related to neck<br>problems. Specific ICD-10-CM codes are described in the<br>denominator section.<br>The Neck PRO-PM is publically available in the CAT version on the<br>FOTO website at no charge. The Neck FS PROM is also available at<br>no charge for public use as a 10-item short form (static/paper-<br>pencil). CAT administration is preferred as it reduces patient<br>response burden by administrating the minimum number of items<br>needed to achieve the targeted measurement accuracy. Scores are<br>reported on a 0 to 100 scale with higher scores indicating better<br>functional status. The Neck FS PROM maps to the Mobility and Self-<br>care constructs within the Activities and Participation domain of<br>the International Classification of Functioning, Disability and<br>Health. | A self-report outcome measure of functional status for patients 14<br>years+ with general orthopaedic impairments. The change in<br>functional status assessed using FOTO (general orthopedic) PROM<br>is adjusted to patient characteristics known to be associated with<br>functional status outcomes (risk adjusted) and used as a<br>performance measure at the patient level, at the individual<br>clinician, and at the clinic level by to assess quality.   |
| Туре   | Outcome: PRO-PM   | Outcome: PRO-PM  |
| Data Source  | Instrument-Based Data   | Electronic Health Data, Instrument-Based Data, Paper Medical Records   |
| Level  | Clinician: Group/Practice, Clinician: Individual  | Clinician: Group/Practice, Clinician: Individual, Facility   |
| Setting<br>Numerator                               | Outpatient Services<br>The numerator is based on residual scores (actual change scores -  | Outpatient Services, Post-Acute Care, Other<br>Patient Level: The residual functional status score for the individual  |
| Statement  | predicted change after risk adjustment) of patients receiving care<br>for neck impairments and who: a) completed the Neck PRO-PM at<br>admission and at the end of the episode of care; and b) were<br>discharged from care.  | patient (residual scores are the actual change scores - predicted<br>change after risk adjustment).<br>Individual Clinician Level: The average of residuals in functional<br>status scores in patients who were treated by a clinician in a 12<br>month time period for general orthopaedic impairment.<br>Clinic Level: The average of residuals in functional status scores in<br>patients who were treated by a clinic in a 12 month time period for<br>general orthopaedic impairment.   |
| Numerator<br>Details                               | patient Level: The residual functional status score for the individual patient (the residual score is the actual change score - predicted change after risk adjustment).<br>Clinician Level: The average of residuals in functional status scores in patients who were treated by the clinician in a 12 month period.<br>Clinic Level: The average of residuals in functional status scores in patients who were treated by the clinic in a 12 month period.<br>Further details are provided in the Measure Testing Form  | Patient Level: The residual score for the individual patients with general orthopaedic impairments is derived by applying the statistical risk adjustment model described in S.14 and S.15 and applying steps 1-5 as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1 j of this application. Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for general orthopaedic impairment. Average scores are calculated using data from all clinicians, however performance is evaluated only for those clinicians that had a minimum of 10 patients in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used is standard threshold of 40 patients/clinician regardless of clinic size, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18. Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for general orthopaedic impairment. Average scores are calculated using data from all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10 patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used is standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18. Both comparative benchmark getimates. In 2011-2013, FOTO used is stability of the benchmarking estimates. In 2011-2013, FOTO used is stability of the b |
| Denominator<br>Statement<br>Denominator<br>Details | <ul> <li>All patients 14 years and older with a neck impairment who have initiated an episode of care and completed the neck functional status PROM at admission and discharge.</li> <li>All patients 14 years and older with a neck impairment who have an episode of care and completed the neck functional status PROM</li> </ul>  | All patients 14 years and older with general orthopaedic<br>impairments who have initiated rehabilitation treatment and<br>completed the FOTO (general orthopaedic) PROM.<br>The established ICD-9-CM codes for the neck, cranium, mandible,<br>thoracic spine, ribs or other general orthopedic impairment include  |
|  | at admission and discharge.<br>An episode is considered completed and the patient discharged<br>when the clinician ceases to provide care for the neck impairment   | Diagnosis specific to the cervical spine:<br>333.83, 353.2, 716.58, 718.88, 718.98, 719.08, 719.18, 719.48,<br>719.58, 719.68, 721.0, 721.1, 722.0, 722.4, 722.71, 722.81, 722.91,   |

|                      | 3461 Functional Status Change for Patients with Neck Impairments  | 0428 Functional Status Change for Patients with General   |
|----------------------|---|---|
|                      | as signified by a discharge from that care. For clinicians who use<br>the FOTO system, the completion of an episode is formally signified<br>when the clinician or clinician's representative completes a short<br>process called a FOTO Staff Discharge which includes completing<br>data fields for the date of the last care visit and the total number of<br>visits used in the episode of care.<br>The ICD-10-CM codes relevant for this measure are included below.<br>G54.2; G54.8; G55; G89.29; M05.69; M05.79; M05.89; M06.08;<br>M06.28; M06.38; M06.88; M08.08; M08.1; M08.28; M08.48;<br>M08.88; M08.98; M11.08; M11.18; M11.28; M11.88; M12.08;<br>M12.18; M12.28; M12.48; M12.53; M12.48; M13.0; M13.88;<br>M14.68; M14.88; M15.0; M15.3; M15.4; M15.8; M15.9; M19.90;<br>M19.91; M19.92; M19.93; N24.08; M24.10; M24.28; M24.80;<br>M24.9; M25.28; M25.30; M25.50; M25.60; M25.78; M25.80;<br>M25.9; M32.10; M32.19; M32.8; M32.9; M40.03; M40.12; M40.13;<br>M40.202; M40.203; M40.292; M40.293; M41.112; M41.113;<br>M41.122; M41.33; M41.22; M41.23; M41.20; M42.01; M42.02; M42.03;<br>M42.11; M43.13; M43.21; M43.22; M43.20; M43.03; M43.31;<br>M43.512; M43.13; M43.21; M43.22; M43.20; M43.03; M43.41;<br>M43.52; M43.53; M46.52; M46.02; M46.03; M46.21; M46.22;<br>M46.32; M46.31; M46.32; M46.33; M46.41; M44.82; M46.43;<br>M46.51; M46.52; M46.53; M46.61; M46.82; M46.83; M46.91;<br>M46.92; M46.93; M47.11; M47.13; M47.21; M47.21; M47.22;<br>M47.23; M47.811; M47.812; M47.813; M47.891; M47.892;<br>M47.893; M48.01; M48.02; M48.03; M48.11; M48.13;<br>M48.21; M48.22; M48.23; M48.33; M48.32; M48.33; M48.41;<br>M48.42; M48.42; M48.43; M48.52; M48.52; M48.53; M48.83; M48.82;<br>M48.83; M49.81; M48.23; M48.33; M48.32; M48.33; M48.42;<br>M48.83; M49.81; M48.23; M48.32; M48.33; M48.42; M48.82;<br>M48.82; M48.33; M48.52; M50.03; M50.00; M50.02;<br>M50.0221; M50.022; M50.023; M50.03; M50.01; M50.020;<br>M50.0221; M50.022; M50.023; M50.03; M50.03; M50.02; M50.020;<br>M50.0221; M50.022; M50.023; M50.03; M50.03; M50.02; M50.202;<br>M50.0221; M50.022; M50.233; M50.03; M50.03; M50.020;<br>M50.021; M50.222; M50.233; M50.33; M50.80; M50.81; M50.820;<br>M50.821; M50.322; M50.32 | Orthopaedic impairments           *723, 730.08, 730.09, 730.18, 739.1, 741.01, 741.91, 754.1, *805.0, *805.1, *806.0, *806.1, 847.0, *952.0, 953.0           * Use of an asterisk is to include all codes in the category           Diagnosis specific to the thoracic spine:           333, 721.2, 721.41, 722.41, 722.43, 730.08, 730.09, 730.18, 739.2, 741.02, 741.92, 805.2, 805.3, *806.7, *806.3, 847.1, *952.1, 953.1           * Use of an asterisk is to include all codes in the category           Diagnosis specific to the Cranium and Mandible           307.81, *346, *350.2, *351, *524.6, 754.0, 784.0, *830, 848.1           * Use of an asterisk is to include all codes in the category           Diagnosis specific to the Ribs           733.6, 739.8, 756.2, 756.3, *786.5, *807.0, *807.1, 807.2, 807.3, 839.61, 848.3, *848.4, 922.1, 922.3           * Use of an asterisk is to include all codes in the category           Diagnosis not specific to the cervical or thoracic spine, cranium/mandible or ribs, but effect the function of the cervical or thoracic spine, cranium/mandible, ribs or other general impairment:           338.29, 353.0, 353.8, 710.0, 711.98, 714.0, 715.09, 715.18, 715.19, 715.28, 715.38, 715.89, 715.98, 716.98, 716.99, 718.69, 718.08, 718.99, 718.9, 720.0, 720.9, *721.9, 722.2, 722.6, 724.00, 724.09, 724.08, 724.9, 724.9, 728.2, 728.87, 728.87, 730.19, 733.0, 733.13, 733.90, *737, 754.2, 756.19, 759.79, 730.19, 732.0, *733.0, 733.13, 733.90, *737, 754.2, 756.19, 759.79, 730.19, 732.0, *733.0, 733.13, 733.90, *737, 754.2, 756.19, 759.79, 731.9, 731.9, 733.0, 733.13, 733.90, *737, 754.2, 756.19, 759.70, *19.79, 724.09, 724.08, 748.9, *731, *59.4, 754.9, 755. |
| Exclusions           | Patients who are not being treated for a neck impairment. Patients who are less than 14 years of age.   | Patients who are not being treated for a General orthopaedic<br>impairment<br><14 years of age  |
| Exclusion<br>Details | N/A   | Patients who are not being treated for a General orthopaedic<br>impairment<br><14 years of age  |
| Risk<br>Adjustment   | Statistical Risk Model  | Statistical Risk Model  |
| Stratification       | The methods used to develop the FOTO risk-adjustment neck<br>model were the same as the methods described in detail in a<br>recent publication by Deutscher et at, 2018 [Deutscher D, Werneke<br>MW, Hayes D, et al. Impact of Risk-Adjustment on Provider Ranking<br>for Patients With Low Back Pain Receiving Physical Therapy. J<br>Orthop Sports Phys Ther. 2018;1-35.] Briefly, we used data from<br>adult patients with neck pain treated in outpatient physical therapy<br>clinics during 2016, that had complete outcomes data at admission<br>and discharge, to develop the risk-adjustment model. The data<br>included the following patient factors that could be evaluated for<br>inclusion in a model for risk-adjustment: FS at admission<br>(continuous); age (continuous); sex (male/female); acuity as<br>number of days from onset of the treated condition (6 categories);<br>type of payer (10 categories); number of related surgeries (4<br>categories); exercise history (3 categories); use of medication at<br>intake for the treatment of LBP (yes/no); previous treatment for  | Risk adjusted – not stratified  |

|            | 3461 Functional Status Change for Patients with Neck Impairments   | 0428 Functional Status Change for Patients with General<br>Orthopaedic Impairments   |
|------------|--|--|
|            | LBP (yes/no); treatment post-surgery (lumbar fusion, laminectomy   |  |
|            | or other); and 31 comorbidities.   |  |
| T          | Please see Measure Testing Form section 2b3 for more details.  |  |
| Type Score | Continuous variable, e.g. average<br>A Residual score is defined as an actual change score minus the   | Continuous variable, e.g. average STEPS TAKEN TO PRODUCE THIS MEASURE:   |
| Algorithm  | risk-adjusted predicted change score. The Residual(s) are calculated at three levels:  | Definitions:<br>Patient's Functional Status Score. A functional status score is  |
|            | <ul> <li>Patient Level: The residual Neck FS Change score for the individual patient.</li> <li>Individual Clinician Level: The average of residuals for change in Neck FS scores in patients who were treated by a clinician in a 12-month time period.</li> <li>Clinic Level: The average of residuals for change in Neck FS</li> </ul> | produced when the patient completes the FOTO (general<br>orthopaedic) PROM administered by internet or a paper and pencil<br>survey. The functional status score is continuous and linear. Scores<br>range from 0 (low function) to 100 (high function). The survey is<br>standardized, and the scores are validated for the measurement of<br>function for this population.   |
|            | scores in patients who were treated within a clinic in a 12-month time period.   | Patient's Functional Status Change Score. A functional status<br>change score is calculated by subtracting the Patient's Functional<br>Status Score at Admission from the Patient's Functional Status<br>Score at Discharge.   |
|            |  | Predicted Functional Status Change Score. Functional Status Change<br>Scores for patients are risk adjusted using multiple linear regression<br>methods that accounted for the following independent variables:<br>Patient's Functional Status Score at Admission, patient age,<br>symptom acuity, surgical history, gender, specific co morbidities,<br>payer type, exercise history, use of medication for the condition,<br>and previous treatment for the condition. The Patient's Functional<br>Status Change Score is the dependent variable. The statistical  |
|            |  | regression produces a Risk-Adjusted Predicted Functional Status<br>Change Score.<br>Risk-adjusted Functional Status Change Residual Score. The   |
|            |  | difference between the actual change and predicted change scores<br>(after risk adjustment) is the residual score and should be<br>interpreted as the unit of functional status change different than<br>predicted given the risk-adjustment variables of the patient being<br>treated. As such, the risk-adjusted residual change score represents  |
|            |  | risk-adjusted change corrected for patient characteristics. Risk-<br>adjusted residual change scores of zero (0) or greater (>0) should<br>be interpreted as functional status change scores that were<br>predicted or better than predicted given the risk-adjustment<br>variables of the patient, and risk-adjusted residual change scores<br>less than zero (<0) should be interpreted as functional status<br>change scores that were less than predicted given the risk-<br>adjustment variables of the patient. Aggregated risk-adjusted<br>residual scores allow meaningful comparisons amongst clinicians of<br>clinics.<br>STEPS: |
|            |  | First, the patient completes FOTO (general orthopaedic) PROM at<br>Admission, which generates the Patient's Functional Status Score a<br>Admission.<br>Second, patient completes FOTO FOTO (general orthopaedic)   |
|            |  | PROM at or near Discharge, which generates the Patient's Functional Status Score at Discharge  |
|            |  | Third, the Patient's Functional Status Change Score (raw, non-risk-<br>adjusted) is generated  |
|            |  | <ul> <li>Fourth, a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation</li> <li>Fifth, a Functional Status Change Residual Score after risk adjustment is generated for each patient.</li> </ul>   |
|            |  | Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a  |
|            |  | minimum of 10 patients/therapist per year for small clinics or 40  |

minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance.STEPS TAKEN TO PRODUCE THIS MEASURE:

## Definitions:

|  | Patient's Functional Status Score. A functional status score is<br>produced when the patient completes the FOTO (general<br>orthopaedic) PROM administered by internet or a paper and pencil<br>survey. The functional status score is continuous and linear. Scores<br>range from 0 (low function) to 100 (high function). The survey is<br>standardized, and the scores are validated for the measurement of<br>function for this population. |  |
|--|---|--|
|  | Patient's Functional Status Change Score. A functional status<br>change score is calculated by subtracting the Patient's Functional<br>Status Score at Admission from the Patient's Functional Status<br>Score at Discharge.  |  |
|  | Predicted Functional Status Change Score. Functional Status Change<br>Scores for patients are risk adjusted using multiple linear regression  |  |

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|--|---|
|  | methods that include the following independent variables: Patient's<br>Functional Status Score at Admission, patient age, symptom acuity,<br>surgical history, gender, number of co morbidities, payer type, and<br>level of fear-avoidance. The Patient's Functional Status Change<br>Score is the dependent variable. The statistical regression produces<br>a Risk-Adjusted Predicted Functional Status Change Score.<br>Risk-adjusted Functional Status Change Residual Score. The<br>difference between the actual change and predicted change scores<br>(after risk adjustment) is the residual score and should be<br>interpreted as the unit of functional status change different than<br>predicted given the risk-adjustment variables of the patient being<br>treated. As such, the risk-adjusted residual change score represents<br>risk-adjusted change corrected for patient characteristics. Risk-<br>adjusted residual change scores of zero (0) or greater (>0) should<br>be interpreted as functional status change scores that were<br>predicted or better than predicted given the risk-adjustment<br>variables of the patient, and risk-adjusted residual change scores<br>less than zero (<0) should be interpreted as functional status<br>change scores that were less than predicted given the risk-<br>adjustment variables of the patient. Aggregated risk-adjusted<br>residual scores allow meaningful comparisons amongst clinicians or<br>clinics. |
|  | <ul> <li>STEPS:</li> <li>First, the patient completes FOTO (general orthopaedic) PROM at Admission, which generates the Patient's Functional Status Score at Admission.</li> <li>Second, patient completes FOTO FOTO (general orthopaedic) PROM at or near Discharge, which generates the Patient's</li> </ul>  |
|  | Functional Status Score at Discharge<br>Third, the Patient's Functional Status Change Score (raw, non-risk-<br>adjusted) is generated<br>Fourth, a Risk-adjusted Predicted Functional Status Change Score is<br>generated using a regression equation<br>Fifth, a Functional Status Change Residual Score after risk<br>adjustment is generated for each patient.   |
|  | Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance.   |

# Comparison of NQF 0005, 0006, 0166, 0258, 0517, 1741, 2548, and 2967

| companson   | comparison of NQF 0005, 0006, 0166, 0258, 0517, 1741, 2548, and 2967 |  |   |  |
|-------------|--|--|---|--|
|             | 0005 CAHPS Clinician & Group<br>Surveys (CG-CAHPS) Version 3.0       | 0006 Consumer Assessment of<br>Healthcare Providers and Systems              | 0166 HCAHPS (Hospital<br>Consumer Assessment of             | 0258 Consumer Assessment<br>of Healthcare Providers and  |
|             | -Adult, Child  | (CAHPS) Health Plan Survey, Version  | Healthcare Providers and                                    | Systems (CAHPS) In-Center                                |
|             |  | 5.0 (Medicaid and Commercial)  | Systems) Survey   | Hemodialysis Survey (ICH                                 |
|             |  |  |   | CAHPS)   |
| Steward     | Agency for Healthcare Research<br>and Quality                        | Agency for Healthcare Research and<br>Quality                                | Centers for Medicare & Medicaid Services                    | Centers for Medicare &<br>Medicaid Services              |
| Description | The Consumer Assessment of   | The CAHPS Health Plan Survey is a  | HCAHPS (NQF 0166) is a 29-                                  | This is a survey-based                                   |
|             | Healthcare Providers and<br>Systems Clinician & Group                | survey that asks health plan enrollees to report about their care and health | item survey instrument that                                 | measure and one of the family of surveys called          |
|             | Survey 3.0 (CG-CAHPS) is a   | plan experiences as well as the quality                                      | produces 10 publicly reported measures:                     | CAHPS Surveys (Consumer                                  |
|             | standardized survey instrument                                       | of care received from physicians. HP-  | 6 multi-item measures                                       | Assessment of Healthcare                                 |
|             | that asks patients to report on                                      | CAHPS Version 4.0 was endorsed by  | (communication with   | Providers and Systems)that                               |
|             | their experiences with primary<br>or specialty care received from    | NQF in July 2007 (NQF 0006) and Version 5.0 received maintenance             | doctors, communication with                                 | are focused on patient experience. The                   |
|             | providers and their staff in   | endorsement in January 2015. The   | nurses, responsiveness of<br>hospital staff, communication  | questionnaire asks End Stage                             |
|             | ambulatory care settings over  | survey is part of the CAHPS family of  | about medicines, discharge                                  | Renal Disease (ESRD) patients                            |
|             | the preceding 6 months.  | patient experience surveys and is  | information and care  | receiving in-center                                      |
|             | The CG-CAHPS 3.0 survey can be used in both primary care and         | available in the public domain at<br>https://www.ahrq.gov/cahps/surveys-     | transition); and  | hemodialysis care about the services and quality of care |
|             | specialty care settings. The   | guidance/hp/index.html   | 4 single-item measures<br>(cleanliness of the hospital      | that they experience. Patients                           |
|             | adult survey is administered to                                      | The survey is designed to be   | environment, quietness of                                   | assess their dialysis providers,                         |
|             | patients aged 18 and over. The child survey is administered to       | administered to includes individuals<br>(18 and older for the Adult version; | the hospital environment,                                   | including nephrologists and medical and non-medical      |
|             | the parents or guardians of  | parents or guardians of children aged  | overall rating of the hospital,                             | staff, the quality of dialysis                           |
|             | pediatric patients under the age                                     | 0-17 for the Child version) who have   | and recommendation of hospital).                            | care they receive, and                                   |
|             | of 18. Patients who had at least                                     | been enrolled in a health plan for a   | Note: The HCAHPS Survey                                     | information sharing about their disease. The survey is   |
|             | one visit to a selected provider during the past 6 months are        | specified period (6 months or longer for Medicaid version, 12 months or      | originally included three                                   | conducted twice a year, in the                           |
|             | eligible to be surveyed.   | longer for Commercial version) with  | items about pain which                                      | spring and fall with adult in-                           |
|             | CG-CAHPS Survey Version 1.0  | no more than one 30-day break in   | formed a composite measure, Pain Management.                | center hemodialysis patients.                            |
|             | was endorsed by NQF in July  | enrollment.  | CMS discontinued publicly                                   | Publicly-reported measures focus on the proportion of    |
|             | 2007 (NQF 0005) and version<br>2.0 received maintenance              | The CAHPS Adult Health Plan Survey has 39 items, and the CAHPS Child         | reporting this measure in July                              | survey respondents at each                               |
|             | endorsement in early 2015.   | Health Plan Survey has 41 items. Ten   | 2018. In January 2018, CMS                                  | facility who choose the most                             |
|             | Version 3.0 was released in July                                     | of the adult survey items and 11 of  | replaced the original HCAHPS<br>pain items with three items | favorable responses.<br>Three multi-item measures:       |
|             | 2015. The development of the survey is through the CAHPS             | the child survey items are used to form 4 composite measures. Each           | that asked about  | a. M1: Nephrologists'                                    |
|             | Consortium and sponsored by  | survey also has 4 single-item rating   | communication about pain.                                   | Communication and Caring                                 |
|             | the Agency for Healthcare  | measures. The aspect of quality  | In compliance with the Substance Use-Disorder               | (NCC)  |
|             | Research and Quality. The survey is part of the CAHPS                | assessed by each measure is<br>described below:                              | Prevention that Promotes                                    | b. M2: Quality of  |
|             | family of patient experience   | Measure 1: Getting Needed Care (2  | Opioid Recovery and   | Dialysis Center Care and<br>Operations (QDCCO)           |
|             | surveys and is available at  | items)   | Treatment (SUPPORT) for                                     | c. M3: Providing   |
|             | https://cahps.ahrq.gov/surveys-<br>guidance/cg/about/index.html      | Measure 2: Getting Care Quickly (2   | Patients and Communities<br>Act (Pub. L. 115-271) of 2018   | Information to Patients (PIP)                            |
|             | The Adult CG-CAHPS Survey 3.0  | items)   | (Section 6104), CMS will                                    | Three Global items:                                      |
|             | has 31 questions including one                                       | Measure 3: How Well Doctors<br>Communicate (4 items in Adult survey          | remove the new  | a. M4: Rating of the<br>nephrologist                     |
|             | overall rating of the provider                                       | & 5 items in Child survey)   | communication about pain items from the HCAHPS              | b. M5: Rating of dialysis                                |
|             | and 13 questions used to create these four multi-item composite      | Measure 4: Health Plan Information   | Survey beginning with                                       | center staff   |
|             | measures of care or services   | and Customer Service (2 items)   | October 2019 discharges.                                    | c. M6: Rating of the                                     |
|             | provided:  | Measure 5: How People Rated Their<br>Personal Doctor (1 item)                |   | dialysis facility  |
|             | 1. Getting Timely<br>Appointments, Care, and                         | Measure 6: How People Rated Their  |   | The first three measures are created from six or more    |
|             | Information (3 items)  | Specialist (1 item)  |   | questions from the survey                                |
|             | 2. How Well Providers  | Measure 7: How People Rated Their  |   | that are reported as one                                 |
|             | Communicate With Patients (4   | Health Care (1 item)   |   | measure score. The three global items are single-item    |
|             | items)   | Measure 8: How People Rated Their<br>Health Plan (1 item)                    |   | measures using a scale of 0 to                           |
|             | 3. Helpful, Courteous, and Respectful Office Staff (2 items)         |  |   | 10 to report the respondent's                            |
|             | 4. Providers' Use of   |  |   | assessment.  |
|             | Information to Coordinate  |  |   | The results are reported on<br>Dialysis Facility Compare |
|             | Patient Care (3 items)   |  |   | (DFC) on the Medicare.gov                                |
|             | The Child CG-CAHPS Survey 3.0  |  |   | wehsite  |

|      | <ul> <li>The Child CG-CAHPS Survey 3.0<br/>has 39 questions including one<br/>overall rating of the provider<br/>and 12 questions used to create<br/>these four multi-item composite<br/>measures of care or services<br/>provided: <ol> <li>Getting Timely</li> <li>Getting Timely</li> </ol> </li> <li>Appointments, Care, and<br/>Information (3 items)</li> <li>How Well Providers</li> <li>Communicate With Patients (4<br/>items)</li> <li>Helpful, Courteous, and<br/>Respectful Office Staff (2 items)</li> <li>Providers' Use of<br/>Information to Coordinate<br/>Patient Care (2 items)</li> </ul> |                 |         | website.        |
|------|---|-----------------|---------|-----------------|
| Туре | Outcome: PRO-PM   | Outcome: PRO-PM | Outcome | Outcome: PRO-PM |

## NATIONAL QUALITY FORUM

|                                   | 0005 CAHPS Clinician & Group  | 0006 Consumer Assessment of   | 0166 HCAHPS (Hospital   | 0258 Consumer Assessment   |
|-----------------------------------|---|---|---|--|
|                                   | Surveys (CG-CAHPS) Version 3.0<br>-Adult, Child   | Healthcare Providers and Systems<br>(CAHPS) Health Plan Survey, Version<br>5.0 (Medicaid and Commercial)  | Consumer Assessment of<br>Healthcare Providers and<br>Systems) Survey   | of Healthcare Providers and<br>Systems (CAHPS) In-Center<br>Hemodialysis Survey (ICH<br>CAHPS)   |
| Data Source<br>Level              | Instrument-Based Data<br>Clinician: Group/Practice  | Instrument-Based Data<br>Health Plan  | Instrument-Based Data<br>Facility   | Instrument-Based Data<br>Facility, Other, Population:<br>Regional and State  |
| Setting<br>Numerator<br>Statement | Outpatient Services<br>The CG-CAHPS Survey item and<br>composites are often reported<br>using a top box scoring method.<br>The top box score refers to the<br>percentage of patients whose<br>responses indicated that they<br>"always" received the desired<br>care or service for a given<br>measure.<br>The top box numerator for the<br>Overall Rating of Provider is the<br>number of respondents who<br>answered 9 or 10 for the item,<br>with 10 indicating "Best<br>provider possible".<br>For more information on the<br>calculation of reporting<br>measures, see | Outpatient Services<br>We recommend that CAHPS Health<br>Plan Survey items and composites be<br>calculated using a top box scoring<br>method. The top box score refers to<br>the percentage of patients whose<br>responses indicated that they<br>"always" received the desired care or<br>service for a given measure. The top<br>box numerator for each of the four<br>Overall Ratings items is the number of<br>respondents who answered 9 or 10<br>for the item; with a 10 indicating the<br>"Best possible." | Inpatient/Hospital<br>The HCAHPS Survey asks<br>recently discharged patients<br>about aspects of their<br>hospital experience that they<br>are uniquely suited to<br>address. The core of the<br>survey contains 19 items that<br>ask "how often" or whether<br>patients experienced a critical<br>aspect of hospital care, rather<br>than whether they were<br>"satisfied" with their care.<br>Also included in the survey<br>are three screener items that<br>direct patients to relevant<br>questions, five items to<br>adjust for the mix of patients<br>across hospitals, and two<br>items (race and ethnicity)<br>that support Congressionally-<br>mandated reports. Hospitals<br>may include additional<br>questions after the core<br>HCAHPS items. | Post-Acute Care<br>There are a total of six ICH<br>CAHPS measures. Three of<br>them are multi-item<br>measures and three are<br>global ratings. Each measure<br>is composed of the responses<br>for all individual questions<br>included in the measure.<br>Missing data for individual<br>survey questions are not<br>included in the calculations.<br>Only data from a "completed<br>survey" is used in the<br>calculations. Each measure<br>score is at the facility level<br>and averages the proportion<br>of respondents who chose<br>each answer option for all<br>items in the measure. Each<br>global rating is be scored<br>based on the number of<br>respondents in the<br>distribution of top responses;<br>e.g., the percentage of<br>patients rating the facility a<br>"9" or "10" on a 0 to 10 scale<br>(with 10 being the best). |
| Denominator<br>Statement          | The measure's denominator is<br>the number of survey<br>respondents. The target<br>populations for the surveys are<br>patients who have had at least<br>one visit to the selected<br>provider in the target 6-month<br>time frame. This time frame is<br>also known as the look back<br>period. The sampling frame is a<br>person-level list and not a visit-<br>level list.  | The eligible population for the survey<br>includes all individuals who have been<br>enrolled in a health plan for at least 6<br>(Medicaid) or 12 (Commercial)<br>months with no more than one 30-<br>day break in enrollment.<br>Denominators will vary by item and<br>composite.   | The target population for<br>HCAHPS measures include<br>eligible adult inpatients of all<br>payer types who completed a<br>survey. HCAHPS patient<br>eligibility and exclusions are<br>defined in detail in the<br>sections that follow. A survey<br>is defined as completed if the<br>patient responded to at least<br>50% of questions applicable<br>to all patients.   | Patients receiving in-center<br>hemodialysis at sampled<br>facility for the past 3 months<br>or longer are included in the<br>sample frame.<br>The denominator for each<br>question is composed of the<br>sample members that<br>responded to the particular<br>question.<br>Proxy respondents are not<br>allowed.<br>Only complete surveys are<br>used. A complete survey is<br>defined as one where the<br>sampled patient answered at<br>least 50 percent of the<br>questions that are applicable<br>to all sample patients: Q1-<br>Q20, Q22, Q23, Q25-Q37,<br>Q39-Q41  |
| Exclusions                        | Among eligible respondents, for<br>a given item, respondents with<br>a missing response is excluded.<br>Among eligible respondents, for<br>a composite measures,<br>respondents who did not<br>answer at least one item in the<br>composite are excluded from<br>the composite measure's<br>denominator.  | <ul> <li>Individuals are excluded from the survey target population if:</li> <li>1) They were not continuously enrolled in the health plan (excepting an allowable enrollment lapse of less than 30 days).</li> <li>2) Their primary health coverage was not through the plan.</li> <li>3) Another member of his or her household had already been sampled.</li> <li>4) They had been institutionalized (put in the care of a specialized institution) or are deceased.</li> </ul>                                | There are a few categories of<br>otherwise eligible patients<br>who are excluded from the<br>HCAHPS sample frame. As<br>detailed below in sec S.9,<br>these exclusions include<br>patients excluded due to<br>state regulations, no-publicity<br>patients, and specific groups<br>of patients with an admission<br>source or discharge status<br>that results in difficulty<br>collecting patient experience<br>data through a survey<br>instrument.  | Exclusions:<br>a. Patients less than 18 years<br>of age<br>b. Patients not receiving<br>dialysis at sampled facility for<br>3 months or more<br>c. Patients who are receiving<br>hospice care<br>d. Any surveys completed by<br>a proxy (mail only mode or<br>mixed mode)<br>e. Any ineligible patients due<br>to death, institutionalization,<br>language barrier, physically or<br>mentally incapable.   |
| Risk<br>Adjustment                | Statistical Risk Model  | Statistical Risk Model  | Statistical Risk Model  |  |
| Stratification                    | CG-CAHPS users that have<br>collected data for different<br>clinical practices may decide to<br>analyze the data separately or<br>together. If practices are to be<br>analyzed together, no changes<br>to the CAHPS Analysis Program<br>are necessary. If a team decides<br>to analyze the practices<br>separately and the data file<br>contains more than one group,   | HP-CAHPS users that have collected<br>data for different groups (i.e., strata)<br>of people can analyze the data<br>separately or together. If groups are<br>analyzed together, no changes to the<br>CAHPS Analysis Program are<br>necessary.<br>Users can estimate separate case-mix<br>adjustments on two different<br>populations using the macro<br>parameter SPLITFLG = 1 in the CAHPS   |   | N/A  |

|            | 0005 CAHPS Clinician & Group<br>Surveys (CG-CAHPS) Version 3.0<br>-Adult, Child  | 0006 Consumer Assessment of<br>Healthcare Providers and Systems<br>(CAHPS) Health Plan Survey, Version<br>5.0 (Medicaid and Commercial)  | 0166 HCAHPS (Hospital<br>Consumer Assessment of<br>Healthcare Providers and<br>Systems) Survey | 0258 Consumer Assessment<br>of Healthcare Providers and<br>Systems (CAHPS) In-Center<br>Hemodialysis Survey (ICH<br>CAHPS) |
|------------|--|--|--|--|
|            | <ul> <li>it is important to set up<br/>selection criteria in the CAHPS<br/>Analysis Program or split the<br/>data set.</li> <li>Users can separate case-mix<br/>adjustments on two different<br/>subgroups using the macro<br/>parameter SPLITFLG = 1 in the<br/>CAHPS analysis program. (The<br/>default value = 0.) An example<br/>of splitting the case-mix<br/>adjustments separately on two<br/>populations is when comparing<br/>urban and rural locations.</li> </ul> | analysis program. (The default value =<br>0.) An example of splitting the case-<br>mix adjustments separately on two<br>populations is when comparing<br>Medicaid Fee-for-Service populations<br>with Medicaid Managed Care<br>populations.<br>If survey users want to combine data<br>for reporting from different sampling<br>strata, they will need to create a text<br>file that identifies the strata and<br>indicates which ones are being<br>combined and the identifier of the<br>entity obtained by combining them. |  |  |
| Type Score | Other (specify): 1.) Tob-box<br>score; 2) case-mix adjusted<br>mean score  | Other (specify): 1.) Tob-box score; 2) case-mix adjusted mean score  | Rate/Proportion  | Rate/Proportion  |

|             | 0517: CAHPS Home Health Care<br>Survey (experience with care)   | 1741: Consumer Assessment of<br>Healthcare Providers and Systems<br>(CAHPS) Surgical Care Survey Version<br>2.0  | 2548: Child Hospital<br>Consumer Assessment of<br>Healthcare Providers and<br>Systems (Child HCAHPS)<br>Survey   | 2967: CAHPS Home- and<br>Community-Based Services<br>Measures  |
|-------------|---|--|--|--|
| Steward     | Centers for Medicare &<br>Medicaid Services   | American College of Surgeons, Division of Advocacy and Health Policy   | Agency for Healthcare<br>Research and Quality  | Centers for Medicare &<br>Medicaid Services  |
| Description | The Consumer Assessment of<br>Healthcare Providers and<br>Systems (CAHPS®) Home Health<br>Care Survey, also referred as<br>the "CAHPS Home Health Care<br>Survey" or "Home Health<br>CAHPS" or "HHCAHPS" is a<br>standardized survey instrument<br>and data collection<br>methodology for measuring<br>home health patients<br>'perspectives on their home<br>health care in Medicare-<br>certified home health care<br>agencies. AHRQ and CMS<br>participated in the development<br>of the Home Health CAHPS to<br>measure the experiences of<br>those receiving home health<br>care with these three goals in<br>mind:<br>(1) To produce comparable data<br>on patients' perspectives on<br>care that allow objective and<br>meaningful comparisons<br>between home health agencies<br>on domains that are important<br>to consumers,<br>(2) To create incentives for<br>agencies to improve their<br>quality of care through public<br>reporting of survey results, and<br>(3) To enhance public<br>accountability in health care by<br>increasing the transparency of<br>the quality of care provided in<br>return for public investment. | The following 6 composites and 1<br>single-item measure are generated<br>from the Consumer Assessment of<br>Healthcare Providers and Systems<br>(CAHPS®) Surgical Care Survey. Each<br>measure is used to assess a particular<br>domain of surgical care quality from<br>the patient's perspective.<br>Measure 1: Information to help you<br>prepare for surgery (2 items)<br>Measure 2: How well surgeon<br>communicates with patients before<br>surgery (4 items)<br>Measure 3: Surgeon's attentiveness on<br>day of surgery (2 items)<br>Measure 4: Information to help you<br>recover from surgery (4 items)<br>Measure 5: How well surgeon<br>communicates with patients after<br>surgery (4 items)<br>Measure 5: How well surgeon<br>communicates with patients after<br>surgery (4 items)<br>Measure 6: Helpful, courteous, and<br>respectful staff at surgeon's office (2<br>items)<br>Measure 7: Rating of surgeon (1 item)<br>The Consumer Assessment of<br>Healthcare Providers and Systems<br>(CAHPS) Surgical Care Survey (S-<br>CAHPS) is a standardized survey<br>instrument that asks patients about<br>their experience before, during and<br>after surgery received from providers<br>and their staff in both inpatient and<br>outpatient (or ambulatory) settings. S-<br>CAHPS is administered to adult<br>patients (age 18 and over) that had an<br>operation as defined by CPT codes (90<br>day globals) within 3 to 6 months prior<br>to the start of the survey.<br>The S-CAHPS expands on the CAHPS,<br>which focuses on primary and specialty<br>medical care, by incorporating<br>domains that are relevant to surgical<br>care, such as sufficient communication<br>to obtain informed consent,<br>anesthesia care, and post-operative<br>follow-up and care coordination. Other<br>questions ask patients to report on<br>their experiences with office staff<br>during visits and to rate the surgeon.<br>The S-CAHPS survey is sponsored by<br>the American College of Surgeons<br>(ACS). The survey was approved as a | Top Box Score Calculation:<br>1) Target Population:<br>Patients that had a non-<br>emergency surgery within 3<br>to 6 months prior to the<br>start of the survey.<br>2) Exclusions = Patients who<br>did not answer at least one<br>item of the composite<br>measures or rating item.<br>3) Screener items. Example:<br>Patients who answered "No"<br>to the first item indicating<br>that the patient had surgery<br>performed on the date listed<br>by the surgeon named.<br>4) Top-box scores (percent<br>with highest rating) are<br>computed for each item<br>5) Top-box scores are<br>averaged across the items<br>within each composite,<br>weighting each item equally.<br>Note that for users who<br>want to case-mix adjust their<br>scores, case-mix adjust their<br>scores, case-mix adjust their<br>scores, case-mix adjustment<br>can be done using the CAHPS<br>macro and the adjustment is<br>made prior to the calculation<br>of the total score.<br>Case-mix Adjusted Scores<br>Case-mix Adjusted Scores<br>Case-mix adjustment is done<br>via linear regression. The<br>CAHPS Consortium<br>recommends self-reported<br>overall health, age, and<br>education as adjusters.<br>These items are printed in<br>the "About You" section of<br>the survey, questions 38-45.<br>The steps for user-defined<br>calculations of risk-adjusted<br>scores can be found in<br>Instructions for Analyzing<br>Data from CAHPS® Surveys:<br>Using the CAHPS Analysis<br>Program Version 4.1<br>available at<br>https://cahps.ahrq.gov/surv<br>eys-guidance/survey4.0-<br>docs/2015-Instructions-for-<br>Analyzing-Data-from-CAHPS-<br>Surveys.pdf. | CAHPS Home- and<br>Community-Based Services<br>measures derive from a cross<br>disability survey to elicit<br>feedback from adult Medicaid<br>beneficiaries receiving home<br>and community based<br>services (HCBS) about the<br>quality of the long-term<br>services and supports they<br>receive in the community and<br>delivered to them under the<br>auspices of a state Medicaid<br>HCBS program. The unit of<br>analysis is the Medicaid HCBS<br>program, and the accountable<br>entity is the operating entity<br>responsible for managing and<br>overseeing a specific HCBS<br>program within a given state.<br>(For additional information on<br>the accountable entity, see<br>Measures Testing form item<br>#1.5 below.)<br>The measures consist of<br>seven scale measures, 6<br>global rating and<br>recommendation measures,<br>and 6 individual measures:<br>Scale Measures<br>1. Staff are reliable and<br>helpful –top-box score<br>composed of 6 survey items<br>2. Staff listen and<br>communicate well –top-box<br>score composed of 11 survey<br>items<br>3. Case manager is helpful -<br>top-box score composed of 3<br>survey items<br>4. Choosing the services that<br>matter to you - top-box score<br>composed of 2 survey items<br>5. Transportation to medical<br>appointments - top-box score<br>composed of 3 survey items<br>5. Transportation to medical<br>appointments - top-box score<br>composed of 3 survey items<br>6. Personal safety and respect<br>- top-box score composed of<br>3 survey items<br>7. Planning your time and<br>activities top-box score<br>composed of 6 survey items<br>6. Personal safety and respect<br>- top-box score composed of<br>3 survey items<br>7. Planning your time and<br>activities top-box score<br>composed of 6 survey items<br>6. Personal safety and respect<br>- top-box score composed of<br>3 survey items<br>7. Planning Your time and<br>activities top-box score<br>composed of 6 survey items<br>7. Planning Measures |

| 0517: CAHPS Home Health Care<br>Survey (experience with care) | 1741: Consumer Assessment of<br>Healthcare Providers and Systems                 | 2548: Child Hospital<br>Consumer Assessment of  | 2967: CAHPS Home- and<br>Community-Based Services            |
|---|--|---|--|
|   | (CAHPS) Surgical Care Survey Version<br>2.0                                      | Healthcare Providers and Systems (Child HCAHPS) | Measures   |
|   | CAHPS product in early 2010 and the  | Survey  | 8. Global rating of personal                                 |
|   | Agency for Healthcare Research and<br>Quality (AHRQ) released version 1.0 of     |   | assistance and behavioral health staff- top-box score on     |
|   | the survey in the spring of 2010. The S-   |   | a 0-10 scale   |
|   | CAHPS survey Version 2.0 was<br>subsequently endorsed by NQF in June             |   | 9. Global rating of  |
|   | 2012 (NQF 1741). The survey is part of   |   | homemaker- top-box score on<br>a 0-10 scale                  |
|   | the CAHPS family of patient experience<br>surveys and is available in the public |   | 10. Global rating of case                                    |
|   | domain at  |   | manager- top-box score on a 0-10 scale                       |
|   | https://cahps.ahrq.gov/surveys-  |   | Recommendations Measures                                     |
|   | guidance/cg/about/index.html.<br>Surgeons may customize the S-CAHPS              |   | 11. Would recommend  |
|   | survey by adding survey items that are   |   | personal<br>assistance/behavioral health                     |
|   | specific to their patients and practice.<br>However, the core survey must be     |   | staff to family and friends –                                |
|   | used in its entirety in order to be  |   | top-box score on a 1-4 scale<br>(Definitely no, Probably no, |
|   | comparable with other S-CAHPS data.<br>The S-CAHPS survey is available in        |   | Probably yes, Definitely yes)                                |
|   | English and Spanish.   |   | 12. Would recommend  |
|   | The 6 composite measures are made up of the following items:                     |   | homemaker to family and<br>friends — top-box score on a      |
|   | The 1 single item measure (Measure 7)  |   | 1-4 scale (Definitely no,                                    |
|   | is (Q35): Using any number from 0 to   |   | Probably no, Probably yes,<br>Definitely yes)                |
|   | 10, where 0 is the worst surgeon possible and 10 is the best surgeon             |   | 13. Would recommend case                                     |
|   | possible, what number would you use to rate all your care from this surgeon?     |   | manager to family and<br>friends– top-box score on a 1-      |
|   | Measure 1: Information to help you   |   | 4 scale (Definitely no,                                      |
|   | prepare for surgery (2 items)  |   | Probably no, Probably yes,<br>Definitely yes)                |
|   | Q3. Before your surgery, did anyone in this surgeon's office give you all the    |   | Unmet Needs Measures   |
|   | information you needed about your  |   | 14. Unmet need in  |
|   | surgery?   |   | dressing/bathing due to lack<br>of help-top-box score on a   |
|   | Q4. Before your surgery, did anyone in this surgeon's office give you easy to    |   | Yes, No scale  |
|   | understand instructions about getting  |   | 15. Unmet need in meal                                       |
|   | ready for your surgery?<br>Measure 2: How well surgeon                           |   | preparation/eating due to<br>lack of help– top-box score on  |
|   | communicates with patients before  |   | a Yes, No scale  |
|   | surgery (4 items)<br>Q9. During your office visits before                        |   | 16. Unmet need in medication administration due to lack of   |
|   | your surgery, did this surgeon listen  |   | help-top-box score on a Yes,                                 |
|   | carefully to you?<br>Q10. During your office visits before                       |   | No scale<br>17. Unmet need in toileting                      |
|   | your surgery, did this surgeon spend   |   | due to lack of help-top-box                                  |
|   | enough time with you?  |   | score on a Yes, No scale<br>18. Unmet need with              |
|   | Q11. During your office visits before your surgery, did this surgeon             |   | household tasks due to lack of                               |
|   | encourage you to ask questions?  |   | help– top-box score on a Yes,<br>No scale                    |
|   | Q12. During your office visits before your surgery, did this surgeon show        |   | Physical Safety Measure                                      |
|   | respect for what you had to say?   |   | 19. Hit or hurt by staff – top-                              |
|   | Measure 3: Surgeon's attentiveness on day of surgery (2 items)                   |   | box score on a Yes, No scale                                 |
|   | Q15. After you arrived at the hospital   |   |  |
|   | or surgical facility, did this surgeon visit you before your surgery?            |   |  |
|   | Q17. Before your surgery?  |   |  |
|   | surgical facility, did this surgeon  |   |  |
|   | discuss the outcome of your surgery with you?                                    |   |  |
|   | Measure 4: Information to help you   |   |  |
|   | recover from surgery (4 items)<br>Q26. Did anyone in this surgeon's              |   |  |
|   | office explain what to expect during   |   |  |
|   | your recovery period?<br>Q27. Did anyone in this surgeon's                       |   |  |
|   | office warn you about any signs or   |   |  |
|   | symptoms that would need immediate medical attention during your recovery        |   |  |
|   | period?  |   |  |
|   | Q28. Did anyone in this surgeon's  |   |  |
|   | office give you easy to understand<br>instructions about what to do during       |   |  |
|   | your recovery period?  |   |  |
|   | Q29. Did this surgeon make sure you were physically comfortable or had           |   |  |
|   | enough pain relief after you left the  |   |  |

|   | AHPS Home Health Care<br>experience with care)   | 1741: Consumer Assessment of<br>Healthcare Providers and Systems<br>(CAHPS) Surgical Care Survey Version<br>2.0  | 2548: Child Hospital<br>Consumer Assessment of<br>Healthcare Providers and<br>Systems (Child HCAHPS)<br>Survey  | 2967: CAHPS Home- and<br>Community-Based Services<br>Measures   |
|---|--|--|---|---|
| Data SourceInstrumeLevelFacilitySettingHome CaNumeratorThe numStatementThe numstatementthat eacencompall questparticuladata forquestionthe calcua completscores aof thoseanswer ofEach globased onrespondof top repercentahome hea 10, whquality re | e: PRO-PM<br>ent-Based Data<br>are<br>herator statement is<br>h measure<br>asses the responses for<br>ions that make up the<br>ar measure. Missing<br>individual survey<br>is are not included in<br>ulations. Only data from<br>eted survey are used in<br>ulations. The measures<br>verages the proportion<br>responding to each<br>choice in all questions.<br>bal rating is scored<br>in the number of the<br>ents in the distribution<br>esponses, such as the<br>age of patients rating a<br>ealth agency with a 9 or<br>iere 10 is the highest<br>esponses on a scale<br>o 10.see S2. | hospital or surgical facility where you<br>had your surgery?<br>Measure 5: How well surgeon<br>communicates with patients after<br>surgery (4 items)<br>Q31. After your surgery, did this<br>surgeon listen carefully to you?<br>Q32. After your surgery, did this<br>surgeon encourage you to ask<br>questions?<br>Q34. After your surgery, did this<br>surgeon show respect for what you<br>had to say?<br>Measure 6: Helpful, courteous, and<br>respectful staff at surgeon's office (2<br>items)<br>Q36. During these visits, were clerks<br>and receptionists at this surgeon's<br>office as helpful as you thought they<br>should be?<br>Q37. During these visits, did clerks and<br>receptionists at this surgeon's<br>office as helpful as you thought they<br>should be?<br>Q37. During these visits, did clerks and<br>receptionists at this surgeon's<br>office as helpful as you thought they<br>should be?<br>Q37. During these visits, did clerks and<br>receptionists at this surgeon's office<br>treat you with courtesy and respect?<br>Outcome: PRO-PM<br>Instrument-Based Data<br>Clinician: Group/Practice<br>Inpatient/Hospital, Outpatient<br>Services, Other<br>We recommend that S-CAHPS Survey<br>items and composites be calculated<br>using a top-box scoring method. The<br>top box score refers to the percentage<br>of patients whose responses indicated<br>excellent performance for a given<br>measure. This approach is a kind of<br>categorical scoring because the<br>emphasis is on the score for a specific<br>category of responses.<br>The top box numerator for the Overall<br>Rating of Surgeon is the number of<br>respondents who answered 9 or 10 for<br>the item, with 10 indicating "Best<br>provider possible".<br>Also, for more information on the<br>calculation of reporting measures, see<br>How to Report Results of the CAHPS<br>Clinician & Group Survey, available at<br>https://cahps.ahrc.gov/surveys-<br>guidance/cg/cgkit/HowtoReportResult<br>sofCGCAHPS080610FINAL.pdf. | Outcome<br>Claims<br>Facility<br>Inpatient/Hospital<br>Top Box Score Calculation:<br>1) Target Population:<br>Patients that had a non-<br>emergency surgery within 3<br>to 6 months prior to the<br>start of the survey.<br>2) Exclusions = Patients who<br>did not answer at least one<br>item of the composite<br>measures or rating item.<br>3) Screener items. Example:<br>Patients who answered "No"<br>to the first item indicating<br>that the patient had surgery<br>performed on the date listed<br>by the surgeon named.<br>4) Top-box scores (percent<br>with highest rating) are<br>computed for each item<br>5) Top-box scores are<br>averaged across the items<br>within each composite,<br>weighting each item equally.<br>Note that for users who<br>want to case-mix adjustment<br>can be done using the CAHPS<br>macro and the adjustment is<br>made prior to the calculation<br>of the total score.<br>Case-mix Adjusted Scores<br>Case-mix Adjusted Scores<br>Case-mix adjustment is<br>made prior to the calculation<br>of the total score.<br>Case-mix adjustment is<br>made prior to the calculation<br>of the total score.<br>Case-mix adjusters.<br>These items are printed in<br>the "About You" section of<br>the survey, questions 38-45. | Outcome: PRO-PMInstrument-Based DataOtherOtherOtherOtherOtherOtherThe CAHPS Home- and<br>Community-Based Services<br>measures are created using<br>top-box scoring. This refers to<br>the percentage of<br>respondents that give the<br>most positive response.<br>Details regarding the<br>definition of the most positive<br>response are noted below.<br>HCBS service experience is<br>measured in the following<br>areas. Attached Excel Table<br>S.2b includes the specific item<br>wording for each measure<br>and the response options that<br>go into the numerator.<br>Scale Measures1. Staff are reliable and<br>helpful – average proportion<br>of respondents that gave the<br>most positive response on 6<br>survey items2. Staff listen and<br>communicate well – average<br>proportion of respondents<br>that gave the most positive<br>response on 11 survey items3. Case manager is helpful -<br>average proportion of<br>respondents that gave the<br>most positive response on 3<br>survey items3. Case manager is helpful -<br>average proportion of<br>respondents that gave the<br>most positive response on 3<br>survey items3. Case manager is helpful -<br>average proportion of<br>respondents that gave the<br>most positive response on 3<br>survey items3. Case manager is helpful -<br>average proportion of<br>respondents that gave the<br>most positive response on 2<br>survey items3. Case manager is helpful -<br>average proportion of<br>respondents that gave the<br>most positive response on 3<br>survey items3. Case manager is helpful -<br>average proportion of respondents<br>that gave the most positive<br>response on 2 survey items5. Transportation to medical<br>appointments - average |

| 0517: CAHPS Home Health Care 1741: Consumer Assessment of 2548: Child Hospital |   |   | 2967: CAHPS Home- and   |  |
|--|---|---|---|--|
| Survey (experience with care)  | Healthcare Providers and Systems<br>(CAHPS) Surgical Care Survey Version<br>2.0 | Healthcare Providers and Systems (Child HCAHPS) | Community-Based Services<br>Measures  |  |
| 0517: CAHPS Home Health Care<br>Survey (experience with care)                  | Healthcare Providers and Systems<br>(CAHPS) Surgical Care Survey Version        | Consumer Assessment of Healthcare Providers and | Community-Based Services<br>Measures7. Planning your time and<br>activities - average proportion<br>of respondents that gave the<br>most positive response on 6<br>survey itemsGlobal Rating Measures8. Global rating of personal<br>assistance and behavioral<br>health staff- average<br>proportion of respondents<br>that gave the most positive<br>response of 9 or 10 on a 0-10<br>scale9. Global rating of<br>homemaker- average<br>proportion of respondents<br>that gave the most positive<br>response of 9 or 10 on a 0-10<br> |  |
|  |   |   | <ul> <li>16. Unmet need in medication<br/>administration due to lack of<br/>help–average proportion of<br/>respondents that gave the<br/>most positive response of<br/>"No" on a 1-2 scale (Yes, No)</li> <li>17. Unmet need in toileting</li> </ul>  |  |
|  |   |   | <ul> <li>17. Unmet need in toileting<br/>due to lack of help–average<br/>proportion of respondents<br/>that gave the most positive<br/>response of "Yes" on a 1-2<br/>scale (Yes, No)</li> <li>18. Unmet need with</li> </ul>   |  |

|                          | 0517: CAHPS Home Health Care   | 1741: Consumer Assessment of   | 2548: Child Hospital  | 2967: CAHPS Home- and  |
|--------------------------|--|--|---|--|
|                          | Survey (experience with care)  | (CAHPS) Surgical Care Survey Version<br>2.0                              | Healthcare Providers and<br>Systems (Child HCAHPS)  | Measures   |
| Denominator<br>Statement | 0517: CAHPS Home Health Care<br>Survey (experience with care)         For each of the proportions<br>described in S.5 the<br>denominator is the number of<br>respondents who replied to the<br>question. | Healthcare Providers and Systems<br>(CAHPS) Surgical Care Survey Version | Consumer Assessment of<br>Healthcare Providers and<br>Systems (Child HCAHPS)<br>Survey<br>Top Box Score Calculation:<br>1) Target Population:<br>Patients that had a non-<br>emergency surgery within 3<br>to 6 months prior to the<br>start of the survey.<br>2) Exclusions = Patients who<br>did not answer at least one<br>item of the composite<br>measures or rating item.<br>3) Screener items. Example:<br>Patients who answered "No"<br>to the first item indicating<br>that the patient had surgery<br>performed on the date listed<br>by the surgeon named.<br>4) Top-box scores (percent<br>with highest rating) are<br>computed for each item<br>5) Top-box scores are<br>averaged across the items<br>within each composite,<br>weighting each item equally.<br>Note that for users who<br>want to case-mix adjust their<br>scores, case-mix adjust their<br>scores, case-mix adjust their<br>scores case-mi | Community-Based Services<br>Measures<br>respondents that gave the<br>most positive response of<br>"No" on a 1-2 scale (Yes, No)<br>Physical Safety Measure<br>19. Hit or hurt by staff –<br>average proportion of<br>respondents that gave the<br>most positive response of<br>"No" on a 1-2 scale (Yes, No)<br>The denominator for all<br>measures is the number of<br>survey respondents.<br>Individuals eligible for the<br>CAHPS Home- and<br>Community-Based Services<br>survey include Medicaid<br>beneficiaries who are at least<br>18 years of age in the sample<br>period, and have received<br>HCBS services for 3 months or<br>longer and their proxies.<br>Eligibility is further<br>determined using three<br>cognitive screening items,<br>administered during the<br>interview:<br>Q1. Does someone come into<br>your home to help you? (Yes,<br>No)<br>Q2. How do they help you?<br>Q3. What do you call them?<br>Individuals who are unable to<br>answer these cognitive<br>screening items are excluded.<br>Some measures also have<br>topic-specific screening items<br>as well. Additional detail is<br>provided in S.9.<br>According to guidance<br>produced under the CMS<br>TEFT Technical Assistance<br>contract, individuals who are<br>more likely to be good proxy<br>respondents during the<br>CAHPS Home- and<br>Community-Based Services |
|                          |  |  | Note that for users who<br>want to case-mix adjust their<br>scores, case-mix adjustment<br>can be done using the CAHPS<br>macro and the adjustment is<br>made prior to the calculation<br>of the total score.<br>Case-mix Adjusted Scores<br>Case-mix adjustment is done<br>via linear regression. The<br>CAHPS Consortium<br>recommends self-reported  | screening items are excluded.<br>Some measures also have<br>topic-specific screening items<br>as well. Additional detail is<br>provided in S.9.<br>According to guidance<br>produced under the CMS<br>TEFT Technical Assistance<br>contract, individuals who are<br>more likely to be good proxy<br>respondents during the<br>CAHPS Home- and<br>Community-Based Services<br>survey data collection are: (a)<br>those who are willing to<br>respond on behalf of the<br>beneficiary; (b) unpaid<br>caregivers, family members,<br>friends, and neighbors; and  |
|                          |  |  |   | (c) those who know the<br>beneficiary well enough that<br>s/he is familiar with the<br>services/supports they are<br>receiving, and has regular,<br>ongoing contact with them.<br>Examples of circumstances<br>that increase the likelihood<br>that someone has knowledge<br>about the beneficiary and<br>their care situation include<br>living with the beneficiary,<br>managing the beneficiary's in-<br>home care for a majority of<br>the day, having regular<br>conversations with the<br>beneficiary about the services<br>they receive, in-person visits<br>with the beneficiary, and  |
|                          |  |  |   | being present when<br>services/supports are<br>delivered. Individuals who are<br>less likely to be good proxy<br>respondents are (a) those<br>with paid responsibilities for<br>providing services/supports to<br>the beneficiary, including<br>family members and friends<br>who are paid to help the<br>beneficiary and (b) guardians  |

|                    | Survey (experience with care)   | 1741: Consumer Assessment of<br>Healthcare Providers and Systems<br>(CAHPS) Surgical Care Survey Version<br>2.0   | 2548: Child Hospital<br>Consumer Assessment of<br>Healthcare Providers and<br>Systems (Child HCAHPS)<br>Survey   | 2967: CAHPS Home- and<br>Community-Based Services<br>Measures  |
|--------------------|---|---|--|--|
|                    |   |   |  | or conservators whose only<br>responsibility is to oversee<br>the beneficiary's finances.  |
| Exclusions         | Numerator and Denominator<br>Exclusions:<br>• Patients under 18 years of age<br>at any time during their stay are<br>excluded.<br>• Patients who received fewer<br>than 2 visits from home health<br>agency personnel during a 2-<br>month look-back period are<br>excluded. The 2-month look-<br>back period is defined as the 2-<br>months prior to and including<br>the last day in the sample<br>month.<br>• Patients have been previously<br>selected for an HHCAHPS<br>sample during any month in the<br>current quarter, or during the<br>last 5 months, are excluded.<br>• Patients who are currently<br>receiving hospice, or are<br>discharged to hospice, are<br>excluded.<br>• All routine maternity patients<br>are excluded.<br>• All "No publicity" status<br>patients are excluded.<br>• Patients who reside in a state<br>where their health condition<br>exclude them from surveys.<br>• Patients who are decedents at<br>the time of the sample are<br>excluded. | The following are excluded when<br>constructing the sampling frame:<br>- Surgical patients whose procedure<br>was greater than 6 months or less than<br>3 months prior to the start of the<br>survey.<br>- Surgical patients younger than 18<br>years old.<br>- Surgical patients who are<br>institutionalized (put in the care of a<br>specialized institution) or deceased. | Top Box Score Calculation:<br>1) Target Population:<br>Patients that had a non-<br>emergency surgery within 3<br>to 6 months prior to the<br>start of the survey.<br>2) Exclusions = Patients who<br>did not answer at least one<br>item of the composite<br>measures or rating item.<br>3) Screener items. Example:<br>Patients who answered "No"<br>to the first item indicating<br>that the patient had surgery<br>performed on the date listed<br>by the surgeon named.<br>4) Top-box scores (percent<br>with highest rating) are<br>computed for each item<br>5) Top-box scores are<br>averaged across the items<br>within each composite,<br>weighting each item equally.<br>Note that for users who<br>want to case-mix adjust their<br>scores, case-mix adjust their<br>scores, case-mix adjust their<br>scores case-mix adjust th | Individuals less than 18 years<br>of age and individuals that<br>have not received HCBS<br>services for at least 3 months<br>should be excluded. During<br>survey administration,<br>additional exclusions include<br>individuals that failed any of<br>the cognitive screening items<br>mentioned in the<br>denominator statement<br>below. There were 227<br>beneficiaries excluded due to<br>not passing the cognitive<br>screener (53 Aged/Disabled,<br>59 ID/DD, 25 TBI, and 90 SMI).<br>Allowing proxy respondents in<br>future administrations has the<br>potential to further reduce<br>these numbers. |
| Risk<br>Adjustment | Other: The patient mix<br>adjustment factors are derived<br>from identified patient<br>characteristics that have been<br>determined to impact response<br>tendencies. The patient-mix<br>regression results indicate the<br>tendency of patients with<br>particular characteristics to<br>respond more positively or<br>negatively to HHCAHPS Survey<br>questions. Patient-mix<br>adjustment factors are derived<br>directly from these data OLS<br>regression results.   | Other: Case-mix adjustment  | Statistical Risk Model   | Statistical Risk Model   |
| Stratification     | Rate/Proportion   | Other (specify): Top-box Score; case-<br>mix adjusted score   | Rate/Proportion  | Other (specify): Top-box<br>Score; case-mix adjusted   |

# Comparison of NQF 2321, 2632, and 2632

|                          | 2321 Functional Change Change in<br>Mobility Score   | 2632 Long-Term Care Hospital (LTCH)<br>Functional Outcome Measure: Change in<br>Mobility Among Patients Requiring<br>Ventilator Support  | 2636 Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure: Discharge Mobility<br>Score for Medical Rehabilitation Patients   |
|--------------------------|--|--|---|
| Steward                  | Uniform Data System for Medical<br>Rehabilitation  | Centers for Medicare & Medicaid Services   | Centers for Medicare & Medicaid Services  |
| Description              | Change in rasch derived values of<br>mobility function from admission to<br>discharge among adult inpatient<br>rehabilitation facility patients aged 18<br>years and older who were discharged<br>alive. The timeframe for the measure is<br>12 months. The measure includes the<br>following 4 mobility FIM <sup>®</sup> items:Transfer<br>Bed/Chair/Wheelchair, Transfer Toilet,<br>Locomotion and Stairs.   | This measure estimates the risk-adjusted<br>change in mobility score between<br>admission and discharge among LTCH<br>patients requiring ventilator support at<br>admission.   | This measure estimates the percentage of IRF<br>patients who meet or exceed an expected<br>discharge mobility score.  |
| Туре                     | Outcome  | Outcome  | Outcome   |
| Data Source              | Instrument-Based Data, Other   | Instrument-Based Data  | Instrument-Based Data   |
| Level                    | Facility, Other  | Facility   | Facility  |
| Setting                  | Inpatient/Hospital, Post-Acute Care  | Post-Acute Care  | Post-Acute Care   |
| Numerator<br>Statement   | Average change in rasch derived mobility<br>function score from admission to<br>discharge at the facility level. Includes<br>the following items: Transfer<br>Bed/Chair/Wheelchair, Transfer Toilet,<br>Locomotion and Stairs. Average is<br>calculated as: (sum of change at the<br>patient level/total number of patients).<br>Patient less than 18 years of age at<br>admission to the facility or patients who<br>died within the facility are excluded. | The measure does not have a simple form<br>for the numerator and denominator. This<br>measure estimates the risk-adjusted<br>change in mobility score between<br>admission and discharge among LTCH<br>patients requiring ventilator support at<br>admission. The change in mobility score is<br>calculated as the difference between the<br>discharge mobility score and the<br>admission mobility score.   | The numerator is the number of patients in an IR<br>with an observed discharge mobility score that is<br>equal to or higher than a calculated expected<br>discharge mobility score.   |
| Denominator<br>Statement | Facility adjusted expected change in rasch derived mobility values, adjusted at the Case Mix Group (CMG) level.  | The target population (denominator) for<br>this quality measure is the number of<br>LTCH patients requiring ventilator support<br>at the time of admission to the LTCH.  | IRF patients included in this measure are at least<br>21 years of age, Medicare Part A and Medicare<br>Advantage beneficiaries, and have complete<br>stays.   |
| Exclusions               | National values used in the CMG<br>adjustment procedure will not include<br>cases who died in the IRF or patients less<br>than 18 years of age at admission. Cases<br>who died during rehabilitation are not<br>typical patients and are routinely<br>omitted from reports and published<br>research on rehabilitation outcomes.<br>Further details and references related to<br>the exclusion criteria can be found in the<br>Measure Testing form.         | This quality measure has following<br>patient-level exclusion criteria:<br>1) Patients with incomplete stays:<br>Rationale: When a patient has an<br>incomplete stay, for example, the patients<br>leave urgently due to a medical<br>emergency, it can be challenging to gather<br>accurate discharge functional status data.<br>Patients with incomplete stays include<br>patients who are unexpectedly discharged<br>to an acute-care setting (Inpatient<br>Prospective Payment System or Inpatient<br>Psychiatric Hospital or unit) because of a<br>medical emergency or psychiatric<br>condition; patients transferred to another<br>LTCH; patients who leave the LTCH against<br>medical advice; patients who die; and<br>patients with a length of stay less than 3<br>days.<br>2) Patients discharged to hospice:<br>Rationale: Patients discharged to hospice<br>are excluded because functional<br>improvement may not be a goal for these<br>patients.<br>3) Patients with progressive neurological<br>conditions, including amyotrophic lateral<br>sclerosis, multiple sclerosis, Parkinson's<br>disease, and Huntington's chorea:<br>Rationale: These patients are excluded<br>because they may have functional decline<br>or less predictable function trajectories.<br>4) Patients in coma, persistent vegetative<br>state, complete tetraplegia, and locked-in<br>syndrome:<br>Rationale: The patients are excluded<br>because they may have limited or less<br>predictable mobility recovery.<br>5) Patients younger than age 21:<br>Rationale: There is only limited evidence<br>published about functional outcomes for<br>individuals younger than 21.<br>6) Patients who are coded as independent<br>on all the mobility items at admission:<br>Rationale: These patients are excluded<br>because no improvement in mobility skills<br>can be measured with the mobility items<br>used in this quality measure. | <ul> <li>This quality measure has five patient-level exclusion criteria:</li> <li>1) Patients with incomplete stays.</li> <li>Rationale: When a patient has an incomplete stay for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data Patients with incomplete stays include patients who are unexpectedly discharged to an acute ca setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Longterm Care Hospital); patients who die or leave ar Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of staless than 3 days.</li> <li>2) Patients with the following medical conditions on admission: coma, persistent vegetative state, complete quadriplegia, locked-in syndrome, or severe anoxic brain damage, cerebral edema or compression of brain.</li> <li>Rationale: These patients are excluded because they may have limited or less predictable mobiliti improvement with the selected items.</li> <li>3) Patients younger than age 21.</li> <li>Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.</li> <li>4) Patients discharged to hospice.</li> <li>Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.</li> <li>5) Patients who are not Medicare Part A or Medicare Advantage beneficiaries.</li> <li>Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.</li> <li>Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.</li> </ul> |

|                    | 2321 Functional Change Change in<br>Mobility Score   | 2632 Long-Term Care Hospital (LTCH)<br>Functional Outcome Measure: Change in<br>Mobility Among Patients Requiring<br>Ventilator Support                 | 2636 Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure: Discharge Mobility<br>Score for Medical Rehabilitation Patients |
|--------------------|--|---|---|
|                    |  | Facility-level quality measure exclusion:<br>For LTCHs with fewer than 20 patient<br>stays, data for this quality measure are<br>not publicly reported. |   |
| Risk<br>Adjustment | Stratification by risk category/subgroup   | Statistical Risk Model  | Statistical Risk Model  |
| Stratification     | While the measure can be stratified by<br>specific impairment type (IGC), the CMG<br>adjustment procedure allows for the<br>measure to be complete, accurate, and<br>valid for all patients within the facility,<br>excluding died cases and ages less than<br>18. | N/A   | N/A   |
| Type Score         | Ratio  | Continuous variable, e.g. average   | Rate/Proportion   |

# Comparison of NQF 2632, 2634, 2636, 0167, 0175, 0422, 0423, 0424, 0425, 0426, 0427, 0428, 0429, 0688, 2287, 2321, 2612, 2643, 2653, 2774, 2775, 2776, 2778

|                                       | 2632 Long-Term Care Hospital<br>(LTCH) Functional Outcome  | 2634 Inpatient Rehabilitation<br>Facility (IRF) Functional   | 2636 Inpatient Rehabilitation<br>Facility (IRF) Functional  | 0167 Improvement in Ambulation/locomotion  |
|---------------------------------------|--|--|---|--|
|                                       | Measure: Change in Mobility  | Outcome Measure: Change in   | Outcome Measure: Discharge  |  |
|                                       | Among Patients Requiring   | Mobility Score for Medical   | Mobility Score for Medical  |  |
| • ·                                   | Ventilator Support   | Rehabilitation Patients  | Rehabilitation Patients   |  |
| Steward                               | Centers for Medicare &<br>Medicaid Services  | Centers for Medicare &<br>Medicaid Services  | Centers for Medicare &<br>Medicaid Services   | Centers for Medicare &<br>Medicaid Services  |
| Description                           | This measure estimates the risk-<br>adjusted change in mobility<br>score between admission and<br>discharge among LTCH patients<br>requiring ventilator support at<br>admission.   | This measure estimates the<br>mean risk-adjusted mean<br>change in mobility score<br>between admission and<br>discharge for Inpatient<br>Rehabilitation Facility (IRF)<br>Medicare Part A and Medicare<br>Advantage patients.  | This measure estimates the<br>percentage of IRF patients who<br>meet or exceed an expected<br>discharge mobility score.   | Percentage of home health<br>episodes of care during which<br>the patient improved in ability<br>to ambulate.  |
| Туре                                  | Outcome  | Outcome  | Outcome   | Outcome  |
| Data Source                           | Instrument-Based Data  | Instrument-Based Data  | Instrument-Based Data   | Electronic Health Data   |
| Level                                 | Facility   | Facility   | Facility  | Facility   |
| Setting                               | Post-Acute Care  | Post-Acute Care  | Post-Acute Care   | Home Care  |
| Numerator<br>Statement<br>Denominator | The measure does not have a<br>simple form for the numerator<br>and denominator. This measure<br>estimates the risk-adjusted<br>change in mobility score<br>between admission and<br>discharge among LTCH patients<br>requiring ventilator support at<br>admission. The change in<br>mobility score is calculated as<br>the difference between the<br>discharge mobility score and the<br>admission mobility score.  | The measure does not have a<br>simple form for the numerator<br>and denominator. This measure<br>estimates the risk-adjusted<br>change in mobility score<br>between admission and<br>discharge among Inpatient<br>Rehabilitation Facility (IRF)<br>Medicare Part A and Medicare<br>Advantage patients age 21 and<br>older. The change in mobility<br>score is calculated as the<br>difference between the<br>discharge mobility score and the<br>admission mobility score.   | The numerator is the number of<br>patients in an IRF with an<br>observed discharge mobility<br>score that is equal to or higher<br>than a calculated expected<br>discharge mobility score.  | Number of home health<br>episodes of care where the<br>value recorded on the discharge<br>assessment indicates less<br>impairment in ambulation<br>locomotion at discharge than at<br>start (or resumption) of care.   |
| Statement                             | The target population<br>(denominator) for this quality<br>measure is the number of LTCH<br>patients requiring ventilator<br>support at the time of admission<br>to the LTCH.  | of Inpatient Rehabilitation<br>Facility Medicare Part A and<br>Medicare Advantage patient<br>stays, except those that meet<br>the exclusion criteria.  | measure are at least 21 years of<br>age, Medicare Part A and<br>Medicare Advantage<br>beneficiaries, and have<br>complete stays.  | All home health episodes where<br>the value recorded for the<br>OASIS-C2 item M1860<br>("Ambulation/Locomotion") on<br>the start (or the resumption) of<br>care assessment indicates<br>minimal or no impairment, or<br>the patient is non-responsive, o<br>the episode of care ended in<br>transfer to inpatient facility or<br>death at home, or the episode is<br>covered by the generic<br>exclusions. |
| Exclusions                            | This quality measure has<br>following patient-level exclusion<br>criteria:<br>1) Patients with incomplete<br>stays:<br>Rationale: When a patient has<br>an incomplete stay, for<br>example, the patients leave<br>urgently due to a medical<br>emergency, it can be<br>challenging to gather accurate<br>discharge functional status data.<br>Patients with incomplete stays<br>include patients who are<br>unexpectedly discharged to an<br>acute-care setting (Inpatient<br>Prospective Payment System or<br>Inpatient Psychiatric Hospital or<br>unit) because of a medical<br>emergency or psychiatric<br>condition; patients transferred<br>to another LTCH; patients who<br>leave the LTCH against medical<br>advice; patients who die; and<br>patients with a length of stay<br>less than 3 days.<br>2) Patients discharged to<br>hospice:<br>Rationale: Patients discharged<br>to hospice are excluded because<br>functional improvement may<br>not be a goal for these patients.<br>3) Patients with progressive<br>neurological conditions,<br>including amyotrophic lateral | This quality measure has six<br>patient-level exclusion criteria:<br>1) Patients with incomplete<br>stays.<br>Rationale: When a patient has<br>an incomplete stay, for<br>example, the patients leave<br>urgently due to a medical<br>emergency, it can be<br>challenging to gather accurate<br>discharge functional status data.<br>Patients with incomplete stays<br>include patients who are<br>unexpectedly discharged to an<br>acute care setting (Short-stay<br>Acute Hospital, Critical Access<br>Hospital, Inpatient Psychiatric<br>Facility, or Long-term Care<br>Hospital); patients who die or<br>leave an Inpatient Rehabilitation<br>Facility (IRF) against medical<br>advice; and patients with a<br>length of stay less than 3 days.<br>2) Patients who are<br>independent with all mobility<br>activities at the time of<br>admission.<br>Rationale: Patients who are<br>independent with all the<br>mobility items (with the<br>exception of the wheelchair<br>items GG0170R and GG0170S)<br>at the time of admission are<br>assigned the highest score on all<br>the mobility items, and thus, | This quality measure has five<br>patient-level exclusion criteria:<br>1) Patients with incomplete<br>stays.<br>Rationale: When a patient has<br>an incomplete stay, for<br>example, the patients leave<br>urgently due to a medical<br>emergency, it can be<br>challenging to gather accurate<br>discharge functional status data.<br>Patients with incomplete stays<br>include patients who are<br>unexpectedly discharged to an<br>acute care setting (Short-stay<br>Acute Hospital, Critical Access<br>Hospital, Inpatient Psychiatric<br>Facility, or Long-term Care<br>Hospital); patients who die or<br>leave an Inpatient Rehabilitation<br>Facility (IRF) against medical<br>advice; and patients with a<br>length of stay less than 3 days.<br>2) Patients with the following<br>medical conditions on<br>admission: coma, persistent<br>vegetative state, complete<br>quadriplegia, locked-in<br>syndrome, or severe anoxic<br>brain damage, cerebral edema<br>or compression of brain.<br>Rationale: These patients are<br>excluded because they may<br>have limited or less predictable | N/A  |

|                    | 2632 Long-Term Care Hospital<br>(LTCH) Functional Outcome<br>Measure: Change in Mobility<br>Among Patients Requiring<br>Ventilator Support   | 2634 Inpatient Rehabilitation<br>Facility (IRF) Functional<br>Outcome Measure: Change in<br>Mobility Score for Medical<br>Rehabilitation Patients   | 2636 Inpatient Rehabilitation<br>Facility (IRF) Functional<br>Outcome Measure: Discharge<br>Mobility Score for Medical<br>Rehabilitation Patients   | 0167 Improvement in<br>Ambulation/locomotion |
|--------------------|--|---|---|--|
|                    | sclerosis, multiple sclerosis,<br>Parkinson's disease, and<br>Huntington's chorea:<br>Rationale: These patients are<br>excluded because they may<br>have functional decline or less<br>predictable function<br>trajectories.<br>4) Patients in coma, persistent<br>vegetative state, complete<br>tetraplegia, and locked-in<br>syndrome:<br>Rationale: The patients are<br>excluded because they may<br>have limited or less predictable<br>mobility recovery.<br>5) Patients younger than age 21:<br>Rationale: There is only limited<br>evidence published about<br>functional outcomes for<br>individuals younger than 21.<br>6) Patients who are coded as<br>independent on all the mobility<br>items at admission:<br>Rationale: These patients are<br>excluded because no<br>improvement in mobility skills<br>can be measured with the<br>mobility items used in this<br>quality measure.<br>Facility-level quality measure<br>exclusion: For LTCHs with fewer<br>than 20 patient stays, data for<br>this quality measure are not<br>publicly reported. | <ul> <li>would not be able to show<br/>functional improvement on this<br/>same set of items at discharge.</li> <li>3) Patients with the following<br/>medical conditions on<br/>admission: coma, persistent<br/>vegetative state; complete<br/>quadriplegia; locked-in<br/>syndrome or severe anoxic brain<br/>damage, cerebral edema or<br/>compression of brain.</li> <li>Rationale: These patients are<br/>excluded because they may<br/>have limited or less predictable<br/>mobility improvement with the<br/>selected mobility items.</li> <li>4) Patients younger than age 21.</li> <li>Rationale: There is only limited<br/>evidence published about<br/>functional outcomes for<br/>individuals with Medicare who<br/>are younger than 21.</li> <li>5) Patients discharged to<br/>hospice.</li> <li>Rationale: Patient goals may<br/>change during the IRF stay, and<br/>functional improvement may no<br/>longer be a goal for a patient<br/>discharged to hospice.</li> <li>6) Patients who are not<br/>Medicare Part A and Medicare<br/>Advantage beneficiaries.</li> <li>Rationale: IRF-PAI data for<br/>patients not covered by the<br/>Medicare and Medicaid<br/>Services.</li> <li>Facility-level quality measure<br/>exclusion: For IRFs with fewer<br/>than 20 patient stays, data for<br/>this quality measure are not<br/>publicly reported.</li> </ul> | <ul> <li>mobility improvement with the selected items.</li> <li>3) Patients younger than age 21.</li> <li>Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.</li> <li>4) Patients discharged to hospice.</li> <li>Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.</li> <li>5) Patients who are not Medicare Part A or Medicare Advantage beneficiaries.</li> <li>Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.</li> <li>Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.</li> </ul> |  |
| Risk<br>Adjustment | Statistical Risk Model   | Statistical Risk Model  | Statistical Risk Model  | Statistical Risk Model                       |
| Stratification     | N/A  | N/A   | N/A   | N/A  |
| Type Score         | Continuous variable, e.g.<br>average   | Continuous variable, e.g.<br>average  | Rate/Proportion   | Rate/Proportion                              |

|             | 0175 Improvement in bed<br>transferring   | 0422 Functional status change<br>for patients with Knee<br>impairments  | 0423 Functional status change<br>for patients with Hip<br>impairments   | 0424 Functional status change<br>for patients with Foot and Ankle<br>impairments  |
|-------------|---|---|---|---|
| Steward     | Centers for Medicare & Medicaid Services  | Focus On Therapeutic<br>Outcomes, Inc   | Focus On Therapeutic<br>Outcomes, Inc   | Focus On Therapeutic<br>Outcomes, Inc   |
| Description | Percentage of home health<br>episodes of care during<br>which the patient improved<br>in ability to get in and out of<br>bed. | A self-report measure of<br>change in functional status<br>for patients 14 year+ with<br>knee impairments. The<br>change in functional status<br>assessed using FOTO's (knee<br>) PROM is adjusted to patient<br>characteristics known to be<br>associated with functional<br>status outcomes (risk<br>adjusted) and used as a<br>performance measure at the<br>patient level, at the<br>individual clinician, and at<br>the clinic level to assess<br>quality. | A risk adjusted, benchmarked<br>effectiveness measure<br>derived from aggregated<br>data submitted by patients<br>14 years+ with Hip<br>impairments who are treated<br>by rehabilitation providers.<br>The measure can be used at<br>the patient level, at the<br>individual clinician, and at the<br>clinic level by comparing to<br>benchmarked, aggregated<br>risk-adjusted functional<br>status data. A self-report<br>measure of change in<br>functional status for patients<br>14 years+ with hip<br>impairments. The change in<br>functional status assessed<br>using FOTO's (hip) PROM is<br>adjusted to patient<br>characteristics known to be<br>associated with functional<br>status outcomes (risk<br>adjusted) and used as a | A self-report measure of<br>change in functional status<br>for patients 14 years+ with<br>foot and ankle impairments.<br>The change in functional<br>status assessed using FOTO's<br>(foot and ankle) PROM is<br>adjusted to patient<br>characteristics known to be<br>associated with functional<br>status outcomes (risk<br>adjusted) and used as a<br>performance measure at the<br>patient level, at the individual<br>clinician, and at the clinic<br>level to assess quality. |

|                          | 0175 Improvement in bed<br>transferring  | 0422 Functional status change<br>for patients with Knee<br>impairments  | 0423 Functional status change<br>for patients with Hip<br>impairments   | 0424 Functional status change<br>for patients with Foot and Ankle<br>impairments   |
|--------------------------|--|---|---|--|
|                          |  |   | performance measure at the<br>patient level, at the individual<br>clinician, and at the clinic<br>level to assess quality.  |  |
| Туре                     | Outcome  | Outcome: PRO-PM   | Outcome: PRO-PM   | Outcome: PRO-PM  |
| Data Source              | Electronic Health Records  | Electronic Health Data,<br>Instrument-Based Data, Paper<br>Medical Records  | Electronic Health Data,<br>Instrument-Based Data, Paper<br>Medical Records  | Electronic Health Data,<br>Instrument-Based Data, Paper<br>Medical Records   |
| Level                    | Facility   | Clinician: Group/Practice,<br>Clinician: Individual, Facility   | Clinician: Group/Practice,<br>Clinician: Individual, Facility   | Clinician: Group/Practice,<br>Clinician: Individual, Facility  |
| Setting                  | Home Care  | Outpatient Services, Post-Acute<br>Care, Other  | Outpatient Services, Post-Acute<br>Care, Other  | Outpatient Services, Post-Acute Care, Other  |
| Numerator<br>Statement   | Number of home health<br>episodes of care where the<br>value recorded on the<br>discharge assessment<br>indicates less impairment in<br>bed transferring at discharge<br>than at start (or resumption)<br>of care.   | Patient Level: The residual<br>functional status score for<br>the individual patient<br>(residual scores are the<br>actual change scores -<br>predicted change after risk<br>adjustment.<br>Individual Clinician Level: The<br>average of residuals in<br>functional status scores in<br>patients who were treated by<br>a clinician in a 12 month time<br>period for knee impairment.<br>Clinic Level: The average of<br>residuals in functional status<br>scores in patients who were<br>treated by a clinic in a 12<br>month time period for knee<br>impairment. | Patient Level: The residual<br>functional status score for<br>the individual patient<br>(residual scores are the<br>actual change scores -<br>predicted change after risk<br>adjustment.<br>Individual Clinician Level: The<br>average residuals in<br>functional status scores in<br>patients who were treated by<br>a clinician in a 12 month time<br>period for hip impairment.<br>Clinic Level: The average<br>residuals in functional status<br>scores in patients who were<br>treated by a clinic in a 12<br>month time period for hip<br>impairment. | Patient Level: The residual<br>functional status score for<br>the individual patient<br>(residual scores are the<br>actual change scores -<br>predicted change after risk<br>adjustment)<br>Individual Clinician Level: The<br>average of residuals in<br>functional status scores in<br>patients who were treated by<br>a clinician in a 12 month time<br>period for foot and or ankle<br>impairment.<br>Clinic Level: The average of<br>residuals in patients who<br>were treated by a clinic in a<br>12 month time period for<br>foot and or ankle<br>impairment. |
| Denominator<br>Statement | The number of home health<br>episodes of care ending with<br>a discharge during the<br>reporting period, other than<br>those covered by generic or<br>measure-specific exclusions.   | All patients 14 years and<br>older with knee impairments<br>who have initiated<br>rehabilitation treatment and<br>completed the FOTO knee FS<br>PROM at admission and<br>discharge.   | All patients 14 years and<br>older with hip impairments<br>who have initiated<br>rehabilitation treatment and<br>complete the FOTO hip FS<br>PROM at admission and<br>discharge.  | All patients 14 years and<br>older with foot or ankle<br>impairments who have<br>initiated rehabilitation<br>treatment and completed the<br>FOTO foot and ankle PROM<br>at admission and discharge.  |
| Exclusions               | All home health episodes<br>where at the start (or<br>resumption) of care<br>assessment the patient is<br>able to transfer<br>independently, or the patient<br>is non-responsive. or the<br>episode of care ended in<br>transfer to inpatient facility<br>or death at home, or the<br>episode is covered by the<br>generic exclusions. | <ul> <li>Patients who are not being treated for a knee impairment</li> <li>Age under 14 years old.</li> </ul>   | <ul> <li>Patients who are not being<br/>treated for a Hip impairment</li> <li>Age under 14 years old.</li> </ul>  | <ul> <li>Patients who are not being treated for a foot and ankle impairment condition.</li> <li>Age under 14 years old.</li> </ul>   |
| Risk<br>Adjustment       | Statistical Risk Model   | Statistical Risk Model  | Statistical Risk Model  | Statistical Risk Model   |
| Stratification           | N/A  | N/A   | N/A   | N/A  |
| Type Score               | Rate/Proportion  | Continuous variable, e.g.<br>average  | Continuous variable, e.g.<br>average  | Continuous variable, e.g.<br>average   |

0425 Functional status change for patients with lumbar

0426 Functional status change for patients with Shoulder

0427 Functional status change for patients with elbow, wrist

0428 Functional status change for patients with General

|             | impairments                   | impairments                      | and hand impairments             | orthopaedic impairments            |
|-------------|-------------------------------|----------------------------------|----------------------------------|------------------------------------|
| Steward     | Focus On Therapeutic          | Focus On Therapeutic             | Focus On Therapeutic             | Focus On Therapeutic               |
|             | Outcomes, Inc                 | Outcomes, Inc                    | Outcomes, Inc                    | Outcomes, Inc                      |
| Description | A self-report outcome         | A self-report outcome            | A self-report outcome            | A self-report outcome              |
|             | measure of functional status  | measure of change in             | measure of functional status     | measure of functional status       |
|             | for patients 14 years+ with   | functional status for patients   | for patients 14 years+ with      | for patients 14 years+ with        |
|             | lumbar impairments. The       | 14 years+ with shoulder          | elbow, wrist, hand               | general orthopaedic                |
|             | change in functional status   | impairments. The change in       | impairments. The change in       | impairments. The change in         |
|             | assessed using FOTO           | functional status assess using   | functional status assessed       | functional status assessed         |
|             | (lumbar) PROM is adjusted to  | FOTO's (shoulder) PROM is        | using FOTO (elbow, wrist and     | using FOTO (general                |
|             | patient characteristics known | adjusted to patient              | hand) PROM is adjusted to        | orthopedic) PROM is adjusted       |
|             | to be associated with         | characteristics known to be      | patient characteristics known    | to patient characteristics         |
|             | functional status outcomes    | associated with functional       | to be associated with            | known to be associated with        |
|             | (risk adjusted) and used as a | status outcomes (risk            | functional status outcomes       | functional status outcomes         |
|             | performance measure at the    | adjusted) and used as a          | (risk adjusted) and used as a    | (risk adjusted) and used as a      |
|             | patient level, at the         | performance measure at the       | performance measure at the       | performance measure at the         |
|             | individual clinician, and at  | patient level, at the individual | patient level, at the individual | patient level, at the individual   |
|             | the clinic level by to assess | clinician, and at the clinic     | clinician, and at the clinic     | clinician, and at the clinic level |
|             | quality.                      | level to assess quality.         | level to assess quality.         | by to assess quality.              |
| Туре        | Outcome: PRO-PM               | Outcome: PRO-PM                  | Outcome: PRO-PM                  | Outcome: PRO-PM                    |

|                          | 0425 Functional status change   | 0426 Functional status change  | 0427 Functional status change  | 0428 Functional status change  |
|--------------------------|---|--|--|--|
|                          | for patients with lumbar  | for patients with Shoulder   | for patients with elbow, wrist   | for patients with General  |
|                          | impairments   | impairments  | and hand impairments   | orthopaedic impairments  |
| Data Source              | Electronic Health Data,   | Electronic Health Data,  | Electronic Health Data,  | Electronic Health Data,  |
|                          | Instrument-Based Data,  | Instrument-Based Data,   | Instrument-Based Data,   | Instrument-Based Data, Paper   |
|                          | Paper Medical Records   | Paper Medical Records  | Paper Medical Records  | Medical Records  |
| Level                    | Clinician: Group/Practice,  | Clinician: Group/Practice,   | Clinician: Group/Practice,   | Clinician: Group/Practice,   |
|                          | Clinician: Individual, Facility   | Clinician: Individual, Facility  | Clinician: Individual, Facility  | Clinician: Individual, Facility  |
| Setting                  | Outpatient Services, Post-<br>Acute Care, Other   | Outpatient Services, Post-<br>Acute Care, Home Care,<br>Other  | Outpatient Services, Post-<br>Acute Care, Other  | Outpatient Services, Post-Acute<br>Care, Other   |
| Numerator<br>Statement   | Patient Level: The residual<br>functional status score for<br>the individual patient<br>(residual scores are the<br>actual change scores -<br>predicted change after risk<br>adjustment).<br>Individual Clinician Level: The<br>average of residuals in<br>functional status scores in<br>patients who were treated by<br>a clinician in a 12 month time<br>period for lumbar<br>impairment.<br>Clinic Level: The average of<br>residuals ) in functional<br>status scores in patients who<br>were treated by a clinic in a<br>12 month time period for<br>lumbar impairment. | Patient Level: The residual<br>functional status score for<br>the individual patient<br>(residual scores are the<br>actual change scores -<br>predicted change after risk<br>adjustment.<br>Individual Clinician Level: The<br>average of residuals in<br>functional status scores in<br>patients who were treated by<br>a clinician in a 12 month time<br>period for shoulder<br>impairment.<br>Clinic Level: The average of<br>residuals in functional status<br>scores in patients who were<br>treated by a clinic in a 12<br>month time period for<br>shoulder impairment. | Patient Level: The residual<br>functional status score for<br>the individual patient<br>(residual scores are the<br>actual change scores -<br>predicted change after risk<br>adjustment).<br>Individual Clinician Level: The<br>average of residuals in<br>functional status scores in<br>patients who were treated by<br>a clinician in a 12 month time<br>period for elbow, wrist and<br>hand impairment.<br>Clinic Level: The average of<br>residuals in functional status<br>scores in patients who were<br>treated by a clinic in a 12<br>month time period for elbow,<br>wrist and hand impairments. | Patient Level: The residual<br>functional status score for the<br>individual patient (residual<br>scores are the actual change<br>scores - predicted change after<br>risk adjustment).<br>Individual Clinician Level: The<br>average of residuals in<br>functional status scores in<br>patients who were treated by<br>a clinician in a 12 month time<br>period for general orthopaedic<br>impairment.<br>Clinic Level: The average of<br>residuals in functional status<br>scores in patients who were<br>treated by a clinic in a 12<br>month time period for general<br>orthopaedic impairment. |
| Denominator<br>Statement | All patients 14 years and<br>older with a lumbar<br>impairment who have<br>initiated rehabilitation<br>treatment and completed the<br>FOTO (lumbar) PROM.   | All patients 14 years and<br>older with shoulder<br>impairments who have<br>initiated rehabilitation<br>treatment and completed the<br>FOTO shoulder FS outcome<br>instrument at admission and<br>discharge.   | All patients 14 years and<br>older with elbow, wrist or<br>hand impairments who have<br>initiated rehabilitation<br>treatment and completed the<br>FOTO (elbow, wrist and<br>hand) PROM.   | All patients 14 years and older<br>with general orthopaedic<br>impairments who have<br>initiated rehabilitation<br>treatment and completed the<br>FOTO (general orthopaedic)<br>PROM.  |
| Exclusions               | <ul> <li>Patients who are not being</li></ul>   | <ul> <li>Patients who are not being</li></ul>  | <ul> <li>Patients who are not being</li></ul>  | <ul> <li>Patients who are not being</li></ul>  |
|                          | treated for a lumbar  | treated for a Shoulder   | treated for an elbow, wrist  | treated for a General  |
|                          | impairment <li>&lt;14 years of age</li>   | impairment <li>&lt;14 years of age</li>  | and/or hand impairment <li>&lt;14 years of age</li>  | orthopaedic impairment <li>&lt;14 years of age</li>  |
| Risk<br>Adjustment       | Statistical Risk Model  | Statistical Risk Model   | Statistical Risk Model   | Statistical Risk Model   |
| Stratification           | N/A   | N/A  | N/A  | N/A  |
| Type Score               | Continuous variable, e.g.   | Continuous variable, e.g.  | Continuous variable, e.g.  | Continuous variable, e.g.  |
|                          | average   | average  | average  | average  |

|             | 0429 Change in Basic Mobility as<br>Measured by the AM-PAC   | 0688 Percent of Residents<br>Whose Need for Help with<br>Activities of Daily Living Has<br>Increased (long stay)   | 2287 Functional Change: Change<br>in Motor Score   | 2321 Functional Change: Change<br>in Mobility Score  |
|-------------|--|--|--|--|
| Steward     | CREcare  | Centers for Medicare &<br>Medicaid Services  | Uniform Data System for<br>Medical Rehabilitation  | Uniform Data System for<br>Medical Rehabilitation  |
| Description | The Activity Measure for Post<br>Acute Care (AM-PAC) is a<br>functional status assessment<br>instrument developed<br>specifically for use in facility and<br>community dwelling post acute<br>care (PAC) patients. It was built<br>using Item Response Theory<br>(IRT) methods to achieve<br>feasible, practical, and precise<br>measurement of functional<br>status (Hambleton 200,<br>Hambleton 2005). Based on<br>factor analytic work and IRT<br>analyses, a Basic Mobility<br>domain has been identified<br>which consists of functional<br>tasks that cover in the following<br>areas: transfers, walking,<br>wheelchair skills, stairs,<br>bend/lift/ and carrying tasks.<br>(Haley, 2004, 2004a, 2004b).<br>The AM-PAC adaptive short<br>form (ASF) versions of the Basic<br>Mobility scale are being<br>submitted to The National | This measure, based on data<br>from the Minimum Data Set<br>(MDS) 3.0 assessment of long-<br>stay nursing facility residents,<br>estimates the percentage of<br>long-stay residents in a nursing<br>facility whose need for<br>assistance with late-loss<br>Activities of Daily Living (ADLs),<br>as reported in the target<br>assessment, increased when<br>compared with a prior<br>assessment. The four late-loss<br>ADLs are: bed mobility, transfer,<br>eating, and toilet use. This<br>measure is calculated by<br>comparing the change in each<br>ADL item between the target<br>assessment (OBRA, PPS or<br>discharge) and a prior<br>assessment (OBRA, PPS or<br>discharge). Long-stay nursing<br>facility residents are those with<br>a nursing facility stay of 101<br>cumulative days or more. | Change in rasch derived values<br>of motor function from<br>admission to discharge among<br>adult inpatient rehabilitation<br>facility patients aged 18 years<br>and older who were discharged<br>alive. The timeframe for the<br>measure is 12 months. The<br>measure includes the following<br>12 FIM® items:Feeding,<br>Grooming, Dressing Upper Body,<br>Dressing Lower Body, Toileting,<br>Bowel, Expression, Memory,<br>Transfer Bed/Chair/Wheelchair,<br>Transfer Toilet, Locomotion and<br>Stairs. | Change in rasch derived values<br>of mobility function from<br>admission to discharge among<br>adult inpatient rehabilitation<br>facility patients aged 18 years<br>and older who were discharged<br>alive. The timeframe for the<br>measure is 12 months. The<br>measure includes the following<br>4 mobility FIM® items:Transfer<br>Bed/Chair/Wheelchair, Transfer<br>Toilet, Locomotion and Stairs. |

| 0429 Change in Basic Mobility as<br>Measured by the AM-PAC  | 0688 Percent of Residents<br>Whose Need for Help with<br>Activities of Daily Living Has<br>Increased (long stay) | 2287 Functional Change: Change<br>in Motor Score | 2321 Functional Change: Change<br>in Mobility Score |
|---|--|--|---|
| Quality Forum. The ASF version  | mercuscu (iong stay)   |  |   |
| of the Basic Mobility scale   |  |  |   |
| consists of 2 different 10-item   |  |  |   |
| forms, one for inpatients versus  |  |  |   |
| those receiving care in a<br>community setting. Built using   |  |  |   |
| IRT methods, the Basic Mobility   |  |  |   |
| ASFs allow different questions  |  |  |   |
| to be targeted to each setting  |  |  |   |
| (inpatient/community),  |  |  |   |
| generating an interval level score that is common across  |  |  |   |
| both ASFs. The scale is   |  |  |   |
| transformed from a logit scale  |  |  |   |
| to a standardized scale which   |  |  |   |
| ranges from 0 - 100 where 100   |  |  |   |
| is the best possible mobility   |  |  |   |
| function. We believe that these   |  |  |   |
| short forms are the best<br>compromise between needed   |  |  |   |
| breadth of functional content   |  |  |   |
| across inpatient and community  |  |  |   |
| functional tasks, and the need  |  |  |   |
| to minimize response burden.  |  |  |   |
| The ASFs for Basic Mobility were  |  |  |   |
| built from an item bank that  |  |  |   |
| contains a rich assortment of 131 calibrated items that have  |  |  |   |
| been developed, tested,   |  |  |   |
| calibrated and applied in clinical  |  |  |   |
| research over the past seven  |  |  |   |
| years. In developing and  |  |  |   |
| evaluating the AM-PAC, we   |  |  |   |
| employed two different samples  |  |  |   |
| of 1081 patients who received   |  |  |   |
| post acute care in acute inpatient rehabilitation units,  |  |  |   |
| long-term care hospitals, skilled   |  |  |   |
| nursing homes, home health  |  |  |   |
| care, and outpatient therapy  |  |  |   |
| care settings. The ASFs were  |  |  |   |
| developed on an initial sample  |  |  |   |
| of 485 post acute care patients   |  |  |   |
| (see Haley et al, 2004) The existence of a detailed item  |  |  |   |
| bank enables the basic AM-PAC   |  |  |   |
| forms to be enhanced and  |  |  |   |
| improved in a very timely   |  |  |   |
| fashion (Jette et al, 2007, Haley   |  |  |   |
| et al, 2008) for examples of this   |  |  |   |
| process).   |  |  |   |
| Scoring estimates from the ASFs   |  |  |   |
| and the computer adaptive test<br>(CAT) are directly comparable,  |  |  |   |
| given they are taken from the   |  |  |   |
| same item bank, the same IRT  |  |  |   |
| analysis and use the same   |  |  |   |
| scoring metric. Using computer  |  |  |   |
| simulations with the AM-PAC   |  |  |   |
| item bank, we demonstrated excellent scoring comparability  |  |  |   |
| between the AM-PAC adaptive   |  |  |   |
| short forms and the CAT. (Haley   |  |  |   |
| · · · · · · · · · · · · · · · · · · ·   |  |  |   |
| et al., 2004)   |  |  |   |
| et al., 2004)   |  |  |   |
| et al., 2004)<br>Advantages of using the CAT  |  |  |   |
| Advantages of using the CAT over the short forms include:   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors  |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at<br>the lower and higher ends of   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at<br>the lower and higher ends of<br>the AM-PAC functional scales.<br>(Haley et al., 2004) However,<br>the adaptive short forms can   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at<br>the lower and higher ends of<br>the AM-PAC functional scales.<br>(Haley et al., 2004) However,<br>the adaptive short forms can<br>generate sufficiently accurate   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at<br>the lower and higher ends of<br>the AM-PAC functional scales.<br>(Haley et al., 2004) However,<br>the adaptive short forms can<br>generate sufficiently accurate<br>scores on the AM-PAC   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at<br>the lower and higher ends of<br>the AM-PAC functional scales.<br>(Haley et al., 2004) However,<br>the adaptive short forms can<br>generate sufficiently accurate<br>scores on the AM-PAC<br>functional domains and those   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at<br>the lower and higher ends of<br>the AM-PAC functional scales.<br>(Haley et al., 2004) However,<br>the adaptive short forms can<br>generate sufficiently accurate<br>scores on the AM-PAC<br>functional domains and those<br>scores can be directly compared                                  |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at<br>the lower and higher ends of<br>the AM-PAC functional scales.<br>(Haley et al., 2004) However,<br>the adaptive short forms can<br>generate sufficiently accurate<br>scores on the AM-PAC<br>functional domains and those   |  |  |   |
| Advantages of using the CAT<br>over the short forms include:<br>less test burden on patients,<br>decreased standard errors<br>around score estimates, and<br>improved scoring accuracy at<br>the lower and higher ends of<br>the AM-PAC functional scales.<br>(Haley et al., 2004) However,<br>the adaptive short forms can<br>generate sufficiently accurate<br>scores on the AM-PAC<br>functional domains and those<br>scores can be directly compared<br>to scores provided from a CAT |  |  |   |

|                          | 0429 Change in Basic Mobility as<br>Measured by the AM-PAC  | 0688 Percent of Residents<br>Whose Need for Help with   | 2287 Functional Change: Change<br>in Motor Score   | 2321 Functional Change: Change in Mobility Score  |
|--------------------------|---|---|--|---|
|                          |   | Activities of Daily Living Has<br>Increased (long stay)   |  |   |
| Data Source              | Other   | Electronic Health Records   | Claims, Other  | Instrument-Based Data, Other  |
| Level                    | Clinician: Individual, Facility   | Facility  | Facility   | Facility, Other   |
| Setting                  | Inpatient/Hospital, Outpatient<br>Services, Post-Acute Care, Home<br>Care   | Post-Acute Care   | Inpatient/Hospital, Post-Acute<br>Care, Home Care  | Inpatient/Hospital, Post-Acute<br>Care  |
| Numerator<br>Statement   | The number (or proportion) of a<br>clinician's patients in a particular<br>risk adjusted diagnostic<br>category who meet a target<br>threshold of improvement in<br>Basic Mobility functioning. We<br>recommend that the target<br>threshold is based on the<br>percentage of patients who<br>exceed one or more Minimal<br>Detectable Change (MDC)<br>thresholds. The percentage<br>threshold is derived from a<br>normative database used for<br>benchmarking. MDC is<br>considered the minimal amount<br>of change that is not likely to be<br>due to measurement error. It is<br>one of the more common<br>change indices, which can be<br>used to identify reliable changes<br>in an outcome like Basic<br>Mobility function adjusting for<br>the amount of measurement<br>error inherent in the<br>measurement. MDC can be<br>reported at different confidence<br>levels. | The numerator is the number of<br>long-stay residents who have a<br>selected target MDS assessment<br>(OBRA, PPS, or discharge)<br>reporting a defined amount of<br>decline in ADL function when<br>compared with a prior<br>assessment (OBRA, PPS, or<br>discharge). This decline in<br>function is captured as an<br>increase in the resident's need<br>for assistance with late-loss<br>ADLs, when compared with the<br>resident's prior assessment,<br>indicated by a higher score on<br>the applicable MDS items on the<br>more recent assessment (which<br>are coded such that a higher<br>score indicates the need for<br>more assistance with an ADL<br>task). Late-loss ADL items are<br>bed mobility, transfer, eating,<br>and toilet use. The threshold<br>increase in need for assistance<br>(suggesting decline in function)<br>that results in a resident being<br>counted in the numerator is met<br>if the score for at least one late-<br>loss ADL item increases by two<br>or more points or if the score for<br>two or more of the late-loss<br>ADLs items increase by one<br>point. The typical interval<br>between the target and prior<br>assessment dates is<br>approximately 90 days. | Average change in rasch derived<br>motor functional score from<br>admission to discharge at the<br>facility level. Average is<br>calculated as (sum of change at<br>the patient level/total number<br>of patients). Cases aged less<br>than 18 years at admission to<br>the IRF or patients who died<br>within the IRF are excluded.   | Average change in rasch derived<br>mobility function score from<br>admission to discharge at the<br>facility level. Includes the<br>following items: Transfer<br>Bed/Chair/Wheelchair, Transfer<br>Toilet, Locomotion and Stairs.<br>Average is calculated as: (sum of<br>change at the patient level/total<br>number of patients). Patient less<br>than 18 years of age at<br>admission to the facility or<br>patients who died within the<br>facility are excluded. |
| Denominator<br>Statement | All patients in a risk adjusted<br>diagnostic category with a<br>mobility goal for an episode of<br>care. Cases to be included in the<br>denominator could be identified<br>based on ICD-9 codes or<br>alternatively, based on CPT<br>codes relevant to treatment<br>goals focused on Basic Mobility<br>function.   | The denominator includes all<br>long-stay residents with a<br>selected target MDS assessment<br>(OBRA, PPS, or discharge) during<br>the quarter and a prior<br>assessment who did not meet<br>the exclusion criteria. Long-stay<br>residents are defined as<br>residents who have stayed in<br>the nursing home for 101<br>cumulative days or more.   | National values used in the<br>CMG-adjustment procedure will<br>not include cases who died in<br>the IRF (or other venue) or cases<br>less than 18 years old. Cases<br>who died during rehabilitation<br>are not typical patients and are<br>typically omitted in the<br>literature when looking at<br>rehabilitation outcomes. In<br>addition, the FIM instrument is<br>meant for an adult population<br>(Ottenbacher et al. 1996). | National values used in the CMG<br>adjustment procedure will not<br>include cases who died in the<br>IRF or patients less than 18<br>years of age at admission. Cases<br>who died during rehabilitation<br>are not typical patients and are<br>routinely omitted from reports<br>and published research on<br>rehabilitation outcomes. Further<br>details and references related to<br>the exclusion criteria can be<br>found in the Measure Testing<br>form.         |
| Exclusions               | Those patients who did not have<br>one or more mobility function<br>goals for the episode of care.  | There are six exclusions applied<br>to the denominator: (1) self-<br>performance total dependence<br>on all four late-loss ADL items<br>during the prior assessment<br>(and therefore it is not possible<br>for the resident to decline<br>sufficiently to be counted in the<br>numerator), (2) self-<br>performance total dependence<br>on three late-loss ADL items<br>during the prior assessment and<br>self-performance extensive<br>assistance on the fourth late-<br>loss ADL item (and therefore it is<br>not possible for the resident to<br>decline sufficiently to be<br>counted in the numerator), (3)<br>comatose status on the target<br>assessment, (4) prognosis of life<br>expectancy of less than six<br>months on the target<br>assessment, (5) receiving<br>hospice care on the target<br>assessment, or/and (6) the<br>resident is not in the numerator<br>and has missing values for any  | While the measure can be<br>stratified by specific impairment<br>type, the CMG adjustment<br>procedure allows for the<br>measure to be complete,<br>accurate, and valid for all<br>patients within the facility,<br>excluding died cases and ages<br>less than 18.   | While the measure can be<br>stratified by specific impairment<br>type (IGC), the CMG adjustment<br>procedure allows for the<br>measure to be complete,<br>accurate, and valid for all<br>patients within the facility,<br>excluding died cases and ages<br>less than 18.  |

|                    | 0429 Change in Basic Mobility as<br>Measured by the AM-PAC | 0688 Percent of Residents<br>Whose Need for Help with<br>Activities of Daily Living Has<br>Increased (long stay)   | 2287 Functional Change: Change<br>in Motor Score   | 2321 Functional Change: Change in Mobility Score   |
|--------------------|--|--|--|--|
|                    |  | of the four ADL items on the<br>target or prior assessment.<br>Nursing facilities are excluded<br>from public reporting if their<br>denominator size is less than 30<br>residents. |  |  |
| Risk<br>Adjustment | Statistical Risk Model                                     | N/A  | Stratification by risk category/group  | Stratification by risk category/group  |
| Stratification     | N/A  | N/A  | While the measure can be<br>stratified by specific impairment<br>type, the CMG adjustment<br>procedure allows for the<br>measure to be complete,<br>accurate, and valid for all<br>patients within the facility,<br>excluding died cases and ages<br>less than 18. | While the measure can be<br>stratified by specific impairment<br>type (IGC), the CMG adjustment<br>procedure allows for the<br>measure to be complete,<br>accurate, and valid for all<br>patients within the facility,<br>excluding died cases and ages<br>less than 18. |
| Type Score         | N/A  | Rate/Proportion  | Ratio  | Ratio  |

|                          | 2612 CARE: Improvement in  | 2643 Average change in   | 2653 Average change in  | 2774 Functional Change: Change   |
|--------------------------|--|--|---|--|
|                          | Mobility   | functional status following<br>lumbar spine fusion surgery   | functional status following total knee replacement surgery  | in Mobility Score for Skilled<br>Nursing Facilities  |
| Steward                  | American Health Care<br>Association  | MN Community Measurement   | MN Community Measurement  | Uniform Data System for<br>Medical Rehabilitation  |
| Description              | The measure calculates a skilled<br>nursing facility's (SNFs) average<br>change in mobility for patients<br>admitted from a hospital who<br>are receiving therapy. The<br>measure calculates the average<br>change in mobility score<br>between admission and<br>discharge for all residents<br>admitted to a SNF from a<br>hospital or another post-acute<br>care setting for therapy (i.e., PT<br>or OT) regardless of payor<br>status. This is a risk adjusted<br>outcome measure, based on the<br>mobility subscale of the<br>Continuity Assessment and<br>Record Evaluation (CARE) Tool<br>and information from the<br>admission MDS 3.0 assessment.<br>The measure is calculated on a<br>rolling 12 month, average<br>updated quarterly. | For patients age 18 and older<br>undergoing lumbar spine fusion<br>surgery, the average change<br>from pre-operative functional<br>status to one year (nine to<br>fifteen months) post-operative<br>functional status using the<br>Oswestry Disability Index (ODI<br>version 2.1a) patient reported<br>outcome tool.   | For patients age 18 and older<br>undergoing total knee<br>replacement surgery, the<br>average change from pre-<br>operative functional status to<br>one year (nine to fifteen<br>months) post-operative<br>functional status using the<br>Oxford Knee Score (OKS) patient<br>reported outcome tool.   | Change in rasch derived values<br>of mobility function from<br>admission to discharge among<br>adult short term rehabilitation<br>skilled nursing facility patients<br>aged 18 years and older who<br>were discharged alive. The time<br>frame for the measure is 12<br>months. The measure includes<br>the following 4 mobility<br>items:Transfer<br>Bed/Chair/Wheelchair, Transfer<br>Toilet, Locomotion and Stairs.                   |
| Туре                     | Outcome  | Outcome: PRO-PM  | Outcome: PRO-PM   | Outcome  |
| Data Source              | Electronic Health Records, Other   | Instrument-Based Data, Other,<br>Paper Medical Records   | Instrument-Based Data, Other,<br>Paper Medical Records  | Electronic Health Records, Other   |
| Level                    | Facility   | Clinician: Group/Practice  | Clinician: Group/Practice   | Facility   |
| Setting                  | Nursing Home/SNF   | Outpatient Services  | Outpatient Services   | Post-Acute Care  |
| Numerator<br>Statement   | The measure assesses the<br>change in mobility. The<br>numerator is the risk adjusted<br>sum of the change in the CARE<br>Tool mobility subscale items<br>between admission and<br>discharge for each individual<br>admitted from a hospital or<br>another post acute care setting<br>regardless of payor status and<br>are receiving therapy (PT or OT)<br>for any reason in a skilled<br>nursing center.   | There is not a traditional<br>numerator for this measure; the<br>measure is calculating the<br>average change in functional<br>status score from pre-operative<br>to post-operative functional<br>status score. The measure is<br>NOT aiming for a numerator<br>target value for a post-operative<br>ODI score.<br>For example:<br>The average change in low back<br>function was an increase in 17.2<br>points one year post-operatively<br>on a 100 point scale. | There is not a traditional<br>numerator for this measure; the<br>measure is calculating the<br>average change in functional<br>status score from pre-operative<br>to post-operative functional<br>status score. The measure is<br>NOT aiming for a numerator<br>target value for a post-operative<br>OKS score.<br>For example:<br>The average change in knee<br>function was an increase of 15.9<br>points one year post-operatively<br>on a 48 point scale. | Average change in rasch derived<br>mobility functional score (Items<br>Transfer Bed/Chair/Wheelchair,<br>Transfer Toilet, Locomotion and<br>Stairs) from admission to<br>discharge at the facility level.<br>Average is calculated as (sum of<br>change at the patient level/total<br>number of patients). Cases aged<br>less than 18 years at admission<br>to the facility or patients who<br>died within the facility are<br>excluded. |
| Denominator<br>Statement | Patients are excluded for two<br>broad reasons:<br>1. if they have conditions where<br>improvement in mobility is very<br>unlikely,<br>OR<br>2. have missing data necessary<br>to calculate the measure<br>Additionally, facilities with<br>denominator size of fewer than<br>30 patients during a 12 month  | Exclusions are for patients with<br>spine related cancer, fracture<br>and infection and idiopathic or<br>congenital scoliosis.   | There are no denominator<br>exclusions from the initial<br>patient population for this<br>measure.  | Excluded in the measure are<br>patients who died in the SNF or<br>patients less than 18 years old.   |

|                    | 2612 CARE: Improvement in<br>Mobility | 2643 Average change in<br>functional status following   | 2653 Average change in<br>functional status following total  | 2774 Functional Change: Change<br>in Mobility Score for Skilled |
|--------------------|---------------------------------------|---|--|---|
|                    | period are excluded from              | lumbar spine fusion surgery   | knee replacement surgery   | Nursing Facilities  |
| Exclusions         | Preporting their data.                | Clinical Condition Reason for<br>Procedure field is collected for<br>purposes of stratification<br>(potential) or use in a risk<br>adjustment model (more likely).<br>The choices for this variable are:<br>1 = Degenerative Disc Disease, 2<br>= Disc Herniation, 3 = Spinal<br>Stenosis, 4 = Spondylolisthesis.<br>These conditions are definable<br>by ICD-9/ ICD-10 codes and are<br>provided in the data dictionary<br>at S.2.b.<br>The use of this variable for<br>stratification of outcomes is<br>dependent on procedure<br>volume at the practice level; it<br>has been our experience so far<br>that the volumes at a practice<br>level do not support reliable<br>stratification by four variables as<br>they may result in volumes that<br>do not meet our standards for<br>public reporting at the practice<br>level. These variables, however,<br>are important for several<br>reasons. The may prove<br>appropriate for inclusion in a<br>future risk adjustment model.<br>They also serve analytical<br>purposes for further<br>understanding of the patient<br>reported outcome rates as some<br>of the conditions represent an<br>area of controversy in terms of<br>appropriateness of procedures<br>and successful outcomes for the<br>patient. | Primary versus revision total<br>knee replacement is the<br>stratification variable for this<br>measure; it is the intent of the<br>measure development group<br>that the outcome rates for this<br>variable are always used and<br>reported separately.<br>As part of the patient level<br>submission of demographic data<br>and PRO tool scores that are<br>submitted to MNCM's HIPAA<br>secure data portal, a field called<br>Procedure Type is included.<br>Definitions and directions for<br>this field include the following:<br>Procedure Type:<br>Enter the type of total knee<br>replacement for this procedure<br>date:<br>1 = Primary Total Knee<br>Replacement<br>2 = Revision Total Knee<br>Replacement<br>This field will be used to stratify<br>results by primary or revision<br>patients.<br>May use the primary CPT codes<br>to determine the status of<br>primary or revision.<br>This variable is defined by CPT<br>codes as follows:<br>Primary Total Knee Replacement<br>Procedures:<br>CPT Code CPT Procedure Code<br>Description<br>27445 Arthroplasty, knee<br>condyle and plateau, medial OR<br>lateral compartment<br>27447 Arthroplasty, knee<br>condyle and plateau, medial<br>AND lateral compartment with<br>or without patellar resurfacing<br>(total knee arthroplasty, with or<br>without allograft, 1 component<br>27487 Revision of total knee<br>arthroplasty, with or without<br>allograft, femoral and entire | See definition of the SNF-CMGs<br>in the excel file provided.   |
| Risk<br>Adjustment | Statistical Risk Model                | Statistical Risk Model  | tibial component<br>Statistical Risk Model   | Stratification by risk<br>category/subgroup                     |
| Stratification     | N/A                                   | Clinical Condition Reason for<br>Procedure field is collected for<br>purposes of stratification<br>(potential) or use in a risk<br>adjustment model (more likely).<br>The choices for this variable are:<br>1 = Degenerative Disc Disease, 2<br>= Disc Herniation, 3 = Spinal<br>Stenosis, 4 = Spondylolisthesis.<br>These conditions are definable<br>by ICD-9/ ICD-10 codes and are<br>provided in the data dictionary<br>at S.2.b.<br>The use of this variable for<br>stratification of outcomes is<br>dependent on procedure<br>volume at the practice level; it<br>has been our experience so far<br>that the volumes at a practice<br>level do not support reliable   | Primary versus revision total<br>knee replacement is the<br>stratification variable for this<br>measure; it is the intent of the<br>measure development group<br>that the outcome rates for this<br>variable are always used and<br>reported separately.<br>As part of the patient level<br>submission of demographic data<br>and PRO tool scores that are<br>submitted to MNCM's HIPAA<br>secure data portal, a field called<br>Procedure Type is included.<br>Definitions and directions for<br>this field include the following:<br>Procedure Type:<br>Enter the type of total knee<br>replacement for this procedure   | N/A   |

|            | 2612 CARE: Improvement in<br>Mobility   | 2643 Average change in<br>functional status following<br>lumbar spine fusion surgery<br>stratification by four variables as<br>they may result in volumes that<br>do not meet our standards for<br>public reporting at the practice<br>level. These variables, however,<br>are important for several  | <ul> <li>2653 Average change in<br/>functional status following total<br/>knee replacement surgery</li> <li>1 = Primary Total Knee<br/>Replacement</li> <li>2 = Revision Total Knee<br/>Replacement</li> <li>This field will be used to stratify</li> </ul>  | 2774 Functional Change: Change<br>in Mobility Score for Skilled<br>Nursing Facilities |
|------------|---|---|--|---|
|            | level. These variables, however,<br>are important for several<br>reasons. The may prove<br>appropriate for inclusion in a<br>future risk adjustment model.<br>They also serve analytical<br>purposes for further<br>understanding of the patient<br>reported outcome rates as some<br>of the conditions represent an<br>area of controversy in terms of<br>appropriateness of procedures<br>and successful outcomes for the<br>patient. | results by primary or revision<br>patients.<br>May use the primary CPT codes<br>to determine the status of<br>primary or revision.<br>This variable is defined by CPT<br>codes as follows:<br>Primary Total Knee Replacement<br>Procedures:<br>CPT Code CPT Procedure Code<br>Description<br>27445 Arthroplasty, knee<br>hinge prosthesis<br>27446 Arthroplasty, knee<br>condyle and plateau, medial OR<br>lateral compartment<br>27447 Arthroplasty, knee<br>condyle and plateau, medial<br>AND lateral compartment with<br>or without patellar resurfacing<br>(total knee arthroplasty) |  |   |
|            |   |   | Revision Total Knee<br>Replacement Procedures:<br>CPT Code CPT Procedure Code<br>Description 27486 Revision of<br>total knee arthroplasty, with or<br>without allograft, 1 component<br>27487 Revision of total knee<br>arthroplasty, with or without<br>allograft, femoral and entire<br>tibial component |   |
| Type Score | Continuous variable, e.g.<br>average  | Continuous variable, e.g.<br>average  | Continuous variable, e.g.<br>average   | Ratio   |

|                          | 2775: Functional Change: Change in<br>Motor Score for Skilled Nursing Facilities  | 2776: Functional Change: Change in<br>Motor Score in Long Term Acute Care<br>Facilities  | 2778: Functional Change: Change in Mobility<br>Score for Long Term Acute Care Facilities  |
|--------------------------|---|--|---|
| Steward                  | Uniform Data System for Medical<br>Rehabilitation   | Uniform Data System for Medical Rehabilitation   | Uniform Data System for Medical Rehabilitation  |
| Description              | Change in rasch derived values of motor<br>function from admission to discharge<br>among adult short term rehabilitation<br>skilled nursing facility patients aged 18<br>years and older who were discharged<br>alive. The time frame for the measure is<br>12 months. The measure includes the<br>following 12 items:Feeding, Grooming,<br>Dressing Upper Body, Dressing Lower<br>Body, Toileting, Bowel, Expression,<br>Memory, Transfer Bed/Chair/Wheelchair,<br>Transfer Toilet, Locomotion and Stairs. | Change in rasch derived values of motor<br>function from admission to discharge<br>among adult long term acute care facility<br>patients aged 18 years and older who<br>were discharged alive. The timeframe for<br>the measure is 12 months. The measure<br>includes the following 12 items:Feeding,<br>Grooming, Dressing Upper Body, Dressing<br>Lower Body, Toileting, Bowel, Expression,<br>Memory, Transfer Bed/Chair/Wheelchair,<br>Transfer Toilet, Locomotion and Stairs. | Change in rasch derived values of mobility<br>function from admission to discharge among<br>adult LTAC patients aged 18 years and older who<br>were discharged alive. The time frame for the<br>measure is 12 months. The measure includes the<br>following 4 mobility items:Transfer<br>Bed/Chair/Wheelchair, Transfer Toilet,<br>Locomotion and Stairs.   |
| Туре                     | Outcome   | Outcome  | Outcome   |
| Data Source              | Electronic Health Records, Paper Medical<br>Records, Other  | Electronic Health Records, Paper Medical<br>Records, Other   | Electronic Health Records, Paper Medical Records, Other   |
| Level                    | Facility  | Facility   | Facility  |
| Setting                  | Post-Acute Care   | Post-Acute Care  | Post-Acute Care   |
| Numerator<br>Statement   | Average change in rasch derived motor<br>functional score from admission to<br>discharge at the facility level for short<br>term rehabilitation patients. Average is<br>calculated as (sum of change at the<br>patient level/total number of patients).<br>Cases aged less than 18 years at<br>admission to the SNF or patients who<br>died within the SNF are excluded.  | Average change in rasch derived motor<br>functional score from admission to<br>discharge at the facility level for short<br>term rehabilitation patients. Average is<br>calculated as (sum of change at the<br>patient level/total number of patients).<br>Cases aged less than 18 years at<br>admission to the LTAC or patients who<br>died within the LTAC are excluded.   | Average change in rasch derived mobility<br>functional score (Items Transfer<br>Bed/Chair/Wheelchair, Transfer Toilet,<br>Locomotion and Stairs) from admission to<br>discharge at the facility level. Average is<br>calculated as (sum of change at the patient<br>level/total number of patients). Cases aged less<br>than 18 years at admission to the facility or<br>patients who died within the facility are<br>excluded. |
| Denominator<br>Statement | Facility adjusted expected change in rasch<br>derived values, adjusted for SNF-CMG<br>(Skilled Nursing Facility Case Mix Group),<br>based on impairment type, admission<br>functional status, and age.  | Facility adjusted expected change in rasch<br>derived values, adjusted for CMG (Case<br>Mix Group), based on impairment type,<br>admission functional status, and age.   | Facility adjusted adjusted expected change in rasch derived values, adjusted at the Case Mix Group level.   |

|                    | 2775: Functional Change: Change in<br>Motor Score for Skilled Nursing Facilities      | 2776: Functional Change: Change in<br>Motor Score in Long Term Acute Care<br>Facilities | 2778: Functional Change: Change in Mobility<br>Score for Long Term Acute Care Facilities      |
|--------------------|---|---|---|
| Exclusions         | Patients age at admission less than 18<br>years old.<br>Patients who died in the SNF. | Patients age at admission less than 18<br>years old<br>Patients who died in the LTAC.   | Excluded in the measure are patients who died in the LTAC or patients less than 18 years old. |
| Risk<br>Adjustment | Stratification by risk category/subgroup  | Stratification by risk category/subgroup  | Stratification by risk category/subgroup  |
| Stratification     | See definition of the SNF-CMGs in the excel file provided.                            | N/A   | N/A   |
| Type Score         | Ratio   | Ratio   | Ratio   |
# Comparison of NQF 2633, 2635, 0174, 2613, 2769, 2777

|                                   | 2633 Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure: Change in  | 2635 Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure: Discharge   | 0174 Improvement in bathing  |
|-----------------------------------|--|---|--|
|                                   | Self-Care Score for Medical Rehabilitation   | Self-Care Score for Medical Rehabilitation  |  |
| Steward<br>Description            | Patients<br>Centers for Medicare & Medicaid Services<br>This measure estimates the risk-adjusted<br>mean change in self-care score between<br>admission and discharge for Inpatient<br>Rehabilitation Facility (IRF) Medicare Part<br>A and Medicare Advantage patients.   | Patients<br>Centers for Medicare & Medicaid Services<br>This measure estimates the percentage of<br>IRF patients who meet or exceed an<br>expected discharge self-care score.   | Centers for Medicare & Medicaid Services<br>Percentage of home health episodes of care<br>during which the patient got better at bathing<br>self.  |
| Туре                              | Outcome  | Outcome   | Outcome  |
| Data Source                       | Instrument-Based Data  | Instrument-Based Data   | Electronic Health Data   |
| Level                             | Facility   | Facility  | Facility   |
| Setting<br>Numerator<br>Statement | Post-Acute Care<br>The measure does not have a simple form<br>for the numerator and denominator. This<br>measure estimates the risk-adjusted<br>change in self-care score between<br>admission and discharge among Inpatient<br>Rehabilitation Facility (IRF) Medicare Part<br>A and Medicare Advantage patients age<br>21 or older. The change in self-care score<br>is calculated as the difference between<br>the discharge self-care score and the<br>admission self-care score.   | Post-Acute Care<br>The numerator is the number of patients<br>in an IRF with an observed discharge self-<br>care score that is equal to or higher than<br>the calculated expected discharge self-<br>care score.  | Home Care<br>Number of home health episodes of care where<br>the value recorded on the discharge assessmen<br>indicates less impairment in bathing at discharg<br>than at start (or resumption) of care.   |
| Denominator<br>Statement          | The denominator is the number of<br>Inpatient Rehabilitation Facility Medicare<br>patient stays, except those that meet the<br>exclusion criteria.   | Inpatient Rehabilitation Facility patients<br>included in this measure are at least 21<br>years of age, Medicare Part A and<br>Medicare Advantage beneficiaries, and<br>have complete stays.  | All home health episodes of care (except those defined in the denominator exclusions) in which the patient was eligible to improve in bathing (i.e., were not at the optimal level of health status according to the "Bathing" OASIS-C2 item M1830).   |
| Exclusions                        | This quality measure has six patient-level<br>exclusion criteria:<br>1) Patients with incomplete stays.<br>Rationale: When a patient has an<br>incomplete stay, for example, the<br>patients leave urgently due to a medical<br>emergency, it can be challenging to<br>gather accurate discharge functional<br>status data. Patients with incomplete<br>stays include patients who are<br>unexpectedly discharged to an acute care<br>setting (Short-stay Acute Hospital, Critical<br>Access Hospital, Inpatient Psychiatric<br>Facility, or Long-term Care Hospital);<br>patients who die or leave an Inpatient<br>Rehabilitation Facility (IRF) against<br>medical advice; and patients with a<br>length of stay less than 3 days.<br>2) Patients who are independent with all<br>self-care activities at the time of<br>admission.<br>Rationale: Patients who are independent<br>with all the self-care items at the time of<br>admission are assigned the highest score<br>on all the self-care items, and thus, would<br>not be able to show functional<br>improvement on this same set of items at<br>discharge.<br>3) Patients with the following medical<br>conditions on admission: coma;<br>persistent vegetative state; complete<br>quadriplegia; locked-in syndrome; or<br>severe anoxic brain damage, cerebral<br>edema or compression of the brain.<br>Rationale: These patients are excluded<br>because they may have limited or less<br>predictable self-care items.<br>4) Patients younger than age 21.<br>Rationale: There is only limited evidence<br>published about functional outcomes for<br>individuals with Medicare who are<br>younger than 21.<br>5) Patients discharged to Hospice.<br>Rationale: Patient goals may change<br>during the IRF stay, and functional<br>improvement may no longer be a goal for<br>a patient discharged to hospice.<br>6) Patients who are not Medicare Part A<br>and Medicare Advantage beneficiaries. | This quality measure has five patient-level<br>exclusion criteria:<br>1) Patients with incomplete stays.<br>Rationale: When a patient has an<br>incomplete stay, for example, the patients<br>leave urgently due to a medical<br>emergency, it can be challenging to gather<br>accurate discharge functional status data.<br>Patients with incomplete stays include<br>patients who are unexpectedly discharged<br>to an acute care setting (Short-stay Acute<br>Hospital, Critical Access Hospital, Inpatient<br>Psychiatric Facility, or Long-term Care<br>Hospital); patients who die or leave an<br>Inpatient Rehabilitation Facility (IRF)<br>against medical advice; and patients with<br>a length of stay less than 3 days.<br>2) Patients with the following medical<br>conditions on admission: coma; persistent<br>vegetative state; complete quadriplegia;<br>locked-in syndrome; or severe anoxic<br>brain damage, cerebral edema or<br>compression of the brain.<br>Rationale: These patients are excluded<br>because they may have limited or less<br>predictable self-care items.<br>3) Patients younger than age 21.<br>Rationale: There is only limited evidence<br>published about functional outcomes for<br>individuals with Medicare who are<br>younger than 21.<br>4) Patients discharged to Hospice.<br>Rationale: Patient goals may change<br>during the IRF stay, and functional<br>improvement may no longer be a goal for<br>a patient discharged to hospice.<br>5) Patients not covered by the Medicare<br>Part A and Medicare Advantage program.<br>Rationale: IRF-PAI data for patients not<br>covered by the Medicare program are not<br>submitted to the Centers for Medicare<br>Part A and Medicare program are not<br>submitted to the Centers for Medicare<br>and Medicaid Services.<br>Facility-level quality measure are not<br>publicly reported. | All home health episodes where at the start (or<br>resumption) of care assessment the patient hac<br>minimal or no impairment, or the patient is non<br>responsive, or the episode of care ended in<br>transfer to inpatient facility or death at home, of<br>was covered by the generic exclusions. |

|                    | 2633 Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure: Change in<br>Self-Care Score for Medical Rehabilitation<br>Patients        | 2635 Inpatient Rehabilitation Facility (IRF)<br>Functional Outcome Measure: Discharge<br>Self-Care Score for Medical Rehabilitation<br>Patients | 0174 Improvement in bathing |
|--------------------|--|---|-----------------------------|
|                    | Rationale: IRF-PAI data for patients not<br>covered by the Medicare program are not<br>submitted to the Centers for Medicare<br>and Medicaid Services. |   |                             |
|                    | Facility-level quality measure exclusion:<br>For IRFs with fewer than 20 patient stays,<br>data for this quality measure are not<br>publicly reported. |   |                             |
| Risk<br>Adjustment | Statistical Risk Model   | Statistical Risk Model  | Statistical Risk Model      |
| Stratification     | N/A  | N/A   | N/A                         |
| Type Score         | Continuous variable, e.g. average  | Rate/Proportion   | Rate/Proportion             |

|                          | 2613 CARE: Improvement in Self Care  | 2769 Functional Change: Change in Self<br>Care Score for Skilled Nursing Facilities   | 2777 Functional Change: Change in Self Care<br>Score for Long Term Acute Care Facilities  |
|--------------------------|--|---|---|
| Steward                  | American Health Care Association   | Uniform Data System for Medical Rehabilitation  | Uniform Data System for Medical Rehabilitation  |
| Description              | The measure calculates a skilled nursing<br>facility's (SNFs) average change in self<br>care for patients admitted from a hospital<br>who are receiving therapy. The measure<br>calculates the average change in self care<br>score between admission and discharge<br>for all residents admitted to a SNF from a<br>hospital or another post-acute care<br>setting for therapy (i.e., PT or OT)<br>regardless of payor status. This is a risk<br>adjusted outcome measure, based on the<br>self care subscale of the Continuity<br>Assessment and Record Evaluation (CARE)<br>Tool and information from the admission<br>MDS 3.0 assessment. The measure is<br>calculated on a rolling 12 month, average<br>updated quarterly.  | Change in rasch derived values of self-care<br>function from admission to discharge<br>among adult patients treated as short<br>term rehabilitation patients in a skilled<br>nursing facility who were discharged alive.<br>The time frame for the measure is 12<br>months. The measure includes the<br>following 8 items: Eating, Grooming,<br>Dressing Upper Body, Dressing Lower<br>Body, Toileting, Bowel, Expression, and<br>Memory. | Change in rasch derived values of self-care<br>function from admission to discharge among<br>adult patients treated in a long term acute care<br>facility who were discharged alive. The time<br>frame for the measure is 12 months. The<br>measure includes the following 8 items: Eating,<br>Grooming, Dressing Upper Body, Dressing Lower<br>Body, Toileting, Bowel, Expression, and Memory. |
| Туре                     | Outcome  | Outcome   | Outcome   |
| Data Source              | Electronic Health Records, Other   | Electronic Health Records, Paper Medical Records, Other   | Electronic Health Records, Paper Medical Records, Other   |
| Level                    | Facility   | Facility  | Facility  |
| Setting                  | Nursing Home/SNF   | Post-Acute Care   | Post-Acute Care   |
| Numerator<br>Statement   | This outcome measure assesses the<br>change in self-care. The numerator is the<br>risk adjusted sum of the change in the<br>CARE Tool self care subscale items<br>between admission and discharge for<br>each individual admitted from a hospital<br>or another post-acute care setting<br>regardless of payor status and are<br>receiving therapy (PT or OT) for any<br>reason in a skilled nursing center.   | Average change in rasch derived self-care<br>functional score from admission to<br>discharge at the facility level, including<br>items: Eating, Grooming, Dressing Upper<br>Body, Dressing Lower Body, Toileting,<br>Bowel, Expression, and Memory.   | Average change in rasch derived self-care<br>functional score from admission to discharge at<br>the facility level, including items: Eating,<br>Grooming, Dressing Upper Body, Dressing Lower<br>Body, Toileting, Bowel, Expression, and Memory.  |
| Denominator<br>Statement | The denominator includes all residents<br>admitted to a SNF from a hospital or<br>another post-acute care setting who<br>receive either PT or OT therapy for any<br>reason during their stay regardless of<br>payor status, have a completed self care<br>subscale of the CARE Tool at admission<br>and discharge and do not meet any of the<br>exclusion criteria and do not have missing<br>data. The self care items used from the<br>CARE tool are listed below and rated on a<br>1-6 scale (see Appendix for CARE Tool).<br>The items included in the CARE Tool self<br>care subscale include:<br>A1. Eating<br>A3. Oral Hygiene<br>A4. Toilet Hygiene<br>A5. Upper Body Dressing<br>C1. Wash Upper Body<br>C2. Shower / Bathe<br>C6. Putting on / taking off<br>footwear | Facility adjusted expected change in rasch<br>derived values, adjusted for SNF-CMG<br>(Skilled Nursing Facility Case Mix Group),<br>based on impairment type, admission<br>functional status, and age   | Facility adjusted expected change in rasch<br>derived values, adjusted for CMG (Case Mix<br>Group), based on impairment type, admission<br>functional status, and age   |
| Exclusions               | Individual patients are excluded for two<br>broad reasons:<br>1. if they have conditions where<br>improvement in self-care is very unlikely,<br>OR   | Excluded in the measure are patients who<br>died in the SNF or patients less than 18<br>years old.  | Excluded in the measure are patients who died in the LTAC or patients less than 18 years old.   |

## NATIONAL QUALITY FORUM

|                    | 2613 CARE: Improvement in Self Care   | 2769 Functional Change: Change in Self<br>Care Score for Skilled Nursing Facilities | 2777 Functional Change: Change in Self Care<br>Score for Long Term Acute Care Facilities |
|--------------------|---|---|--|
|                    | <ul> <li>2. have missing data necessary to calculate the measure</li> <li>Additionally, facilities with denominator size of fewer than 30 patients during a 12 month period are excluded from reporting of their data.</li> </ul> |   |  |
| Risk<br>Adjustment | Statistical Risk Model  | Stratification by risk category/subgroup  | Stratification by risk category/subgroup   |
| Stratification     | N/A   | N/A   | N/A  |
| Type Score         | Continuous variable, e.g. average   | Ratio   | Ratio  |

## NATIONAL QUALITY FORUM

# **Appendix E2: Related and Competing Measures (narrative version)**

## Comparison of NQF 2286 and NQF 2633

2286 Functional Change: Change in Self Care Score 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

## Steward

## 2286 Functional Change: Change in Self Care Score

Uniform Data System for Medical Rehabilitation

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Centers for Medicare & Medicaid Services

## Description

## 2286 Functional Change: Change in Self Care Score

Change in rasch derived values of self-care function from admission to discharge among adult patients treated at an inpatient rehabilitation facility who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 8 items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

## 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

This measure estimates the risk-adjusted mean change in self-care score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare patients.

## Туре

### 2286 Functional Change: Change in Self Care Score

Outcome

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Outcome

## Data Source

## 2286 Functional Change: Change in Self Care Score

Instrument-Based Data, Other

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Instrument-Based Data

Level

#### 2286 Functional Change: Change in Self Care Score

Facility, Other

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Facility

## Setting

#### 2286 Functional Change: Change in Self Care Score

Inpatient/Hospital

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Post-Acute Care

## Numerator Statement

## 2286 Functional Change: Change in Self Care Score

Average change in rasch derived self-care functional score from admission to discharge at the facility level, including items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. Average is calculated as: (sum of change at the patient level for all items (Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) / total number of patients).

## 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in self-care score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare patients age 21 or older. The change in self-care score is calculated as the difference between the discharge self-care score and the admission self-care score.

#### Numerator Details

## 2286 Functional Change: Change in Self Care Score

For Inpatient Rehabilitation Facilities (IRFs) data collection currently occurs as required by the Centers for Medicare and Medicaid Services (CMS) reimbursement using the mandated payment document, the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). Embedded in the IRF-PAI is the FIM® Instrument. The FIM® Instrument is a criterion referenced tool with 18 items that measure patient physical and cognitive functional status and patient burden of care (level of dependence/need for helper assistance). Each item is rated on a scale of 1 (most dependent) to 7 (completely independent). For the purposes of this measure, a subset of 8 FIM® items has been tested and validated which comprise the self-care measure; those items are: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. Rasch analysis was performed on the 8 items and the difference in the rasch derived values (defined in S.2b) from admission to discharge reflect the change at the patient level. The numerator of the measure is the facility's average change.

While the IRF-PAI is specific to inpatient rehabilitation facilities, the measure can be used in all post-acute care venues. The FIM<sup>®</sup> instrument can be assessed in all venues of care and has been tested and validated for use in inpatient medical rehabilitation, long term acute care facilities (LTAC), skilled nursing facilities (SNF) and home health. At present, numerous LTACs and SNFs utilize the FIM<sup>®</sup> instrument (www.udsmr.org), thus the self-care measure is applicable for use in IRF, SNF, LTAC and other venues where patient functional change is anticipated.

## 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Seven self-care activities are each scored based on a patient's ability to complete the activity. The scores for the seven activities are summed to obtain a self-care score at the time of admission and at the time of discharge. The change in self-care is the difference between the discharge self-care score and the admission self-care score.

The 7 self-care items are:

GG0130A. Eating

GG0130B. Oral hygiene

GG0130C. Toileting hygiene

GG0130E. Shower/bathe self

GG0130F. Upper body dressing

GG0130G. Lower body dressing

GG0130H. Putting on/taking off footwear

Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

10 = Not attempted due to environmental limitations

88 = Not attempted due to medical condition or safety concerns.

The performance period is 12 months for reporting on CMS's IRF Compare website.

## **Denominator Statement**

### 2286 Functional Change: Change in Self Care Score

Facility adjusted adjusted expected change in rasch derived values, adjusted at the Case Mix Group level.

## 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

The denominator is the number of Inpatient Rehabilitation Facility Medicare patient stays, except those that meet the exclusion criteria.

## Denominator Details

#### 2286 Functional Change: Change in Self Care Score

To calculate the facility adjusted expected self-care change in rasch derived values, indirect standardization is used, which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission (in essence, patient severity). Patients within the same CMG are expected to have similar resource utilization needs and similar outcomes. There are three steps to classifying a patient into a CMG at admission:

1. Identify the patient's impairment group code (IGC).

2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM<sup>®</sup> items as indicated on the CMS IRF-PAI v. 20 instrument (attached).

3. Calculate the cognitive FIM<sup>®</sup> rating (as indicated on the CMS IRF\_PAI v. 20 instrument) and the patient age at admission. (This step is not required for all CMGs.)

See file uploaded in S.15 for calculations.

While CMGs are only present for patients admitted to an IRF, the same procedure can be used for patients receiving care at a LTAC facility and/or a SNF, with groupings specific to those venues of care.

## 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

The denominator is the number of Inpatient Rehabilitation Facility Medicare Part A and Medicare Advantage patient stays, except those that meet the exclusion criteria.

### Exclusions

#### 2286 Functional Change: Change in Self Care Score

National values used in the CMG-adjustment procedure will not include cases who died in the IRF or cases less than 18 years old. It is standard to exclude cases who died during rehabilitation as this is a highly atypical outcome, in addition, minors are excluded as well. The measure testing file includes further explanation regarding the exclusion criteria as well as references.

## 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

This quality measure has six patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital,

Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients who are independent with all self-care activities at the time of admission.

Rationale: Patients who are independent with all the self-care items at the time of admission are assigned the highest score on all the self-care items, and thus, would not be able to show functional improvement on this same set of items at discharge.

3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; or severe anoxic brain damage, cerebral edema or compression of the brain.

Rationale: These patients are excluded because they may have limited or less predictable self-care improvement with the selected self-care items.

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

5) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

## **Exclusion Details**

#### 2286 Functional Change: Change in Self Care Score

Patient date of birth (DOB) and discharge setting are both variables collected in the IRF-PAI. Age can be calculated from DOB and patient date of admission (also collected in the IRF-PAI). In the variable discharge setting, there is a specific category for 'died' (code: 11). Date of birth, date of admission and discharge setting (including died as a category) are also assessed in the LTAC and SNF.

## 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

The following items are used to identify which patients are excluded from the quality measure calculations.

These data elements are included on the current version of the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI), which is available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/IRFPAI.html

It can be challenging to gather accurate discharge functional status data for patients who experience incomplete stays. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients discharged to

a hospice; patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

Items used to identify these patient records:

1) Patients with incomplete stays.

Patients with a length of stay less than 3 days: We calculate length of stay using the following items on the IRF-PAI.

Item 12. Admission Date.

Item 40. Discharge Date.

Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of less than 3 days are excluded.

Item 41. Patient discharged against medical advice. This item is used to identify patients discharged against medical advice.

Patient records with a response of "Yes = 1" are excluded.

Item 44C. Was the patient discharged alive? This item is used to identify patients who died during the IRF stay.

Patient records with a response of "No=0" are excluded.

44D. Patient's discharge destination/living setting. This item is used to identify patients with an incomplete stay.

Short-term General Hospital = 02

Long-Term Care Hospital = 63

Inpatient Psychiatric Facility = 65

Critical Access Hospital = 66.

2) Patients who are independent with all self-care activities at the time of admission: Patients who are independent with all the self-care items at the time of admission are assigned the highest score on all the self-care items, and thus, would not be able to show functional improvement (i.e., a higher score) on this same set of items at discharge.

## Self-care items

GG0130A. Eating = 06, and

GG0130B. Oral hygiene = 06, and

GG0130C. Toileting hygiene = 06, and

GG0130E. Shower/bathe self = 06, and

GG0130F. Upper body dressing = 06, and

GG0130G. Lower body dressing = 06, and

GG0130H. Putting on/taking off footwear = 06.

3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; and locked-in syndrome; and severe anoxic brain damage, cerebral edema or compression of the brain.

The following items will be used to identify patients with these conditions:

21A. Impairment Group.

0004.1221 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C1-C4

0004.1222 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C5-C8 0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C1-C4 0004.2222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C5-C8 22. Etiologic Diagnosis.

This item is used to determine a patient's etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude the records of patients with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5. Locked-in state

24. Comorbid Conditions.

This item is used to exclude selected comorbidities. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude the records of patients with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5. Locked-in state

4) Patients younger than age 21.

These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

5) Patients discharged to hospice

44D. Patient's discharge destination/living setting.

This item is used to identify patients discharged to hospice. The following responses are used:

Hospice (home) = 50

Hospice (institutional facility) = 51

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

The following items are used to identify and exclude the records of patients who are not Medicare Part A and Medicare Advantage beneficiaries:

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

## Risk Adjustment

### 2286 Functional Change: Change in Self Care Score

Stratification by risk category/subgroup

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Statistical Risk Model

## Stratification

## 2286 Functional Change: Change in Self Care Score

While the measure can be stratified by specific impairment type (using IGC), the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding cases who died and excluding patient under age 18 years.

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

N/A

## Type Score

2286 Functional Change: Change in Self Care Score

Ratio

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Continuous variable, e.g. average

## Algorithm

## 2286 Functional Change: Change in Self Care Score

1. Target population: Inpatient rehabilitation facility patients, skilled nursing facility short term patients, long term acute care facility patients, and home health patients.

- 2. Exclusions: Age less than 18 and cases who died during the episode of care.
- 3. Cases meeting target process: All remaining cases.

4. Outcome: Ratio of facility level average self-care change (rasch derived values) to facility CMG adjusted expected self-care change.

5. Risk adjustment: CMG adjustment using indirect standardization of the proportion of cases at the facility by CMG, and CMG specific national average of rasch derived value of self-care change.

## 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

We provide the detailed calculation algorithm in an attachment entitled "IRF Detailed Function QM Specifications 2633 01-07-2019" included in the Appendix.

The detailed calculation algorithm is provided to the public in the document entitled IRF Measure Calculations and Reporting User's Manual. The current version of this document is available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/IRF-Quality-Reporting-Program-Measures-Information-.html

The following are the key steps used to calculate the measure:

1) Sum the scores of the admission self-care items to create an admission self-care score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes (' $^{\prime}$ ) and missing data ('-') are recoded. (range: 7 to 42).

2) Sum the scores of the discharge self-care items to create a discharge self-care score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded. (range: 7 to 42).

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Calculate the difference between the admission self-care score (from step 1) and the discharge self-care score (from step 2) for each patient to create a change in self-care score for each patient.

5) Calculate an expected change in self-care score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).

6) Calculate an average change in self-care score for each IRF. This is the facility-level observed change in self-care score.

7) Calculate an average expected change in self-care score for each IRF. This is the facilitylevel expected change in self-care score.

8) Subtract the facility-level expected change score from the facility -level observed change score to determine the difference in scores (difference value). A difference value that is 0 indicates the observed and expected scores are equal. An observed minus expected difference value that is higher than 0 (positive value) indicates that the observed change score is greater (better) than the expected change score. An observed minus expected difference value that is less than 0 (negative value) indicates that the observed change score is lower (worse) than the expected change score.

9) Add the national average change in self-care score to each IRF's difference value (from step 8). This is the risk-adjusted mean change in self-care score.

Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

The 7 self-care items are:

GG0130A. Eating

GG0130B. Oral hygiene

GG0130C. Toileting hygiene

GG0130E. Shower/bathe self

GG0130F. Upper body dressing

GG0130G. Lower body dressing

GG0130H. Putting on/taking off footwear

## Comparison of NQF 2321 and NQF 2634

2321 Functional Change: Change in Mobility Score

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

## Steward

## 2321 Functional Change: Change in Mobility Score

Uniform Data System for Medical Rehabilitation

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Centers for Medicare & Medicaid Services

## Description

#### 2321 Functional Change: Change in Mobility Score

Change in rasch derived values of mobility function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility FIM<sup>®</sup> items:Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

This measure estimates the mean risk-adjusted mean change in mobility score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.

## Туре

## 2321 Functional Change: Change in Mobility Score

Outcome

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Outcome

## Data Source

#### 2321 Functional Change: Change in Mobility Score

Instrument-Based Data, Other

# 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Instrument-Based Data

## Level

2321 Functional Change: Change in Mobility Score Facility, Other

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients Facility

### Setting

## 2321 Functional Change: Change in Mobility Score Inpatient/Hospital, Post-Acute Care

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Post-Acute Care

## Numerator Statement

#### 2321 Functional Change: Change in Mobility Score

Average change in rasch derived mobility function score from admission to discharge at the facility level. Includes the following items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level/total number of patients). Patient less than 18 years of age at admission to the facility or patients who died within the facility are excluded.

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in mobility score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients age 21 and older. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score.

## Numerator Details

#### 2321 Functional Change: Change in Mobility Score

For Inpatient Rehabilitation Facilities (IRFs) data collection is presently required for payment reimbursement by the Centers for Medicare and Medicaid Services (CMS) using the mandated Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). Embedded in the IRF-PAI is the FIM<sup>®</sup> Instrument. The FIM<sup>®</sup> Instrument is a criterion referenced tool with 18 items that measures patient physical and cognitive function, need for helper assistance, burden of care/level of dependence. Each item is rated on a scale of 1 (most dependent) to 7 (completely independent). For the purposes of this measure, a subset of 4 FIM<sup>®</sup> items has been tested and validated as the Change in Mobility measure; the items are: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Rasch analysis was performed on the items and the difference in the rasch derived values (defined in S.2b) from admission to discharge reflect the change at the patient level. The numerator of the measure is the average change in mobility score at the facility level. While the IRF-PAI is specific to inpatient rehabilitation facilities, the change in mobility measure can be used in all post-acute care venues. The FIM® instrument is routinely used for patient functional assessment in all venues of care and has been tested and validated for use in IRFs, skilled nursing facilities (SNFs) and long term acute care facilities (LTAC)

(www.udsmr.org), therefore this measure is not specific for inpatient medical rehabilitation use only.

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Seventeen mobility activities are each scored based on a patient's ability to complete the activity. The scores for the activities are summed to obtain a mobility score at the time of admission and at the time of discharge. The change in mobility is the difference between the discharge mobility score and the admission mobility score.

The mobility items are:

GG0170A. Roll left and right

GG0170B. Sit to lying

GG0170C. Lying to sitting on side of bed

GG0170D. Sit to stand

GG0170E. Chair/bed-to-chair transfer

GG0170F. Toilet transfer

GG0170G. Car transfer

GG0170I. Walk 10 feet

GG0170J. Walk 50 feet with two turns

GG0170K. Walk 150 feet

GG0170L. Walking 10 feet on uneven surfaces

GG1070M. 1 step (curb)

GG0170N. 4 steps

GG01700. 12 steps

GG0170P. Picking up object

GG0170R. Wheel 50 feet with two turns (for patients who do not walk at admission and discharge)

GG0170S. Wheel 150 feet (for patients who do not walk at admission and discharge)

Each patient's ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

If the patient did not attempt the activity, the reason that activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

10 = Not attempted due to environmental limitations

88 = Not attempted due to medical condition or safety concerns.

The performance period is 12 months for reporting on CMS's IRF Compare website.

## Denominator Statement

#### 2321 Functional Change: Change in Mobility Score

Facility adjusted expected change in rasch derived mobility values, adjusted at the Case Mix Group (CMG) level.

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

The denominator is the number of Inpatient Rehabilitation Facility Medicare Part A and Medicare Advantage patient stays, except those that meet the exclusion criteria.

## Denominator Details

## 2321 Functional Change: Change in Mobility Score

To calculate the facility adjusted expected change in rasch derived mobility values, indirect standardization was used, which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission, in essence, patient severity. Patients within the same CMG are expected to have similar resource utilization needs and similar functional outcomes. There are three steps to classifying a patient into a CMG at admission:

1. Identify the patient's impairment group code (IGC).

2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM<sup>®</sup> items.

3. Calculate the cognitive FIM<sup>®</sup> rating and the patient's age at admission. (This step is not required for all CMGs.)

See file uploaded in S.2b for calculations or 'CMG Version 3.00 [ZIP, 9.02mb]' at the following link for more details:

https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/CMG.html

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

The denominator is the number of Inpatient Rehabilitation Facility Medicare Part A and Medicare Advantage patient stays, except those that meet the exclusion criteria.

## **Exclusions**

#### 2321 Functional Change: Change in Mobility Score

National values used in the CMG adjustment procedure will not include cases who died in the IRF or patients less than 18 years of age at admission. Cases who died during rehabilitation are not typical patients and are routinely omitted from reports and published research on rehabilitation outcomes. Further details and references related to the exclusion criteria can be found in the Measure Testing form.

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

This quality measure has six patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients who are independent with all mobility activities at the time of admission.

Rationale: Patients who are independent with all the mobility items (with the exception of the wheelchair items GG0170R and GG0170S) at the time of admission are assigned the highest score on all the mobility items, and thus, would not be able to show functional improvement on this same set of items at discharge.

3) Patients with the following medical conditions on admission: coma, persistent vegetative state; complete quadriplegia; locked-in syndrome or severe anoxic brain damage, cerebral edema or compression of brain.

Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected mobility items.

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

5) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

## **Exclusion Details**

#### 2321 Functional Change: Change in Mobility Score

Patient date of birth (DOB), date of admission and discharge setting variables are collected in the IRF-PAI. Age can be calculated from DOB and admission date. The variable discharge setting includes a category for 'died' which is indicated as a code of '11'. Patient date of birth, admission date and discharge setting are also documented in SNFs and LTAC facilities.

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

The following items are used to identify which patients are excluded from the quality measure calculations.

These data elements are included on the current version of the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI), which is available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/IRFPAI.html

It can be challenging to gather accurate discharge functional status data for patients who experience incomplete stays. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients discharged to a hospice; patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

Items used to identify these patient records:

1) Patients with incomplete stays.

Patients with a length of stay less than 3 days: We calculate length of stay using the following items on the IRF-PAI.

Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of less than 3 days are excluded.

Item 12. Admission Date.

Item 40. Discharge Date.

Item 41. Patient discharged against medical advice. This item is used to identify patients discharged against medical advice.

Patient records with a response of "Yes = 1" are excluded.

Item 44C. Was the patient discharged alive? This item is used to identify patients who died during the IRF stay.

Patient records with a response of "No = 0" are excluded.

44D. Patient's discharge destination/living setting.

This item is used to identify an incomplete stay. Specifically, the following responses will be used to identity patients with incomplete stays:

Short-term General Hospital = 02

Long-Term Care Hospital = 63

Inpatient Psychiatric Facility = 65

Critical Access Hospital = 66.

2) Patients who are independent with all mobility activities at the time of admission.

Patients who are independent with all the mobility items at the time of admission are assigned the highest score on all the mobility items, thus, would not be able to show functional improvement (i.e., a higher score) on this same set of items at discharge. The following items and scores are used to identify and exclude patient records:

Mobility items

GG0170A. Roll left and right = 06, and GG0170B. Sit to lying = 06, and GG0170C. Lying to sitting on side of bed = 06, and GG0170D. Sit to stand = 06, and GG0170E. Chair/bed-to-chair transfer = 06, and

GG0170F. Toilet transfer = 06, and

GG0170G. Car transfer = 06, and

GG0170I. Walk 10 feet = 06, and

GG0170J. Walk 50 feet with two turns = 06, and

GG0170K. Walk 150 feet = 06, and

GG0170L. Walking 10 feet on uneven surfaces = 06, and

GG0170M. 1 step (curb) = 06, and

GG0170N. 4 steps = 06, and

GG0170O. 12 steps = 06, and

GG0170P. Picking up object = 06.

3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; and severe anoxic brain damage, cerebral edema or compression of the brain.

The following items will be used to identify patients with these conditions:

21A. Impairment Group.

0004.1221 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C1-C4

0004.1222 - Spinal Cord Dysfunction, Non-Traumatic: Quadriplegia Complete, C5-C8

0004.2221 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C1-C4

0004.2222 - Spinal Cord Dysfunction, Traumatic: Quadriplegia Complete, C5-C8

22. Etiologic Diagnosis.

This item is used to determine a patient's etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to identify and exclude records of patients with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5. Locked-in state

24. Comorbid Conditions.

This item is used to exclude selected comorbidities. The following Hierarchical Condition Categories (HCCs) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes will be used to exclude records of patients with these conditions:

HCC 80. Coma, Brain Compression/Anoxic Damage

ICD-10-CM. G82.51 Quadriplegia, C1-C4 complete

ICD-10-CM. G82.53 Quadriplegia, C5-C7 complete

ICD-10-CM. S14.11xx Quadriplegia, Complete lesion at Cx(1-8) level of cervical spinal cord, initial encounter or subsequent encounter, or sequela

ICD-10-CM. G83.5. Locked-in state

4) Patients younger than age 21. These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

5) Patients discharged to hospice.

44D. Patient's discharge destination/living setting.

This item is used to identify patients discharged to hospice. The following responses are used:

Hospice (home) = 50

Hospice (institutional facility) = 51

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

#### Risk Adjustment

#### 2321 Functional Change: Change in Mobility Score

Stratification by risk category/subgroup

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Statistical Risk Model

## Stratification

#### 2321 Functional Change: Change in Mobility Score

While the measure can be stratified by specific impairment type (IGC), the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

N/A

## Type Score

2321 Functional Change: Change in Mobility Score

Ratio

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Continuous variable, e.g. average

## Algorithm

#### 2321 Functional Change: Change in Mobility Score

1. Target population: patients receiving care at an inpatient medical rehabilitation facility, a skilled nursing facility, or a long term acute care facility.

2. Exclusions: Age less than 18 years and patients who died during the episode of care.

3. Cases meeting target process: All remaining cases.

4. Outcome: Ratio of facility level average mobility change (rasch derived values) to facility CMG adjusted expected mobility change.

5. Risk adjustment: CMG adjustment using indirect standardization of the proportion of cases at the facility by CMG, and CMG specific national average of rasch derived value of mobility change.

## 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

We provide the detailed calculation algorithm in an attachment entitled "IRF Detailed Function QM Specifications 2634 01-07-2019" included in the Appendix.

The detailed calculation algorithm is provided to the public in the document entitled IRF Measure Calculations and Reporting User's Manual. The current version of this document is available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/IRF-Quality-Reporting-Program-Measures-Information.html

The following are key steps used to calculate the measure:

1) Sum the scores of the admission mobility items to create an admission mobility score for each patient, after 'activity not attempted' codes (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded, and for patients who do not walk on admission and discharge, walking items have been recoded to use wheelchair mobility item codes. (range: 15 to 90).

2) Sum the scores of the discharge mobility items to create a discharge mobility score for each patient, after 'activity not attempted' values (07. Patient refused, 09. Not applicable, 10. Not attempted due to environmental limitations, and 88. Not attempted due to medical condition or safety concerns), skip codes ('^') and missing data ('-') are recoded. As described in step 1, for patients who do not walk on admission and discharge, use wheelchair mobility item codes instead of walking codes. (range: 15 to 90).

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Calculate the difference between the admission mobility score (from step 1) and the discharge mobility score (from step 2) for each patient to create a change in mobility score for each patient.

5) Calculate an expected change in mobility score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).

6) Calculate an average observed change in mobility score for each IRF (using the patient data calculated in step 4). This is the facility-level observed change in mobility score.

7) Calculate an average expected change in mobility score for each IRF (using the patient data from step 5). This is the facility-level expected change in mobility score.

8) Subtract the facility-level expected change score from the facility-level observed change score to determine the difference in scores (difference value). A difference value that is 0 indicates the observed and expected scores are equal. An observed minus expected difference value that is higher than 0 (positive) indicates that the observed change score is greater (better) than the expected change score. An observed minus expected difference value that is less than 0 (negative) indicates that the observed change score is lower (worse) than the expected change score.

9) Add the national average change in mobility score to each IRF's difference value (from step 8). This is the risk-adjusted mean change in mobility score.

Each patient's ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 06 - Independent

level 05 - Setup or clean up assistance

level 04 - Supervision or touching assistance

level 03 - Partial/moderate assistance

level 02 - Substantial/maximal assistance

level 01 - Dependent

The mobility items are:

GG0170A. Roll left and right

GG0170B. Sit to lying

GG0170C. Lying to sitting on side of bed

GG0170D. Sit to stand

GG0170E. Chair/bed-to-chair transfer

GG0170F. Toilet transfer

GG0170G. Car transfer

GG0170I. Walk 10 feet

GG0170J. Walk 50 feet with two turns

GG0170K. Walk 150 feet

GG0170L. Walking 10 feet on uneven surfaces

GG1070M. 1 step (curb)

GG0170N. 4 steps

GG01700. 12 steps

GG0170P. Picking up object

GG0170R. Wheel 50 feet with two turns (for patients who do not walk at admission and discharge)

GG0170S. Wheel 150 feet (for patients who do not walk at admission and discharge)

## Comparison of NQF 3227 and NQF 2962

3227 CollaboRATE Shared Decision Making Score 2962 Shared Decision Making Process

### Steward

#### 3227 CollaboRATE Shared Decision Making Score

The Dartmouth Institute for Health Policy & Clinical Practice

## 2962 Shared Decision Making Process

Massachusetts General Hospital

### Description

#### 3227 CollaboRATE Shared Decision Making Score

CollaboRATE is a patient-reported measure of shared decision making which contains three brief questions that patients, their parents, or their representatives complete following a clinical encounter. The CollaboRATE measure provides a performance score representing the percentage of adults 18 and older who experience a high level of shared decision making.

The measure was developed to be generic and designed so that it could apply to all clinical encounters, irrespective of the condition or the patient group. The measure asks the patient to evaluate the 'effort made' to inform, to listen to issues that matter to the patient, and to include those issues in choosing 'next steps'. The items were co-developed with patients using cognitive interview methods.

CollaboRATE is designed for use in routine health care delivery. The brevity and the ease of completion were purposeful, so the measure could be used as a performance metric for shared decision making.

### 2962 Shared Decision Making Process

This measure assesses the extent to which health care providers actually involve patients in a decision-making process when there is more than one reasonable option. This proposal is to focus on patients who have undergone any one of 7 common, important surgical procedures: total replacement of the knee or hip, lower back surgery for spinal stenosis of herniated disc, radical prostatectomy for prostate cancer, mastectomy for early stage breast cancer or percutaneous coronary intervention (PCI) for stable angina. Patients answer four questions (scored 0 to 4) about their interactions with providers about the decision to have the procedure, and the measure of the extent to which a provider or provider group is practicing shared decision making for a particular procedure is the average score from their responding patients who had the procedure.

## Туре

## 3227 CollaboRATE Shared Decision Making Score

Outcome: PRO-PM

## 2962 Shared Decision Making Process

Outcome: PRO-PM

### Data Source

#### 3227 CollaboRATE Shared Decision Making Score

Instrument-Based Data

### 2962 Shared Decision Making Process

Instrument-Based Data

## Level

## 3227 CollaboRATE Shared Decision Making Score Clinician: Group/Practice

#### 2962 Shared Decision Making Process

Clinician: Group/Practice

## Setting

## 3227 CollaboRATE Shared Decision Making Score

Inpatient/Hospital, Outpatient Services

#### 2962 Shared Decision Making Process

**Outpatient Services** 

## Numerator Statement

#### 3227 CollaboRATE Shared Decision Making Score

Shared decision making; top-box scores represent the proportion of patients perceiving a high level of shared decision-making.

## 2962 Shared Decision Making Process

Patient answers to four questions about whether not 4 essential elements of shared decision making (laying out options, discussing the reasons to have the intervention and not to have the intervention, and asking for patient input) were part of the interactions with providers when the decision was made to have the procedure.

## Numerator Details

#### 3227 CollaboRATE Shared Decision Making Score

The numerator consists of those cases (i.e. patient responses) where perfect scores are given on all three CollaboRATE items; cases with perfect scores are coded '1', whereas all other patient scores are coded '0' in a dichotomous top score outcome variable.

### 2962 Shared Decision Making Process

All responding patients will answer four questions about their pre-surgical interactions with their providers:

1. How much did a doctor (or health care provider) talk with you about the reasons you might want to (HAVE INTERVENTION)—a lot, some, a little, or not at all?

2. How much did a doctor (or other health care provider) talk with you about reasons you might not want to (HAVE INTERVENTION)—a lot, some, a little or not at all?

3. Did any of your doctors ask you if you wanted to (HAVE INTERVENTION)? (YES/NO)

4. Did any of your doctors (or health care providers) explain that you could choose whether or not to (HAVE INTERVENTION)? (YES/NO)

OR: "Did any of your doctors (or health care providers) explain that there were choices in what you could do to treat your [condition]? (YES/NO)

SCORING: 1 POINT EACH FOR ANSWERING "A LOT" OR "SOME" TO QUESTIONS 1 AND 2; 1 POINT EACH FOR ANSWERING "YES" TO QUESTIONS 3 AND 4. TOTAL SCORE = 0 TO 4.

Score for a provider or provider group is simply the average score for their responding patients. This will be a continuous number from 0 to 4.

### **Denominator Statement**

### 3227 CollaboRATE Shared Decision Making Score

The denominator consists of all patients who complete the three CollaboRATE items. The denominator may include patients of any demographic or clinical background, as the measure is generic and applicable to a variety of clinical situations.

## 2962 Shared Decision Making Process

All responding patients who have undergone one of the following 7 surgical procedures: back surgery for a herniated disc; back surgery for spinal stenosis; knee replacement for osteoarthritis of the knee; hip replacement for osteoarthritis of the hip; radical prostatectomy for prostate cancer; percutaneous coronary intervention (PCI) for stable angina, and mastectomy for early stage breast cancer.

#### **Denominator Details**

#### 3227 CollaboRATE Shared Decision Making Score

CollaboRATE is applicable to all patients; the denominator therefore consists of all complete responses.

#### 2962 Shared Decision Making Process

See S2. There is an attached sheet with ICD 10 and CPT codes needed to identify eligible patients.

## Exclusions

#### 3227 CollaboRATE Shared Decision Making Score

All patients are eligible to complete collaboRATE. Only incomplete collaboRATE responses should be excluded from the denominator.

#### 2962 Shared Decision Making Process

For back, hip, knee, and prostate surgery patients, there are no exclusions, so long as the surgery is for the designated condition.

PCI patients who had a heart attack within 4 weeks of the PCI procedure are excluded, as are those who have had previous coronary artery procedures (either PCI or CABG).

For patients who have mastectomy, patients who had had a prior lumpectomy for breast cancer in the same breast and patients who have not been diagnosed with breast cancer (who are having prophylactic mastectomies) are excluded.

## **Exclusion Details**

#### 3227 CollaboRATE Shared Decision Making Score

Exclude from the denominator any cases in which there are missing responses on any of the three collaboRATE items.

#### 2962 Shared Decision Making Process

Included in attached file

## Risk Adjustment

#### 3227 CollaboRATE Shared Decision Making Score

Statistical Risk Model

#### 2962 Shared Decision Making Process

N/A

## Stratification

## 3227 CollaboRATE Shared Decision Making Score

We do not stratify by patient or provider level characteristics, although there may be analytic interest in these variables. If responses are collected for patients of all ages, it may be appropriate to stratify by pediatric and adult patients.

## 2962 Shared Decision Making Process

N/A

## Type Score

### 3227 CollaboRATE Shared Decision Making Score

Rate/proportion

#### 2962 Shared Decision Making Process

Continuous variable, e.g. average

### Algorithm

#### 3227 CollaboRATE Shared Decision Making Score

To calculate CollaboRATE Performance Score:

Exclude cases (i.e. patient survey responses) where a response to one or more of the CollaboRATE questions is missing. Code each case as either '1', if the response to all three CollaboRATE items was 9, or '0' if the response to any of the three CollaboRATE items was less than 9. To case-mix adjust scores, conduct logistic regression analysis with the binary collaboRATE score outcome as the dependent variable and independent variables including patient age and patient gender; predict probabilities at the medical group level based on this model. These probabilities are the CollaboRATE performance scores for each medical group. Higher scores represent more shared decision making. This number also corresponds to the case-mix adjusted proportion of patients who perceive 'gold standard' shared decision making.

### 2962 Shared Decision Making Process

All responding patients will answer four questions about their pre-surgical interactions with their providers:

1. How much did a doctor (or health care provider) talk with you about the reasons you might want to (HAVE INTERVENTION)—a lot, some, a little, or not at all?

2. How much did a doctor (or other health care provider) talk with you about reasons you might not want to (HAVE INTERVENTION)—a lot, some, a little or not at all?

3. Did any of your doctors ask you if you wanted to (HAVE INTERVENTION)? (YES/NO)

Did any of your doctors (or health care providers) explain that you could choose whether or not to (HAVE INTERVENTION)? (YES/NO) OR: "Did any of your doctors (or health care providers) explain that there were choices in what you could do to treat your [condition]? (YES/NO)

SCORING: 1 POINT EACH FOR ANSWERING "A LOT" OR "SOME" TO QUESTIONS 1 AND 2; 1 POINT EACH FOR ANSWERING "YES" TO QUESTIONS 3 AND 4. TOTAL SCORE = 0 TO 4.

Score for a provider or provider group is simply the average score for their responding patients. This will be a continuous number from 0 to 4.

## Comparison of NQF 3461 and NQF 0428

3461 Functional Status Change for Patients with Neck Impairments0428 Functional Status Change for Patients with General Orthopaedic Impairments

## Steward

#### 3461 Functional Status Change for Patients with Neck Impairments

Focus on Therapeutic Outcomes, Inc.

## 0428 Functional Status Change for Patients with General Orthopaedic Impairments

Focus on Therapeutic Outcomes, Inc.

## Description

#### 3461 Functional Status Change for Patients with Neck Impairments

This is a patient-reported outcome performance measure (PRO-PM) consisting of a patient-reported outcome measure (PROM) of risk-adjusted change in functional status (FS) for patients aged 14 years and older with neck impairments. The change in FS is assessed using the Neck FS PROM. The measure is adjusted to patient characteristics known to be associated with FS outcomes (risk adjusted) and used as a performance measure (PM) at the patient, individual clinician, and clinic levels to assess quality.

The Neck FS PROM is an item-response theory-based computer adaptive test (CAT) for patients with impairments related to neck problems. Specific ICD-10-CM codes are described in the denominator section.

The Neck PRO-PM is publically available in the CAT version on the FOTO website at no charge. The Neck FS PROM is also available at no charge for public use as a 10-item short form (static/paper-pencil). CAT administration is preferred as it reduces patient response burden by administrating the minimum number of items needed to achieve the targeted measurement accuracy. Scores are reported on a 0 to 100 scale with higher scores indicating better functional status. The Neck FS PROM maps to the Mobility and Self-care constructs within the Activities and Participation domain of the International Classification of Functioning, Disability and Health.

### 0428 Functional Status Change for Patients with General Orthopaedic Impairments

A self-report outcome measure of functional status for patients 14 years+ with general orthopaedic impairments. The change in functional status assessed using FOTO (general orthopedic) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality.

## Туре

## 3461 Functional Status Change for Patients with Neck Impairments Outcome: PRO-PM

0428 Functional Status Change for Patients with General Orthopaedic Impairments Outcome: PRO-PM

## Data Source

## 3461 Functional Status Change for Patients with Neck Impairments Instrument-Based Data

0428 Functional Status Change for Patients with General Orthopaedic Impairments Electronic Health Data, Instrument-Based Data, Paper Medical Records

## Level

- 3461 Functional Status Change for Patients with Neck Impairments Clinician: Group/Practice, Clinician: Individual
- 0428 Functional Status Change for Patients with General Orthopaedic Impairments Clinician: Group/Practice, Clinician: Individual, Facility

## Setting

### 3461 Functional Status Change for Patients with Neck Impairments

**Outpatient Services** 

0428 Functional Status Change for Patients with General Orthopaedic Impairments Outpatient Services, Post-Acute Care, Other

## Numerator Statement

### 3461 Functional Status Change for Patients with Neck Impairments

The numerator is based on residual scores (actual change scores - predicted change after risk adjustment) of patients receiving care for neck impairments and who: a) completed the Neck PRO-PM at admission and at the end of the episode of care; and b) were discharged from care.

#### 0428 Functional Status Change for Patients with General Orthopaedic Impairments

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for general orthopaedic impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for general orthopaedic impairment.

## Numerator Details

## 3461 Functional Status Change for Patients with Neck Impairments

Patient Level: The residual functional status score for the individual patient (the residual score is the actual change score - predicted change after risk adjustment).

Clinician Level: The average of residuals in functional status scores in patients who were treated by the clinician in a 12 month period.

Clinic Level: The average of residuals in functional status scores in patients who were treated by the clinic in a 12 month period.

Further details are provided in the Measure Testing Form

#### 0428 Functional Status Change for Patients with General Orthopaedic Impairments

Patient Level: The residual score for the individual patients with general orthopaedic impairments is derived by applying the statistical risk adjustment model described in S.14 and S.15 and applying steps 1-5 as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1j of this application.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for general orthopaedic impairment. Average scores are calculated using data from all clinicians, however performance is evaluated only for those clinicians that had a minimum of 10 patients in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinician regardless of clinic size, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for general orthopaedic impairment. Average scores are calculated using data from all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10 patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Both comparative benchmark reports (i.e., scale ranging from 0 to 100 with higher scores meaning higher functional abilities) at the clinician or clinic level include patients with general orthopaedic impairments, who were treated in therapy and had their functional status assessed at the end of their episode of therapy and were discharged from therapy.

## **Denominator Statement**

## 3461 Functional Status Change for Patients with Neck Impairments

All patients 14 years and older with a neck impairment who have initiated an episode of care and completed the neck functional status PROM at admission and discharge.

#### 0428 Functional Status Change for Patients with General Orthopaedic Impairments

All patients 14 years and older with general orthopaedic impairments who have initiated rehabilitation treatment and completed the FOTO (general orthopaedic) PROM.

#### Denominator Details

#### 3461 Functional Status Change for Patients with Neck Impairments

All patients 14 years and older with a neck impairment who have an episode of care and completed the neck functional status PROM at admission and discharge.

An episode is considered completed and the patient discharged when the clinician ceases to provide care for the neck impairment as signified by a discharge from that care. For clinicians who use the FOTO system, the completion of an episode is formally signified when the clinician or clinician's representative completes a short process called a FOTO Staff Discharge which includes completing data fields for the date of the last care visit and the total number of visits used in the episode of care.

The ICD-10-CM codes relevant for this measure are included below.

G54.2; G54.8; G55; G89.29; M05.69; M05.79; M05.89; M06.08; M06.28; M06.38; M06.88; M08.08; M08.1; M08.28; M08.48; M08.88; M08.98; M11.08; M11.18; M11.28; M11.88; M12.08; M12.18; M12.28; M12.48; M12.58; M12.88; M13.0; M13.88; M14.68; M14.88; M15.0; M15.3; M15.4; M15.8; M15.9; M19.90; M19.91; M19.92; M19.93; M24.08; M24.10; M24.28; M24.80; M24.9; M25.28; M25.30; M25.50; M25.60; M25.78; M25.80; M25.9; M32.10; M32.19; M32.8; M32.9; M40.03; M40.12; M40.13; M40.202; M40.203; M40.292; M40.293; M41.112; M41.113; M41.122; M41.123; M41.22; M41.23; M41.41; M41.42; M41.43; M41.52; M41.53; M41.82; M41.83; M42.01; M42.02; M42.03; M42.11; M42.12; M42.13; M43.01; M43.02; M43.03; M43.11; M43.12; M43.13; M43.21; M43.22; M43.23; M43.3; M43.4; M43.5X2; M43.5X3; M43.6; M43.8X1; M43.8X2; M43.8X3; M45.1; M45.2; M45.3; M46.01; M46.02; M46.03; M46.21; M46.22; M46.23; M46.31; M46.32; M46.33; M46.41; M46.42; M46.43; M46.51; M46.52; M46.53; M46.81; M46.82; M46.83; M46.91; M46.92; M46.93; M47.11; M47.12; M47.13; M47.21; M47.22; M47.23; M47.811; M47.812; M47.813; M47.891; M47.892; M47.893; M48.01; M48.02; M48.03; M48.11; M48.12; M48.13; M48.21; M48.22; M48.23; M48.31; M48.32; M48.33; M48.41; M48.42; M48.43; M48.51; M48.52; M48.53; M48.8X1; M48.8X2; M48.8X3; M49.81; M49.82; M49.83; M50.00; M50.01; M50.020; M50.021; M50.022; M50.023; M50.03; M50.10; M50.11; M50.120; M50.121; M50.122; M50.123; M50.13; M50.20; M50.21; M50.220; M50.221; M50.222; M50.223; M50.23; M50.30; M50.31; M50.320; M50.321; M50.322; M50.323; M50.33; M50.80; M50.81; M50.820; M50.821; M50.822; M50.823; M50.83; M50.90; M50.91; M50.920; M50.921; M50.922; M50.923; M50.93; M53.0; M53.1; M53.2X1; M53.2X2; M53.2X3; M53.81; M53.82; M53.83; M54.11; M54.12; M54.13; M54.2; M54.81; M54.89; M54.9; M62.830; M62.838; M62.89; M63.88; M65.28; M65.88; M66.18; M70.88; M70.98; M71.48; M71.58; M71.88; M79.12; M79.7; M80.08; M80.88; M81.0; M81.6; M81.8; M85.88; M89.8X8; M93.28; M93.88; M93.98; M95.3; M96.1; M99.01; M99.11; M99.21; M99.31; M99.41; M99.51; M99.61; M99.71; M99.81; Q76.1; Q76.2; Q76.3; Q76.411; Q76.412; Q76.413; Q76.49; R25.2; R29.3; R29.898; R29.91; R51; S12.000; S12.001; S12.01; S12.02; S12.030; S12.031; S12.040; S12.041; S12.090; S12.091; s12.100; s12.101; s12.110; s12.111; s12.112; s12.120; s12.121; s12.130; s12.131; s12.14; s12.150; s12.151; s12.190; s12.191; s12.200; s12.201; s12.230; s12.231; s12.24; s12.250; S12.251; S12.290; S12.291; S12.300; S12.301; S12.330; S12.331; S12.34; S12.350; S12.351; S12.390; S12.391; S12.400; S12.401; S12.430; S12.431; S12.44; S12.450; S12.451; S12.490; S12.491; S12.500; S12.501; S12.530; S12.531; S12.54; S12.550; S12.551; S12.590; S12.591; S12.600; S12.601; S12.630; S12.631; S12.64; S12.650; S12.651; S12.690; S12.691; S12.8; \$12.9; \$13.0; \$13.100; \$13.101; \$13.110; \$13.111; \$13.120; \$13.121; \$13.130; \$13.131; S13.140; S13.141; S13.150; S13.151; S13.160; S13.161; S13.170; S13.171; S13.180; \$13.181; \$13.20; \$13.29; \$13.4; \$13.5; \$13.8; \$13.9; \$14.2; \$14.8; \$14.9; \$16.1; \$16.2; S16.8; S16.9; S19.80; S19.89; T85.850; Z82.61 FOR ICD-10 CODES WITH DESCRIPTORS PLEASE SEE CODE BOOK ATTACHED IN SECTION S2b

## 0428 Functional Status Change for Patients with General Orthopaedic Impairments

The established ICD-9-CM codes for the neck, cranium, mandible, thoracic spine, ribs or other general orthopedic impairment include:

Diagnosis specific to the cervical spine:

333.83, 353.2, 716.58, 718.88, 718.98, 719.08, 719.18, 719.48, 719.58, 719.68, 721.0, 721.1, 722.0, 722.4, 722.71, 722.81, 722.91, \*723, 730.08, 730.09, 730.18, 739.1, 741.01, 741.91, 754.1, \*805.0, \*805.1, \*806.0, \*806.1, 847.0, \*952.0, 953.0

\* Use of an asterisk is to include all codes in the category

Diagnosis specific to the thoracic spine:

353.3, 721.2, 721.41, 722.11, 722.31, 722.51, 722.72, 722.82, 722.92, 724.01, 724.1, 724.4, 724.5, 730.08, 730.09, 730.18, 739.2, 741.02, 741.92, 805.2, 805.3, \*806.2, \*806.3, 847.1, \*952.1, 953.1

\* Use of an asterisk is to include all codes in the category

Diagnosis specific to the Cranium and Mandible

307.81, \*346, \*350.2, \*351, \*524.6, 754.0, 784.0, \*830, 848.1

\* Use of an asterisk is to include all codes in the category

Diagnosis specific to the Ribs

733.6, 739.8, 756.2, 756.3, \*786.5, \*807.0, \*807.1, 807.2, 807.3, 839.61, 848.3, \*848.4, 922.1, 922.3

\* Use of an asterisk is to include all codes in the category

Diagnosis not specific to the cervical or thoracic spine, cranium/mandible or ribs, but effect the function of the cervical or thoracic spine, cranium/mandible, ribs or other general impairment:

338.29, 353.0, 353.8, 710.0, 711.98, 714.0, 715.09, 715.18, 715.19, 715.28, 715.38, 715.88, 715.89, 715.98, 716.98, 716.99, 716.59, 716.98, 716.99, 718.08, 718.09, 718.19, 718.28, 718.29, 718.38, 718.39, 719.49, 719.59, 718.89, 718.99, 720.0, 720.9, \*721.9, 722.2, 722.6, 724.00, 724.09, 724.08, 724.5, 724.9, 728.2, 728.85, 728.87, 730.19, 732.0, \*733.0, 733.13, 733.90, \*737, 754.2, 756.19, 759.79, 781.92, 847.9, 952.8, V54.17, V54.89, V57.1, V59.49, V67.0

\* Use of an asterisk is to include all codes in the category

The ICD 10 Crosswalk is provided on the measure specific webpage provided in S.1.

### Exclusions

## 3461 Functional Status Change for Patients with Neck Impairments

Patients who are not being treated for a neck impairment. Patients who are less than 14 years of age.

0428 Functional Status Change for Patients with General Orthopaedic Impairments

Patients who are not being treated for a General orthopaedic impairment

<14 years of age

## **Exclusion Details**

3461 Functional Status Change for Patients with Neck Impairments

N/A

#### 0428 Functional Status Change for Patients with General Orthopaedic Impairments

Patients who are not being treated for a General orthopaedic impairment <14 years of age

### Risk Adjustment

## 3461 Functional Status Change for Patients with Neck Impairments

Statistical Risk Model

## 0428 Functional Status Change for Patients with General Orthopaedic Impairments Statistical Risk Model

## Stratification

### 3461 Functional Status Change for Patients with Neck Impairments

The methods used to develop the FOTO risk-adjustment neck model were the same as the methods described in detail in a recent publication by Deutscher et at, 2018 [Deutscher D, Werneke MW, Hayes D, et al. Impact of Risk-Adjustment on Provider Ranking for Patients With Low Back Pain Receiving Physical Therapy. J Orthop Sports Phys Ther. 2018;1-35.] Briefly, we used data from adult patients with neck pain treated in outpatient physical therapy clinics during 2016, that had complete outcomes data at admission and discharge, to develop the risk-adjustment model. The data included the following patient factors that could be evaluated for inclusion in a model for risk-adjustment: FS at admission (continuous); age (continuous); sex (male/female); acuity as number of days from onset of the treated condition (6 categories); type of payer (10 categories); number of related surgeries (4 categories); exercise history (3 categories); use of medication at intake for the treatment of LBP (yes/no); previous treatment for LBP (yes/no); treatment post-surgery (lumbar fusion, laminectomy or other); and 31 comorbidities.

Please see Measure Testing Form section 2b3 for more details.

### 0428 Functional Status Change for Patients with General Orthopaedic Impairments

Risk adjusted - not stratified

## Type Score

#### 3461 Functional Status Change for Patients with Neck Impairments

Continuous variable, e.g. average

#### 0428 Functional Status Change for Patients with General Orthopaedic Impairments

Continuous variable, e.g. average

## Algorithm

#### 3461 Functional Status Change for Patients with Neck Impairments

A Residual score is defined as an actual change score minus the risk-adjusted predicted change score. The Residual(s) are calculated at three levels:

- Patient Level: The residual Neck FS Change score for the individual patient.
- Individual Clinician Level: The average of residuals for change in Neck FS scores in patients who were treated by a clinician in a 12-month time period.

• Clinic Level: The average of residuals for change in Neck FS scores in patients who were treated within a clinic in a 12-month time period.

## **0428 Functional Status Change for Patients with General Orthopaedic Impairments** STEPS TAKEN TO PRODUCE THIS MEASURE:

#### Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO (general orthopaedic) PROM administered by internet or a paper and pencil survey. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that accounted for the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, specific co morbidities, payer type, exercise history, use of medication for the condition, and previous treatment for the condition. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and predicted change scores (after risk adjustment) is the residual score and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient, and risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were predicted residual change scores less than zero adjustment variables of the patient, and risk-adjusted residual change scores less than zero adjustment variables of the patient. Aggregated risk-adjusted residual scores allow meaningful comparisons amongst clinicians or clinics.

## STEPS:

First, the patient completes FOTO (general orthopaedic) PROM at Admission, which generates the Patient's Functional Status Score at Admission.

Second, patient completes FOTO FOTO (general orthopaedic) PROM at or near Discharge, which generates the Patient's Functional Status Score at Discharge

Third, the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

Fourth, a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

Fifth, a Functional Status Change Residual Score after risk adjustment is generated for each patient.

Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance.STEPS TAKEN TO PRODUCE THIS MEASURE:

#### Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO (general orthopaedic) PROM administered by internet or a paper and pencil survey. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co morbidities, payer type, and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and predicted change scores (after risk adjustment) is the residual score and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient, and risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were predicted residual change scores less than zero adjustment variables of the patient, and risk-adjusted residual change scores less than zero adjustment variables of the patient. Aggregated risk-adjusted residual scores allow meaningful comparisons amongst clinicians or clinics.

## STEPS:

First, the patient completes FOTO (general orthopaedic) PROM at Admission, which generates the Patient's Functional Status Score at Admission.

Second, patient completes FOTO FOTO (general orthopaedic) PROM at or near Discharge, which generates the Patient's Functional Status Score at Discharge

Third, the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

Fourth, a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

Fifth, a Functional Status Change Residual Score after risk adjustment is generated for each patient.

Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance.
# Comparison of NQF 0005, 0006, 0166, 0258, 0517, 1741, 2548, and 2967

0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial) 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey

0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

# Steward

0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child Agency for Healthcare Research and Quality

0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

Agency for Healthcare Research and Quality

- 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey Centers for Medicare & Medicaid Services
- 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

Centers for Medicare & Medicaid Services

# Description

# 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

The Consumer Assessment of Healthcare Providers and Systems Clinician & Group Survey 3.0 (CG-CAHPS) is a standardized survey instrument that asks patients to report on their experiences with primary or specialty care received from providers and their staff in ambulatory care settings over the preceding 6 months.

The CG-CAHPS 3.0 survey can be used in both primary care and specialty care settings. The adult survey is administered to patients aged 18 and over. The child survey is administered to the parents or guardians of pediatric patients under the age of 18. Patients who had at least one visit to a selected provider during the past 6 months are eligible to be surveyed.

CG-CAHPS Survey Version 1.0 was endorsed by NQF in July 2007 (NQF 0005) and version 2.0 received maintenance endorsement in early 2015. Version 3.0 was released in July 2015. The development of the survey is through the CAHPS Consortium and sponsored by the Agency for Healthcare Research and Quality. The survey is part of the CAHPS family of patient experience surveys and is available at https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html

The Adult CG-CAHPS Survey 3.0 has 31 questions including one overall rating of the provider and 13 questions used to create these four multi-item composite measures of care or services provided:

- 1. Getting Timely Appointments, Care, and Information (3 items)
- 2. How Well Providers Communicate With Patients (4 items)
- 3. Helpful, Courteous, and Respectful Office Staff (2 items)
- 4. Providers' Use of Information to Coordinate Patient Care (3 items)

The Child CG-CAHPS Survey 3.0 has 39 questions including one overall rating of the provider and 12 questions used to create these four multi-item composite measures of care or services provided:

- 1. Getting Timely Appointments, Care, and Information (3 items)
- 2. How Well Providers Communicate With Patients (4 items)
- 3. Helpful, Courteous, and Respectful Office Staff (2 items)
- 4. Providers' Use of Information to Coordinate Patient Care (2 items)

# 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

The CAHPS Health Plan Survey is a survey that asks health plan enrollees to report about their care and health plan experiences as well as the quality of care received from physicians. HP-CAHPS Version 4.0 was endorsed by NQF in July 2007 (NQF 0006) and Version 5.0 received maintenance endorsement in January 2015. The survey is part of the CAHPS family of patient experience surveys and is available in the public domain at https://www.ahrq.gov/cahps/surveys-guidance/hp/index.html

The survey is designed to be administered to includes individuals (18 and older for the Adult version; parents or guardians of children aged 0-17 for the Child version) who have been enrolled in a health plan for a specified period (6 months or longer for Medicaid version, 12 months or longer for Commercial version) with no more than one 30-day break in enrollment.

The CAHPS Adult Health Plan Survey has 39 items, and the CAHPS Child Health Plan Survey has 41 items. Ten of the adult survey items and 11 of the child survey items are used to form 4 composite measures. Each survey also has 4 single-item rating measures. The aspect of quality assessed by each measure is described below:

Measure 1: Getting Needed Care (2 items)

Measure 2: Getting Care Quickly (2 items)

Measure 3: How Well Doctors Communicate (4 items in Adult survey & 5 items in Child survey)

Measure 4: Health Plan Information and Customer Service (2 items)

Measure 5: How People Rated Their Personal Doctor (1 item)

Measure 6: How People Rated Their Specialist (1 item)

Measure 7: How People Rated Their Health Care (1 item)

Measure 8: How People Rated Their Health Plan (1 item)

#### 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey

HCAHPS (NQF 0166) is a 29-item survey instrument that produces 10 publicly reported measures:

6 multi-item measures (communication with doctors, communication with nurses, responsiveness of hospital staff, communication about medicines, discharge information and care transition); and

4 single-item measures (cleanliness of the hospital environment, quietness of the hospital environment, overall rating of the hospital, and recommendation of hospital).

Note: The HCAHPS Survey originally included three items about pain which formed a composite measure, Pain Management. CMS discontinued publicly reporting this measure

in July 2018. In January 2018, CMS replaced the original HCAHPS pain items with three items that asked about communication about pain. In compliance with the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act (Pub. L. 115-271) of 2018 (Section 6104), CMS will remove the new communication about pain items from the HCAHPS Survey beginning with October 2019 discharges.

# 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

This is a survey-based measure and one of the family of surveys called CAHPS Surveys (Consumer Assessment of Healthcare Providers and Systems)that are focused on patient experience. The questionnaire asks End Stage Renal Disease (ESRD) patients receiving incenter hemodialysis care about the services and quality of care that they experience. Patients assess their dialysis providers, including nephrologists and medical and non-medical staff, the quality of dialysis care they receive, and information sharing about their disease. The survey is conducted twice a year, in the spring and fall with adult in-center hemodialysis patients. Publicly-reported measures focus on the proportion of survey respondents at each facility who choose the most favorable responses.

Three multi-item measures:

- a. M1: Nephrologists' Communication and Caring (NCC)
- b. M2: Quality of Dialysis Center Care and Operations (QDCCO)
- c. M3: Providing Information to Patients (PIP)

Three Global items:

- a. M4: Rating of the nephrologist
- b. M5: Rating of dialysis center staff
- c. M6: Rating of the dialysis facility

The first three measures are created from six or more questions from the survey that are reported as one measure score. The three global items are single-item measures using a scale of 0 to 10 to report the respondent's assessment.

The results are reported on Dialysis Facility Compare (DFC) on the Medicare.gov website.

# Туре

# 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

Outcome: PRO-PM

0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

Outcome: PRO-PM

- 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey Outcome
- 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

Outcome: PRO-PM

#### Data Source

0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

Instrument-Based Data

0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

Instrument-Based Data

- 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey Instrument-Based Data
- 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS) Instrument-Based Data

#### Level

- 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child Clinician: Group/Practice
- 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial) Health Plan
- 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey Facility
- 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

Facility, Other, Population: Regional and State

# Setting

- 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child Outpatient Services
- 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

**Outpatient Services** 

- 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey Inpatient/Hospital
- 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS) Post-Acute Care

#### Numerator Statement

#### 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

The CG-CAHPS Survey item and composites are often reported using a top box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure.

The top box numerator for the Overall Rating of Provider is the number of respondents who answered 9 or 10 for the item, with 10 indicating "Best provider possible".

For more information on the calculation of reporting measures, see

# 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

We recommend that CAHPS Health Plan Survey items and composites be calculated using a top box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. The top box numerator for each of the four Overall Ratings items is the number of respondents who answered 9 or 10 for the item; with a 10 indicating the "Best possible."

#### 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey

The HCAHPS Survey asks recently discharged patients about aspects of their hospital experience that they are uniquely suited to address. The core of the survey contains 19 items that ask "how often" or whether patients experienced a critical aspect of hospital care, rather than whether they were "satisfied" with their care. Also included in the survey are three screener items that direct patients to relevant questions, five items to adjust for the mix of patients across hospitals, and two items (race and ethnicity) that support Congressionally-mandated reports. Hospitals may include additional questions after the core HCAHPS items.

# 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

There are a total of six ICH CAHPS measures. Three of them are multi-item measures and three are global ratings. Each measure is composed of the responses for all individual questions included in the measure. Missing data for individual survey questions are not included in the calculations. Only data from a "completed survey" is used in the calculations. Each measure score is at the facility level and averages the proportion of respondents who chose each answer option for all items in the measure. Each global rating is be scored based on the number of respondents in the distribution of top responses; e.g., the percentage of patients rating the facility a "9" or "10" on a 0 to 10 scale (with 10 being the best).

#### **Denominator Statement**

#### 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 6-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.

# 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

The eligible population for the survey includes all individuals who have been enrolled in a health plan for at least 6 (Medicaid) or 12 (Commercial) months with no more than one 30-day break in enrollment. Denominators will vary by item and composite.

#### 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey

The target population for HCAHPS measures include eligible adult inpatients of all payer types who completed a survey. HCAHPS patient eligibility and exclusions are defined in detail in the sections that follow. A survey is defined as completed if the patient responded to at least 50% of questions applicable to all patients.

# 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

Patients receiving in-center hemodialysis at sampled facility for the past 3 months or longer are included in the sample frame.

The denominator for each question is composed of the sample members that responded to the particular question.

Proxy respondents are not allowed.

Only complete surveys are used. A complete survey is defined as one where the sampled patient answered at least 50 percent of the questions that are applicable to all sample patients: Q1-Q20, Q22, Q23, Q25-Q37, Q39-Q41

# **Exclusions**

#### 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

Among eligible respondents, for a given item, respondents with a missing response is excluded. Among eligible respondents, for a composite measures, respondents who did not answer at least one item in the composite are excluded from the composite measure's denominator.

# 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

Individuals are excluded from the survey target population if:

1) They were not continuously enrolled in the health plan (excepting an allowable enrollment lapse of less than 30 days).

2) Their primary health coverage was not through the plan.

3) Another member of his or her household had already been sampled.

4) They had been institutionalized (put in the care of a specialized institution) or are deceased.

#### 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey

There are a few categories of otherwise eligible patients who are excluded from the HCAHPS sample frame. As detailed below in sec S.9, these exclusions include patients excluded due to state regulations, no-publicity patients, and specific groups of patients with an admission source or discharge status that results in difficulty collecting patient experience data through a survey instrument.

# 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

Exclusions:

- a. Patients less than 18 years of age
- b. Patients not receiving dialysis at sampled facility for 3 months or more
- c. Patients who are receiving hospice care
- d. Any surveys completed by a proxy (mail only mode or mixed mode)

e. Any ineligible patients due to death, institutionalization, language barrier, physically or mentally incapable.

# Risk Adjustment

0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

Statistical Risk Model

0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

Statistical Risk Model

- 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey Statistical Risk Model
- 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

#### Stratification

#### 0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child

CG-CAHPS users that have collected data for different clinical practices may decide to analyze the data separately or together. If practices are to be analyzed together, no changes to the CAHPS Analysis Program are necessary. If a team decides to analyze the practices separately and the data file contains more than one group, it is important to set up selection criteria in the CAHPS Analysis Program or split the data set.

Users can separate case-mix adjustments on two different subgroups using the macro parameter SPLITFLG = 1 in the CAHPS analysis program. (The default value = 0.) An example of splitting the case-mix adjustments separately on two populations is when comparing urban and rural locations.

# 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

HP-CAHPS users that have collected data for different groups (i.e., strata) of people can analyze the data separately or together. If groups are analyzed together, no changes to the CAHPS Analysis Program are necessary.

Users can estimate separate case-mix adjustments on two different populations using the macro parameter SPLITFLG = 1 in the CAHPS analysis program. (The default value = 0.) An example of splitting the case-mix adjustments separately on two populations is when comparing Medicaid Fee-for-Service populations with Medicaid Managed Care populations.

If survey users want to combine data for reporting from different sampling strata, they will need to create a text file that identifies the strata and indicates which ones are being combined and the identifier of the entity obtained by combining them.

0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey

0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

N/A

# Type Score

- **0005 CAHPS Clinician & Group Surveys (CG-CAHPS) Version 3.0 -Adult, Child** Other (specify): 1.) Tob-box score; 2) case-mix adjusted mean score
- 0006 Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)

Other (specify): 1.) Tob-box score; 2) case-mix adjusted mean score

- 0166 HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey Rate/Proportion
- 0258 Consumer Assessment of Healthcare Providers and Systems (CAHPS) In-Center Hemodialysis Survey (ICH CAHPS)

Rate/Proportion

0517: CAHPS Home Health Care Survey (experience with care)

1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey 2967: CAHPS Home- and Community-Based Services Measures

### Steward

#### **0517: CAHPS Home Health Care Survey (experience with care)**

Centers for Medicare & Medicaid Services

1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

American College of Surgeons, Division of Advocacy and Health Policy

2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Agency for Healthcare Research and Quality

#### 2967: CAHPS Home- and Community-Based Services Measures

Centers for Medicare & Medicaid Services

#### Description

#### 0517: CAHPS Home Health Care Survey (experience with care)

The Consumer Assessment of Healthcare Providers and Systems (CAHPS<sup>®</sup>) Home Health Care Survey, also referred as the "CAHPS Home Health Care Survey" or "Home Health

CAHPS" or "HHCAHPS" is a standardized survey instrument and data collection methodology for measuring home health patients 'perspectives on their home health care in Medicare-certified home health care agencies. AHRQ and CMS participated in the development of the Home Health CAHPS to measure the experiences of those receiving home health care with these three goals in mind:

(1) To produce comparable data on patients' perspectives on care that allow objective and meaningful comparisons between home health agencies on domains that are important to consumers,

(2) To create incentives for agencies to improve their quality of care through public reporting of survey results, and

(3) To enhance public accountability in health care by increasing the transparency of the quality of care provided in return for public investment.

# 1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

The following 6 composites and 1 single-item measure are generated from the Consumer Assessment of Healthcare Providers and Systems (CAHPS<sup>®</sup>) Surgical Care Survey. Each measure is used to assess a particular domain of surgical care quality from the patient's perspective.

Measure 1: Information to help you prepare for surgery (2 items)

Measure 2: How well surgeon communicates with patients before surgery (4 items)

Measure 3: Surgeon's attentiveness on day of surgery (2 items)

Measure 4: Information to help you recover from surgery (4 items)

Measure 5: How well surgeon communicates with patients after surgery (4 items)

Measure 6: Helpful, courteous, and respectful staff at surgeon's office (2 items)

Measure 7: Rating of surgeon (1 item)

The Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey (S-CAHPS) is a standardized survey instrument that asks patients about their experience before, during and after surgery received from providers and their staff in both inpatient and outpatient (or ambulatory) settings. S-CAHPS is administered to adult patients (age 18 and over) that had an operation as defined by CPT codes (90 day globals) within 3 to 6 months prior to the start of the survey.

The S-CAHPS expands on the CAHPS Clinician & Group Survey (CG-CAHPS), which focuses on primary and specialty medical care, by incorporating domains that are relevant to surgical care, such as sufficient communication to obtain informed consent, anesthesia care, and post-operative follow-up and care coordination. Other questions ask patients to report on their experiences with office staff during visits and to rate the surgeon.

The S-CAHPS survey is sponsored by the American College of Surgeons (ACS). The survey was approved as a CAHPS product in early 2010 and the Agency for Healthcare Research and Quality (AHRQ) released version 1.0 of the survey in the spring of 2010. The S-CAHPS survey Version 2.0 was subsequently endorsed by NQF in June 2012 (NQF 1741). The survey is part of the CAHPS family of patient experience surveys and is available in the public domain at https://cahps.ahrq.gov/surveys-guidance/cg/about/index.html. Surgeons may customize the S-CAHPS survey by adding survey items that are specific to their patients and practice. However, the core survey must be used in its entirety in order to be

comparable with other S-CAHPS data. The S-CAHPS survey is available in English and Spanish.

The 6 composite measures are made up of the following items:

The 1 single item measure (Measure 7) is (Q35): Using any number from 0 to 10, where 0 is the worst surgeon possible and 10 is the best surgeon possible, what number would you use to rate all your care from this surgeon?

Measure 1: Information to help you prepare for surgery (2 items)

Q3. Before your surgery, did anyone in this surgeon's office give you all the information you needed about your surgery?

Q4. Before your surgery, did anyone in this surgeon's office give you easy to understand instructions about getting ready for your surgery?

Measure 2: How well surgeon communicates with patients before surgery (4 items)

Q9. During your office visits before your surgery, did this surgeon listen carefully to you?

Q10. During your office visits before your surgery, did this surgeon spend enough time with you?

Q11. During your office visits before your surgery, did this surgeon encourage you to ask questions?

Q12. During your office visits before your surgery, did this surgeon show respect for what you had to say?

Measure 3: Surgeon's attentiveness on day of surgery (2 items)

Q15. After you arrived at the hospital or surgical facility, did this surgeon visit you before your surgery?

Q17. Before you left the hospital or surgical facility, did this surgeon discuss the outcome of your surgery with you?

Measure 4: Information to help you recover from surgery (4 items)

Q26. Did anyone in this surgeon's office explain what to expect during your recovery period?

Q27. Did anyone in this surgeon's office warn you about any signs or symptoms that would need immediate medical attention during your recovery period?

Q28. Did anyone in this surgeon's office give you easy to understand instructions about what to do during your recovery period?

Q29. Did this surgeon make sure you were physically comfortable or had enough pain relief after you left the hospital or surgical facility where you had your surgery?

Measure 5: How well surgeon communicates with patients after surgery (4 items)

Q31. After your surgery, did this surgeon listen carefully to you?

Q32. After your surgery, did this surgeon spend enough time with you?

Q33. After your surgery, did this surgeon encourage you to ask questions?

Q34. After your surgery, did this surgeon show respect for what you had to say?

Measure 6: Helpful, courteous, and respectful staff at surgeon's office (2 items)

Q36. During these visits, were clerks and receptionists at this surgeon's office as helpful as you thought they should be?

Q37. During these visits, did clerks and receptionists at this surgeon's office treat you with courtesy and respect?

# 2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Top Box Score Calculation:

1) Target Population: Patients that had a non-emergency surgery within 3 to 6 months prior to the start of the survey.

2) Exclusions = Patients who did not answer at least one item of the composite measures or rating item.

3) Screener items. Example: Patients who answered "No" to the first item indicating that the patient had surgery performed on the date listed by the surgeon named.

4) Top-box scores (percent with highest rating) are computed for each item

5) Top-box scores are averaged across the items within each composite, weighting each item equally.

Note that for users who want to case-mix adjust their scores, case-mix adjustment can be done using the CAHPS macro and the adjustment is made prior to the calculation of the total score.

Case-mix Adjusted Scores

Case-mix adjustment is done via linear regression. The CAHPS Consortium recommends self-reported overall health, age, and education as adjusters. These items are printed in the "About You" section of the survey, questions 38-45.

The steps for user-defined calculations of risk-adjusted scores can be found in Instructions for Analyzing Data from CAHPS® Surveys: Using the CAHPS Analysis Program Version 4.1 available at

https://cahps.ahrq.gov/surveys-guidance/survey4.0-docs/2015-Instructions-for-Analyzing-Data-from-CAHPS-Surveys.pdf.

#### 2967: CAHPS Home- and Community-Based Services Measures

CAHPS Home- and Community-Based Services measures derive from a cross disability survey to elicit feedback from adult Medicaid beneficiaries receiving home and community based services (HCBS) about the quality of the long-term services and supports they receive in the community and delivered to them under the auspices of a state Medicaid HCBS program. The unit of analysis is the Medicaid HCBS program, and the accountable entity is the operating entity responsible for managing and overseeing a specific HCBS program within a given state. (For additional information on the accountable entity, see Measures Testing form item #1.5 below.)

The measures consist of seven scale measures, 6 global rating and recommendation measures, and 6 individual measures:

#### Scale Measures

- 1. Staff are reliable and helpful -top-box score composed of 6 survey items
- 2. Staff listen and communicate well -top-box score composed of 11 survey items
- 3. Case manager is helpful top-box score composed of 3 survey items
- 4. Choosing the services that matter to you top-box score composed of 2 survey items
- 5. Transportation to medical appointments top-box score composed of 3 survey items

6. Personal safety and respect - top-box score composed of 3 survey items

7. Planning your time and activities top-box score composed of 6 survey items Global Ratings Measures

8. Global rating of personal assistance and behavioral health staff- top-box score on a 0-10 scale

9. Global rating of homemaker- top-box score on a 0-10 scale

10. Global rating of case manager- top-box score on a 0-10 scale

**Recommendations Measures** 

11. Would recommend personal assistance/behavioral health staff to family and friends – top-box score on a 1-4 scale (Definitely no, Probably no, Probably yes, Definitely yes)

12. Would recommend homemaker to family and friends — top-box score on a 1-4 scale (Definitely no, Probably no, Probably yes, Definitely yes)

13. Would recommend case manager to family and friends- top-box score on a 1-4 scale (Definitely no, Probably no, Probably yes, Definitely yes)

**Unmet Needs Measures** 

14. Unmet need in dressing/bathing due to lack of help-top-box score on a Yes, No scale

15. Unmet need in meal preparation/eating due to lack of help- top-box score on a Yes, No scale

16. Unmet need in medication administration due to lack of help- top-box score on a Yes, No scale

17. Unmet need in toileting due to lack of help- top-box score on a Yes, No scale

18. Unmet need with household tasks due to lack of help– top-box score on a Yes, No scale Physical Safety Measure

19. Hit or hurt by staff – top-box score on a Yes, No scale

# Туре

# 0517: CAHPS Home Health Care Survey (experience with care)

Outcome: PRO-PM

1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

Outcome: PRO-PM

2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Outcome

# 2967: CAHPS Home- and Community-Based Services Measures Outcome: PRO-PM

# Data Source

# 0517: CAHPS Home Health Care Survey (experience with care)

Instrument-Based Data

1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

Instrument-Based Data

2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Claims

#### 2967: CAHPS Home- and Community-Based Services Measures

Instrument-Based Data

#### Level

0517: CAHPS Home Health Care Survey (experience with care)

Facility

1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

Clinician: Group/Practice

2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Facility

2967: CAHPS Home- and Community-Based Services Measures Other

#### Setting

0517: CAHPS Home Health Care Survey (experience with care)

Home Care

1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

Inpatient/Hospital, Outpatient Services, Other

2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Inpatient/Hospital

2967: CAHPS Home- and Community-Based Services Measures

Other

#### Numerator Statement

#### 0517: CAHPS Home Health Care Survey (experience with care)

The numerator statement is that each measure encompasses the responses for all questions that make up the particular measure. Missing data for individual survey questions are not included in the calculations. Only data from a completed survey are used in the calculations. The measures scores averages the proportion of those responding to each answer choice in all questions. Each global rating is scored based on the number of the respondents in the distribution of top responses, such as the percentage of patients

rating a home health agency with a 9 or a 10, where 10 is the highest quality responses on a scale from 0 to 10.see S2.

# 1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

We recommend that S-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated excellent performance for a given measure. This approach is a kind of categorical scoring because the emphasis is on the score for a specific category of responses.

The top box numerator for the Overall Rating of Surgeon is the number of respondents who answered 9 or 10 for the item, with 10 indicating "Best provider possible".

Also, for more information on the calculation of reporting measures, see How to Report Results of the CAHPS Clinician & Group Survey, available at

https://cahps.ahrq.gov/surveys-

guidance/cg/cgkit/HowtoReportResultsofCGCAHPS080610FINAL.pdf.

# 2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Top Box Score Calculation:

1) Target Population: Patients that had a non-emergency surgery within 3 to 6 months prior to the start of the survey.

2) Exclusions = Patients who did not answer at least one item of the composite measures or rating item.

3) Screener items. Example: Patients who answered "No" to the first item indicating that the patient had surgery performed on the date listed by the surgeon named.

4) Top-box scores (percent with highest rating) are computed for each item

5) Top-box scores are averaged across the items within each composite, weighting each item equally.

Note that for users who want to case-mix adjust their scores, case-mix adjustment can be done using the CAHPS macro and the adjustment is made prior to the calculation of the total score.

Case-mix Adjusted Scores

Case-mix adjustment is done via linear regression. The CAHPS Consortium recommends self-reported overall health, age, and education as adjusters. These items are printed in the "About You" section of the survey, questions 38-45.

## 2967: CAHPS Home- and Community-Based Services Measures

The CAHPS Home- and Community-Based Services measures are created using top-box scoring. This refers to the percentage of respondents that give the most positive response. Details regarding the definition of the most positive response are noted below. HCBS service experience is measured in the following areas. Attached Excel Table S.2b includes the specific item wording for each measure and the response options that go into the numerator.

Scale Measures

1. Staff are reliable and helpful – average proportion of respondents that gave the most positive response on 6 survey items

2. Staff listen and communicate well – average proportion of respondents that gave the most positive response on 11 survey items

3. Case manager is helpful - average proportion of respondents that gave the most positive response on 3 survey items

4. Choosing the services that matter to you - average proportion of respondents that gave the most positive response on 2 survey items

5. Transportation to medical appointments - average proportion of respondents that gave the most positive response on 3 survey items

6. Personal safety and respect - average proportion of respondents that gave the most positive response on 3 survey items

7. Planning your time and activities - average proportion of respondents that gave the most positive response on 6 survey items

**Global Rating Measures** 

8. Global rating of personal assistance and behavioral health staff- average proportion of respondents that gave the most positive response of 9 or 10 on a 0-10 scale

9. Global rating of homemaker- average proportion of respondents that gave the most positive response of 9 or 10 on a 0-10 scale

10. Global rating of case manager- average proportion of respondents that gave the most positive response of 9 or 10 on a 0-10 scale

#### **Recommendation Measures**

11. Would recommend personal assistance/behavioral health staff to family and friends – average proportion of respondents that gave the most positive response of "Definitely Yes" on a 1-4 scale (Definitely no, Probably no, Probably yes, Definitely yes)

12. Would recommend homemaker to family and friends — average proportion of respondents that gave the most positive response of "Definitely Yes" on a 1-4 scale (Definitely no, Probably no, Probably yes, Definitely yes)

13. Would recommend case manager to family and friends– average proportion of respondents that gave the most positive response of "Definitely Yes" on a 1-4 scale (Definitely no, Probably no, Probably yes, Definitely yes)

#### **Unmet Needs Measures**

14. Unmet need in dressing/bathing due to lack of help–average proportion of respondents that gave the most positive response of "No" on a 1-2 scale (Yes, No)

15. Unmet need in meal preparation/eating due to lack of help–average proportion of respondents that gave the most positive response of "No" on a 1-2 scale (Yes, No)

16. Unmet need in medication administration due to lack of help–average proportion of respondents that gave the most positive response of "No" on a 1-2 scale (Yes, No)

17. Unmet need in toileting due to lack of help–average proportion of respondents that gave the most positive response of "Yes" on a 1-2 scale (Yes, No)

18. Unmet need with household tasks due to lack of help–average proportion of respondents that gave the most positive response of "No" on a 1-2 scale (Yes, No) Physical Safety Measure

19. Hit or hurt by staff –average proportion of respondents that gave the most positive response of "No" on a 1-2 scale (Yes, No)

#### **Denominator Statement**

#### 0517: CAHPS Home Health Care Survey (experience with care)

For each of the proportions described in S.5 the denominator is the number of respondents who replied to the question.

# 1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

The measure's denominator is the number of survey respondents. The target population for the survey is adult patients (age 18 and over) who had a major surgery as defined by Common Procedural Terminology (CPT) codes (90 day globals) within 3 to 6 months prior to the start of the survey.

Results will typically be compiled over a 12-month period.

For more information on the calculation of reporting measures, see Patient Experience Measures from the CAHPS Surgical Care Survey, available at

https://www.ahrq.gov/cahps/surveys-guidance/surgical/instructions/get-surg-care-survey-instruct.html.

# 2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Top Box Score Calculation:

1) Target Population: Patients that had a non-emergency surgery within 3 to 6 months prior to the start of the survey.

2) Exclusions = Patients who did not answer at least one item of the composite measures or rating item.

3) Screener items. Example: Patients who answered "No" to the first item indicating that the patient had surgery performed on the date listed by the surgeon named.

4) Top-box scores (percent with highest rating) are computed for each item

5) Top-box scores are averaged across the items within each composite, weighting each item equally.

Note that for users who want to case-mix adjust their scores, case-mix adjustment can be done using the CAHPS macro and the adjustment is made prior to the calculation of the total score.

Case-mix Adjusted Scores

Case-mix adjustment is done via linear regression. The CAHPS Consortium recommends self-reported overall health, age, and education as adjusters. These items are printed in the "About You" section of the survey, questions 38-45.

#### 2967: CAHPS Home- and Community-Based Services Measures

The denominator for all measures is the number of survey respondents. Individuals eligible for the CAHPS Home- and Community-Based Services survey include Medicaid beneficiaries who are at least 18 years of age in the sample period, and have received HCBS services for 3 months or longer and their proxies. Eligibility is further determined using three cognitive screening items, administered during the interview:

Q1. Does someone come into your home to help you? (Yes, No)

Q2. How do they help you?

Q3. What do you call them?

Individuals who are unable to answer these cognitive screening items are excluded. Some measures also have topic-specific screening items as well. Additional detail is provided in S.9.

According to guidance produced under the CMS TEFT Technical Assistance contract, individuals who are more likely to be good proxy respondents during the CAHPS Homeand Community-Based Services survey data collection are: (a) those who are willing to respond on behalf of the beneficiary; (b) unpaid caregivers, family members, friends, and neighbors; and (c) those who know the beneficiary well enough that s/he is familiar with the services/supports they are receiving, and has regular, ongoing contact with them. Examples of circumstances that increase the likelihood that someone has knowledge about the beneficiary and their care situation include living with the beneficiary, managing the beneficiary about the services they receive, in-person visits with the beneficiary, and being present when services/supports are delivered. Individuals who are less likely to be good proxy respondents are (a) those with paid responsibilities for providing services/supports to the beneficiary and friends who are paid to help the beneficiary and (b) guardians or conservators whose only responsibility is to oversee the beneficiary's finances.

#### Exclusions

# 0517: CAHPS Home Health Care Survey (experience with care)

Numerator and Denominator Exclusions:

- Patients under 18 years of age at any time during their stay are excluded.
- Patients who received fewer than 2 visits from home health agency personnel during a 2month look-back period are excluded. The 2-month look-back period is defined as the 2months prior to and including the last day in the sample month.
- Patients have been previously selected for an HHCAHPS sample during any month in the current quarter, or during the last 5 months, are excluded.
- Patients who are currently receiving hospice, or are discharged to hospice, are excluded.
- All routine maternity patients are excluded.
- All "No publicity" status patients are excluded.
- Patients receiving only non-skilled care are excluded.
- Patients who reside in a state where their health condition exclude them from surveys.
- Patients who are decedents at the time of the sample are excluded.

# 1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

The following are excluded when constructing the sampling frame:

- Surgical patients whose procedure was greater than 6 months or less than 3 months prior to the start of the survey.

- Surgical patients younger than 18 years old.

- Surgical patients who are institutionalized (put in the care of a specialized institution) or deceased.

# 2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Top Box Score Calculation:

1) Target Population: Patients that had a non-emergency surgery within 3 to 6 months prior to the start of the survey.

2) Exclusions = Patients who did not answer at least one item of the composite measures or rating item.

3) Screener items. Example: Patients who answered "No" to the first item indicating that the patient had surgery performed on the date listed by the surgeon named.

4) Top-box scores (percent with highest rating) are computed for each item

5) Top-box scores are averaged across the items within each composite, weighting each item equally.

Note that for users who want to case-mix adjust their scores, case-mix adjustment can be done using the CAHPS macro and the adjustment is made prior to the calculation of the total score.

**Case-mix Adjusted Scores** 

Case-mix adjustment is done via linear regression. The CAHPS Consortium recommends self-reported overall health, age, and education as adjusters. These items are printed in the "About You" section of the survey, questions 38-45.

# 2967: CAHPS Home- and Community-Based Services Measures

Individuals less than 18 years of age and individuals that have not received HCBS services for at least 3 months should be excluded. During survey administration, additional exclusions include individuals that failed any of the cognitive screening items mentioned in the denominator statement below. There were 227 beneficiaries excluded due to not passing the cognitive screener (53 Aged/Disabled, 59 ID/DD, 25 TBI, and 90 SMI). Allowing proxy respondents in future administrations has the potential to further reduce these numbers.

#### Risk Adjustment

# 0517: CAHPS Home Health Care Survey (experience with care)

Other: The patient mix adjustment factors are derived from identified patient characteristics that have been determined to impact response tendencies. The patient-mix regression results indicate the tendency of patients with particular characteristics to respond more positively or negatively to HHCAHPS Survey questions. Patient-mix adjustment factors are derived directly from these data OLS regression results.

1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

Other: Case-mix adjustment

2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey Statistical Risk Model

#### 2967: CAHPS Home- and Community-Based Services Measures

Statistical Risk Model

# Stratification

0517: CAHPS Home Health Care Survey (experience with care)

Rate/Proportion

1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0

Other (specify): Top-box Score; case-mix adjusted score

2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

Rate/Proportion

**2967: CAHPS Home- and Community-Based Services Measures** Other (specify): Top-box Score; case-mix adjusted score

Type Score

- 0517: CAHPS Home Health Care Survey (experience with care)
- 1741: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surgical Care Survey Version 2.0
- 2548: Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey
- 2967: CAHPS Home- and Community-Based Services Measures

# Comparison of NQF 2321, 2632, and 2632

2321 Functional Change Change in Mobility Score

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

# Steward

#### 2321 Functional Change Change in Mobility Score

Uniform Data System for Medical Rehabilitation

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Centers for Medicare & Medicaid Services

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Centers for Medicare & Medicaid Services

# Description

#### 2321 Functional Change Change in Mobility Score

Change in rasch derived values of mobility function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility FIM<sup>®</sup> items:Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

# 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission.

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

This measure estimates the percentage of IRF patients who meet or exceed an expected discharge mobility score.

# Туре

# 2321 Functional Change Change in Mobility Score

Outcome

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Outcome

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Outcome

#### Data Source

#### 2321 Functional Change Change in Mobility Score

Instrument-Based Data, Other

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Instrument-Based Data

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Instrument-Based Data

# Level

- 2321 Functional Change Change in Mobility Score Facility, Other
- 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support Facility
- 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients Facility

# Setting

- 2321 Functional Change Change in Mobility Score Inpatient/Hospital, Post-Acute Care
- 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Post-Acute Care

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients Post-Acute Care

#### Numerator Statement

#### 2321 Functional Change Change in Mobility Score

Average change in rasch derived mobility function score from admission to discharge at the facility level. Includes the following items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level/total number of patients). Patient less than 18 years of age at admission to the facility or patients who died within the facility are excluded.

# 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in mobility score between admission and

discharge among LTCH patients requiring ventilator support at admission. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score.

# 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

The numerator is the number of patients in an IRF with an observed discharge mobility score that is equal to or higher than a calculated expected discharge mobility score.

#### **Denominator Statement**

#### 2321 Functional Change Change in Mobility Score

Facility adjusted expected change in rasch derived mobility values, adjusted at the Case Mix Group (CMG) level.

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

The target population (denominator) for this quality measure is the number of LTCH patients requiring ventilator support at the time of admission to the LTCH.

# 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

IRF patients included in this measure are at least 21 years of age, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

# Exclusions

#### 2321 Functional Change Change in Mobility Score

National values used in the CMG adjustment procedure will not include cases who died in the IRF or patients less than 18 years of age at admission. Cases who died during rehabilitation are not typical patients and are routinely omitted from reports and published research on rehabilitation outcomes. Further details and references related to the exclusion criteria can be found in the Measure Testing form.

# 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility

# Among Patients Requiring Ventilator Support

This quality measure has following patient-level exclusion criteria:

1) Patients with incomplete stays:

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute-care setting (Inpatient Prospective Payment System or Inpatient Psychiatric Hospital or unit) because of a medical emergency or psychiatric condition; patients transferred to another LTCH; patients who leave the LTCH against medical advice; patients who die; and patients with a length of stay less than 3 days.

2) Patients discharged to hospice:

Rationale: Patients discharged to hospice are excluded because functional improvement may not be a goal for these patients.

3) Patients with progressive neurological conditions, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, and Huntington's chorea:

Rationale: These patients are excluded because they may have functional decline or less predictable function trajectories.

4) Patients in coma, persistent vegetative state, complete tetraplegia, and locked-in syndrome:

Rationale: The patients are excluded because they may have limited or less predictable mobility recovery.

5) Patients younger than age 21:

Rationale: There is only limited evidence published about functional outcomes for individuals younger than 21.

6) Patients who are coded as independent on all the mobility items at admission:

Rationale: These patients are excluded because no improvement in mobility skills can be measured with the mobility items used in this quality measure.

Facility-level quality measure exclusion: For LTCHs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

# 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

This quality measure has five patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients with the following medical conditions on admission: coma, persistent vegetative state, complete quadriplegia, locked-in syndrome, or severe anoxic brain damage, cerebral edema or compression of brain.

Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected items.

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

4) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

5) Patients who are not Medicare Part A or Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

#### Risk Adjustment

#### 2321 Functional Change Change in Mobility Score

Stratification by risk category/subgroup

- 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support Statistical Risk Model
- 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Statistical Risk Model

# Stratification

#### 2321 Functional Change Change in Mobility Score

While the measure can be stratified by specific impairment type (IGC), the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

N/A

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

N/A

# Type Score

2321 Functional Change Change in Mobility Score

Ratio

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Continuous variable, e.g. average

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Rate/Proportion

# Comparison of NQF 2632, 2634, 2636, 0167, 0175, 0422, 0423, 0424, 0425, 0426, 0427, 0428, 0429, 0688, 2287, 2321, 2612, 2643, 2653, 2774, 2775, 2776, 2778

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

0167 Improvement in Ambulation/locomotion

#### Steward

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Centers for Medicare & Medicaid Services

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Centers for Medicare & Medicaid Services

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Centers for Medicare & Medicaid Services

0167 Improvement in Ambulation/locomotion

Centers for Medicare & Medicaid Services

# Description

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission.

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

This measure estimates the mean risk-adjusted mean change in mobility score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

This measure estimates the percentage of IRF patients who meet or exceed an expected discharge mobility score.

#### **0167 Improvement in Ambulation/locomotion**

Percentage of home health episodes of care during which the patient improved in ability to ambulate.

Туре

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Outcome

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Outcome

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Outcome

**0167** Improvement in Ambulation/locomotion

Outcome

# Data Source

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Instrument-Based Data

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Instrument-Based Data

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Instrument-Based Data

0167 Improvement in Ambulation/locomotion

**Electronic Health Data** 

## Level

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Facility

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Facility

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Facility

**0167 Improvement in Ambulation/locomotion** 

Facility

#### Setting

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Post-Acute Care

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Post-Acute Care

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Post-Acute Care

**0167 Improvement in Ambulation/locomotion** 

Home Care

#### Numerator Statement

# 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score.

# 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in mobility score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients age 21 and older. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score.

# 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

The numerator is the number of patients in an IRF with an observed discharge mobility score that is equal to or higher than a calculated expected discharge mobility score.

#### 0167 Improvement in Ambulation/locomotion

Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in ambulation locomotion at discharge than at start (or resumption) of care.

# Denominator Statement

# 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

The target population (denominator) for this quality measure is the number of LTCH patients requiring ventilator support at the time of admission to the LTCH.

# 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

The denominator is the number of Inpatient Rehabilitation Facility Medicare Part A and Medicare Advantage patient stays, except those that meet the exclusion criteria.

# 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

IRF patients included in this measure are at least 21 years of age, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

#### **0167** Improvement in Ambulation/locomotion

All home health episodes where the value recorded for the OASIS-C2 item M1860 ("Ambulation/Locomotion") on the start (or the resumption) of care assessment indicates minimal or no impairment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death at home, or the episode is covered by the generic exclusions.

# Exclusions

# 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

This quality measure has following patient-level exclusion criteria:

1) Patients with incomplete stays:

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute-care setting (Inpatient Prospective Payment System or Inpatient Psychiatric Hospital or unit) because of a medical emergency or psychiatric condition; patients transferred to another LTCH; patients who leave the LTCH against medical advice; patients who die; and patients with a length of stay less than 3 days.

2) Patients discharged to hospice:

Rationale: Patients discharged to hospice are excluded because functional improvement may not be a goal for these patients.

3) Patients with progressive neurological conditions, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, and Huntington's chorea:

Rationale: These patients are excluded because they may have functional decline or less predictable function trajectories.

4) Patients in coma, persistent vegetative state, complete tetraplegia, and locked-in syndrome:

Rationale: The patients are excluded because they may have limited or less predictable mobility recovery.

5) Patients younger than age 21:

Rationale: There is only limited evidence published about functional outcomes for individuals younger than 21.

6) Patients who are coded as independent on all the mobility items at admission:

Rationale: These patients are excluded because no improvement in mobility skills can be measured with the mobility items used in this quality measure.

Facility-level quality measure exclusion: For LTCHs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

# 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

This quality measure has six patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients who are independent with all mobility activities at the time of admission.

Rationale: Patients who are independent with all the mobility items (with the exception of the wheelchair items GG0170R and GG0170S) at the time of admission are assigned the highest score on all the mobility items, and thus, would not be able to show functional improvement on this same set of items at discharge.

3) Patients with the following medical conditions on admission: coma, persistent vegetative state; complete quadriplegia; locked-in syndrome or severe anoxic brain damage, cerebral edema or compression of brain.

Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected mobility items.

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

5) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

#### 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

This quality measure has five patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly

discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients with the following medical conditions on admission: coma, persistent vegetative state, complete quadriplegia, locked-in syndrome, or severe anoxic brain damage, cerebral edema or compression of brain.

Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected items.

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

4) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

5) Patients who are not Medicare Part A or Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

#### **0167 Improvement in Ambulation/locomotion**

N/A

#### Risk Adjustment

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Statistical Risk Model

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Statistical Risk Model

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Statistical Risk Model

#### 0167 Improvement in Ambulation/locomotion

Statistical Risk Model

# Stratification

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

N/A

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

N/A

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

N/A

**0167** Improvement in Ambulation/locomotion

N/A

# Type Score

2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support

Continuous variable, e.g. average

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Continuous variable, e.g. average

2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Rate/Proportion

#### **0167 Improvement in Ambulation/locomotion**

Rate/Proportion

0175 Improvement in bed transferring

0422 Functional status change for patients with Knee impairments

0423 Functional status change for patients with Hip impairments

0424 Functional status change for patients with Foot and Ankle impairments

#### Steward

#### 0175 Improvement in bed transferring

Centers for Medicare & Medicaid Services

## 0422 Functional status change for patients with Knee impairments

Focus On Therapeutic Outcomes, Inc

0423 Functional status change for patients with Hip impairments

Focus On Therapeutic Outcomes, Inc

#### 0424 Functional status change for patients with Foot and Ankle impairments

Focus On Therapeutic Outcomes, Inc

#### Description

#### 0175 Improvement in bed transferring

Percentage of home health episodes of care during which the patient improved in ability to get in and out of bed.

#### 0422 Functional status change for patients with Knee impairments

A self-report measure of change in functional status for patients 14 year+ with knee impairments. The change in functional status assessed using FOTO's (knee ) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

#### 0423 Functional status change for patients with Hip impairments

A risk adjusted, benchmarked effectiveness measure derived from aggregated data submitted by patients 14 years+ with Hip impairments who are treated by rehabilitation providers. The measure can be used at the patient level, at the individual clinician, and at the clinic level by comparing to benchmarked, aggregated risk-adjusted functional status data. A self-report measure of change in functional status for patients 14 years+ with hip impairments. The change in functional status assessed using FOTO's (hip) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

#### 0424 Functional status change for patients with Foot and Ankle impairments

A self-report measure of change in functional status for patients 14 years+ with foot and ankle impairments. The change in functional status assessed using FOTO's (foot and ankle) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

## Туре

# 0175 Improvement in bed transferring

Outcome

- 0422 Functional status change for patients with Knee impairments Outcome: PRO-PM
- 0423 Functional status change for patients with Hip impairments Outcome: PRO-PM
- 0424 Functional status change for patients with Foot and Ankle impairments Outcome: PRO-PM

# Data Source

### 0175 Improvement in bed transferring

Electronic Health Records

#### 0422 Functional status change for patients with Knee impairments

Electronic Health Data, Instrument-Based Data, Paper Medical Records

# 0423 Functional status change for patients with Hip impairments Electronic Health Data, Instrument-Based Data, Paper Medical Records

0424 Functional status change for patients with Foot and Ankle impairments Electronic Health Data, Instrument-Based Data, Paper Medical Records

#### Level

0175 Improvement in bed transferring

Facility

- 0422 Functional status change for patients with Knee impairments Clinician: Group/Practice, Clinician: Individual, Facility
- 0423 Functional status change for patients with Hip impairments Clinician: Group/Practice, Clinician: Individual, Facility
- 0424 Functional status change for patients with Foot and Ankle impairments Clinician: Group/Practice, Clinician: Individual, Facility

# Setting

0175 Improvement in bed transferring

Home Care

- **0422 Functional status change for patients with Knee impairments** Outpatient Services, Post-Acute Care, Other
- 0423 Functional status change for patients with Hip impairments Outpatient Services, Post-Acute Care, Other
- **0424 Functional status change for patients with Foot and Ankle impairments** Outpatient Services, Post-Acute Care, Other

#### Numerator Statement

#### 0175 Improvement in bed transferring

Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in bed transferring at discharge than at start (or resumption) of care.

#### 0422 Functional status change for patients with Knee impairments

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for knee impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for knee impairment.

#### 0423 Functional status change for patients with Hip impairments

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for hip impairment.

Clinic Level: The average residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for hip impairment.

#### 0424 Functional status change for patients with Foot and Ankle impairments

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment)

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for foot and or ankle impairment.

Clinic Level: The average of residuals in patients who were treated by a clinic in a 12 month time period for foot and or ankle impairment.

#### **Denominator Statement**

#### 0175 Improvement in bed transferring

The number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

#### 0422 Functional status change for patients with Knee impairments

All patients 14 years and older with knee impairments who have initiated rehabilitation treatment and completed the FOTO knee FS PROM at admission and discharge.

#### 0423 Functional status change for patients with Hip impairments

All patients 14 years and older with hip impairments who have initiated rehabilitation treatment and complete the FOTO hip FS PROM at admission and discharge.

#### 0424 Functional status change for patients with Foot and Ankle impairments

All patients 14 years and older with foot or ankle impairments who have initiated rehabilitation treatment and completed the FOTO foot and ankle PROM at admission and discharge.

# **Exclusions**

#### 0175 Improvement in bed transferring

All home health episodes where at the start (or resumption) of care assessment the patient is able to transfer independently, or the patient is non-responsive. or the episode of care ended in transfer to inpatient facility or death at home, or the episode is covered by the generic exclusions.

#### 0422 Functional status change for patients with Knee impairments

- Patients who are not being treated for a knee impairment
- •Age under 14 years old.

#### 0423 Functional status change for patients with Hip impairments

- Patients who are not being treated for a Hip impairment
- •Age under 14 years old.

#### 0424 Functional status change for patients with Foot and Ankle impairments

- Patients who are not being treated for a foot and ankle impairment condition.
- •Age under 14 years old.

#### Risk Adjustment

#### 0175 Improvement in bed transferring

Statistical Risk Model

- 0422 Functional status change for patients with Knee impairments Statistical Risk Model
- 0423 Functional status change for patients with Hip impairments Statistical Risk Model
- 0424 Functional status change for patients with Foot and Ankle impairments Statistical Risk Model

# Stratification

0175 Improvement in bed transferring

N/A

- 0422 Functional status change for patients with Knee impairments N/A
- 0423 Functional status change for patients with Hip impairments N/A
- 0424 Functional status change for patients with Foot and Ankle impairments N/A

# Type Score

- 0175 Improvement in bed transferring Rate/Proportion
- 0422 Functional status change for patients with Knee impairments
  - Continuous variable, e.g. average
- 0423 Functional status change for patients with Hip impairments

Continuous variable, e.g. average

**0424 Functional status change for patients with Foot and Ankle impairments** Continuous variable, e.g. average

0425 Functional status change for patients with lumbar impairments
0426 Functional status change for patients with Shoulder impairments
0427 Functional status change for patients with elbow, wrist and hand impairments
0428 Functional status change for patients with General orthopaedic impairments

### Steward

0425 Functional status change for patients with lumbar impairments Focus On Therapeutic Outcomes, Inc

**0426 Functional status change for patients with Shoulder impairments** Focus On Therapeutic Outcomes, Inc

#### 0427 Functional status change for patients with elbow, wrist and hand impairments

Focus On Therapeutic Outcomes, Inc

# 0428 Functional status change for patients with General orthopaedic impairments

Focus On Therapeutic Outcomes, Inc

# Description

#### 0425 Functional status change for patients with lumbar impairments

A self-report outcome measure of functional status for patients 14 years+ with lumbar impairments. The change in functional status assessed using FOTO (lumbar) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality.

#### 0426 Functional status change for patients with Shoulder impairments

A self-report outcome measure of change in functional status for patients 14 years+ with shoulder impairments. The change in functional status assess using FOTO's (shoulder) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

#### 0427 Functional status change for patients with elbow, wrist and hand impairments

A self-report outcome measure of functional status for patients 14 years+ with elbow, wrist, hand impairments. The change in functional status assessed using FOTO (elbow, wrist and hand) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

#### 0428 Functional status change for patients with General orthopaedic impairments

A self-report outcome measure of functional status for patients 14 years+ with general orthopaedic impairments. The change in functional status assessed using FOTO (general orthopedic) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality.

#### Туре

# 0425 Functional status change for patients with lumbar impairments

Outcome: PRO-PM

# 0426 Functional status change for patients with Shoulder impairments Outcome: PRO-PM

- 0427 Functional status change for patients with elbow, wrist and hand impairments Outcome: PRO-PM
- 0428 Functional status change for patients with General orthopaedic impairments Outcome: PRO-PM
#### Data Source

- 0425 Functional status change for patients with lumbar impairments Electronic Health Data, Instrument-Based Data, Paper Medical Records
- **0426 Functional status change for patients with Shoulder impairments** Electronic Health Data, Instrument-Based Data, Paper Medical Records
- **0427 Functional status change for patients with elbow, wrist and hand impairments** Electronic Health Data, Instrument-Based Data, Paper Medical Records
- **0428 Functional status change for patients with General orthopaedic impairments** Electronic Health Data, Instrument-Based Data, Paper Medical Records

#### Level

- **0425 Functional status change for patients with lumbar impairments** Clinician: Group/Practice, Clinician: Individual, Facility
- 0426 Functional status change for patients with Shoulder impairments Clinician: Group/Practice, Clinician: Individual, Facility
- **0427 Functional status change for patients with elbow, wrist and hand impairments** Clinician: Group/Practice, Clinician: Individual, Facility
- 0428 Functional status change for patients with General orthopaedic impairments Clinician: Group/Practice, Clinician: Individual, Facility

#### Setting

- 0425 Functional status change for patients with lumbar impairments Outpatient Services, Post-Acute Care, Other
- **0426 Functional status change for patients with Shoulder impairments** Outpatient Services, Post-Acute Care, Home Care, Other
- **0427** Functional status change for patients with elbow, wrist and hand impairments Outpatient Services, Post-Acute Care, Other
- **0428 Functional status change for patients with General orthopaedic impairments** Outpatient Services, Post-Acute Care, Other

#### Numerator Statement

#### 0425 Functional status change for patients with lumbar impairments

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment). Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for lumbar impairment.

Clinic Level: The average of residuals ) in functional status scores in patients who were treated by a clinic in a 12 month time period for lumbar impairment.

#### 0426 Functional status change for patients with Shoulder impairments

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for shoulder impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for shoulder impairment.

#### 0427 Functional status change for patients with elbow, wrist and hand impairments

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for elbow, wrist and hand impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for elbow, wrist and hand impairments.

#### 0428 Functional status change for patients with General orthopaedic impairments

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for general orthopaedic impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for general orthopaedic impairment.

#### **Denominator Statement**

#### 0425 Functional status change for patients with lumbar impairments

All patients 14 years and older with a lumbar impairment who have initiated rehabilitation treatment and completed the FOTO (lumbar) PROM.

#### 0426 Functional status change for patients with Shoulder impairments

All patients 14 years and older with shoulder impairments who have initiated rehabilitation treatment and completed the FOTO shoulder FS outcome instrument at admission and discharge.

#### 0427 Functional status change for patients with elbow, wrist and hand impairments

All patients 14 years and older with elbow, wrist or hand impairments who have initiated rehabilitation treatment and completed the FOTO (elbow, wrist and hand) PROM.

#### 0428 Functional status change for patients with General orthopaedic impairments

All patients 14 years and older with general orthopaedic impairments who have initiated rehabilitation treatment and completed the FOTO (general orthopaedic) PROM.

#### Exclusions

#### 0425 Functional status change for patients with lumbar impairments

• Patients who are not being treated for a lumbar impairment

- •<14 years of age</p>
- 0426 Functional status change for patients with Shoulder impairments

Patients who are not being treated for a Shoulder impairment

•<14 years of age</p>

0427 Functional status change for patients with elbow, wrist and hand impairments

Patients who are not being treated for an elbow, wrist and/or hand impairment
<14 years of age</li>

#### 0428 Functional status change for patients with General orthopaedic impairments

- Patients who are not being treated for a General orthopaedic impairment
- •<14 years of age

#### Risk Adjustment

- 0425 Functional status change for patients with lumbar impairments Statistical Risk Model
- 0426 Functional status change for patients with Shoulder impairments Statistical Risk Model
- 0427 Functional status change for patients with elbow, wrist and hand impairments Statistical Risk Model
- 0428 Functional status change for patients with General orthopaedic impairments Statistical Risk Model

#### Stratification

0425 Functional status change for patients with lumbar impairments

N/A

- 0426 Functional status change for patients with Shoulder impairments N/A
- 0427 Functional status change for patients with elbow, wrist and hand impairments N/A
- 0428 Functional status change for patients with General orthopaedic impairments  $\ensuremath{\mathsf{N/A}}$

#### Type Score

- **0425 Functional status change for patients with lumbar impairments** Continuous variable, e.g. average
- **0426 Functional status change for patients with Shoulder impairments** Continuous variable, e.g. average
- **0427 Functional status change for patients with elbow, wrist and hand impairments** Continuous variable, e.g. average

#### 0428 Functional status change for patients with General orthopaedic impairments

Continuous variable, e.g. average

0429 Change in Basic Mobility as Measured by the AM-PAC

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

2287 Functional Change: Change in Motor Score

2321 Functional Change: Change in Mobility Score

#### Steward

0429 Change in Basic Mobility as Measured by the AM-PAC

CREcare

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

Centers for Medicare & Medicaid Services

- 2287 Functional Change: Change in Motor Score Uniform Data System for Medical Rehabilitation
- 2321 Functional Change: Change in Mobility Score

Uniform Data System for Medical Rehabilitation

#### Description

#### 0429 Change in Basic Mobility as Measured by the AM-PAC

The Activity Measure for Post Acute Care (AM-PAC) is a functional status assessment instrument developed specifically for use in facility and community dwelling post acute care (PAC) patients. It was built using Item Response Theory (IRT) methods to achieve feasible, practical, and precise measurement of functional status (Hambleton 200, Hambleton 2005). Based on factor analytic work and IRT analyses, a Basic Mobility domain has been identified which consists of functional tasks that cover in the following areas: transfers, walking, wheelchair skills, stairs, bend/lift/ and carrying tasks. (Haley, 2004, 2004a, 2004b).

The AM-PAC adaptive short form (ASF) versions of the Basic Mobility scale are being submitted to The National Quality Forum. The ASF version of the Basic Mobility scale consists of 2 different 10-item forms, one for inpatients versus those receiving care in a community setting. Built using IRT methods, the Basic Mobility ASFs allow different questions to be targeted to each setting (inpatient/community), generating an interval level score that is common across both ASFs. The scale is transformed from a logit scale to a standardized scale which ranges from 0 - 100 where 100 is the best possible mobility function. We believe that these short forms are the best compromise between needed breadth of functional content across inpatient and community functional tasks, and the need to minimize response burden.

The ASFs for Basic Mobility were built from an item bank that contains a rich assortment of 131 calibrated items that have been developed, tested, calibrated and applied in clinical research over the past seven years. In developing and evaluating the AM-PAC, we employed two different samples of 1081 patients who received post acute care in acute inpatient rehabilitation units, long-term care hospitals, skilled nursing homes, home health care, and outpatient therapy care settings. The ASFs were developed on an initial sample

of 485 post acute care patients (see Haley et al, 2004) The existence of a detailed item bank enables the basic AM-PAC forms to be enhanced and improved in a very timely fashion (Jette et al, 2007, Haley et al, 2008) for examples of this process).

Scoring estimates from the ASFs and the computer adaptive test (CAT) are directly comparable, given they are taken from the same item bank, the same IRT analysis and use the same scoring metric. Using computer simulations with the AM-PAC item bank, we demonstrated excellent scoring comparability between the AM-PAC adaptive short forms and the CAT. (Haley et al., 2004)

Advantages of using the CAT over the short forms include: less test burden on patients, decreased standard errors around score estimates, and improved scoring accuracy at the lower and higher ends of the AM-PAC functional scales. (Haley et al., 2004) However, the adaptive short forms can generate sufficiently accurate scores on the AM-PAC functional domains and those scores can be directly compared to scores provided from a CAT application of the same item pool.

# 0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

This measure, based on data from the Minimum Data Set (MDS) 3.0 assessment of longstay nursing facility residents, estimates the percentage of long-stay residents in a nursing facility whose need for assistance with late-loss Activities of Daily Living (ADLs), as reported in the target assessment, increased when compared with a prior assessment. The four lateloss ADLs are: bed mobility, transfer, eating, and toilet use. This measure is calculated by comparing the change in each ADL item between the target assessment (OBRA, PPS or discharge) and a prior assessment (OBRA, PPS or discharge). Long-stay nursing facility residents are those with a nursing facility stay of 101 cumulative days or more.

#### 2287 Functional Change: Change in Motor Score

Change in rasch derived values of motor function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 12 FIM<sup>®</sup> items:Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

#### 2321 Functional Change: Change in Mobility Score

Change in rasch derived values of mobility function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility FIM<sup>®</sup> items:Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

#### Туре

#### 0429 Change in Basic Mobility as Measured by the AM-PAC

Outcome

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay) Outcome

#### 2287 Functional Change: Change in Motor Score

Outcome

2321 Functional Change: Change in Mobility Score Outcome

#### Data Source

0429 Change in Basic Mobility as Measured by the AM-PAC

Other

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

Electronic Health Records

- 2287 Functional Change: Change in Motor Score Claims, Other
- 2321 Functional Change: Change in Mobility Score Instrument-Based Data, Other

#### Level

- 0429 Change in Basic Mobility as Measured by the AM-PAC Clinician: Individual, Facility
- 0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

Facility

- 2287 Functional Change: Change in Motor Score Facility
- 2321 Functional Change: Change in Mobility Score Facility, Other

#### Setting

0429 Change in Basic Mobility as Measured by the AM-PAC

Inpatient/Hospital, Outpatient Services, Post-Acute Care, Home Care

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

Post-Acute Care

- 2287 Functional Change: Change in Motor Score Inpatient/Hospital, Post-Acute Care, Home Care
- 2321 Functional Change: Change in Mobility Score Inpatient/Hospital, Post-Acute Care

#### Numerator Statement

#### 0429 Change in Basic Mobility as Measured by the AM-PAC

The number (or proportion) of a clinician's patients in a particular risk adjusted diagnostic category who meet a target threshold of improvement in Basic Mobility functioning. We recommend that the target threshold is based on the percentage of patients who exceed one or more Minimal Detectable Change (MDC) thresholds. The percentage threshold is derived from a normative database used for benchmarking. MDC is considered the minimal amount of change that is not likely to be due to measurement error. It is one of the more common change indices, which can be used to identify reliable changes in an outcome like Basic Mobility function adjusting for the amount of measurement error inherent in the measurement. MDC can be reported at different confidence levels.

## 0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

The numerator is the number of long-stay residents who have a selected target MDS assessment (OBRA, PPS, or discharge) reporting a defined amount of decline in ADL function when compared with a prior assessment (OBRA, PPS, or discharge). This decline in function is captured as an increase in the resident's need for assistance with late-loss ADLs, when compared with the resident's prior assessment, indicated by a higher score on the applicable MDS items on the more recent assessment (which are coded such that a higher score indicates the need for more assistance with an ADL task). Late-loss ADL items are bed mobility, transfer, eating, and toilet use. The threshold increase in need for assistance (suggesting decline in function) that results in a resident being counted in the numerator is met if the score for at least one late-loss ADL item increases by two or more points or if the score for two or more of the late-loss ADLs items increase by one point. The typical interval between the target and prior assessment dates is approximately 90 days.

#### 2287 Functional Change: Change in Motor Score

Average change in rasch derived motor functional score from admission to discharge at the facility level. Average is calculated as (sum of change at the patient level/total number of patients). Cases aged less than 18 years at admission to the IRF or patients who died within the IRF are excluded.

#### 2321 Functional Change: Change in Mobility Score

Average change in rasch derived mobility function score from admission to discharge at the facility level. Includes the following items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level/total number of patients). Patient less than 18 years of age at admission to the facility or patients who died within the facility are excluded.

#### **Denominator Statement**

#### 0429 Change in Basic Mobility as Measured by the AM-PAC

All patients in a risk adjusted diagnostic category with a mobility goal for an episode of care. Cases to be included in the denominator could be identified based on ICD-9 codes or alternatively, based on CPT codes relevant to treatment goals focused on Basic Mobility function.

# 0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

The denominator includes all long-stay residents with a selected target MDS assessment (OBRA, PPS, or discharge) during the quarter and a prior assessment who did not meet the exclusion criteria. Long-stay residents are defined as residents who have stayed in the nursing home for 101 cumulative days or more.

#### 2287 Functional Change: Change in Motor Score

National values used in the CMG-adjustment procedure will not include cases who died in the IRF (or other venue) or cases less than 18 years old. Cases who died during rehabilitation are not typical patients and are typically omitted in the literature when looking at rehabilitation outcomes. In addition, the FIM instrument is meant for an adult population (Ottenbacher et al. 1996).

#### 2321 Functional Change: Change in Mobility Score

National values used in the CMG adjustment procedure will not include cases who died in the IRF or patients less than 18 years of age at admission. Cases who died during rehabilitation are not typical patients and are routinely omitted from reports and published research on rehabilitation outcomes. Further details and references related to the exclusion criteria can be found in the Measure Testing form.

#### Exclusions

#### 0429 Change in Basic Mobility as Measured by the AM-PAC

Those patients who did not have one or more mobility function goals for the episode of care.

# 0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

There are six exclusions applied to the denominator: (1) self-performance total dependence on all four late-loss ADL items during the prior assessment (and therefore it is not possible for the resident to decline sufficiently to be counted in the numerator), (2) self-performance total dependence on three late-loss ADL items during the prior assessment and self-performance extensive assistance on the fourth late-loss ADL item (and therefore it is not possible for the resident to decline sufficiently to be counted in the numerator), (3) comatose status on the target assessment, (4) prognosis of life expectancy of less than six months on the target assessment, (5) receiving hospice care on the target assessment, or/and (6) the resident is not in the numerator and has missing values for any of the four ADL items on the target or prior assessment.

Nursing facilities are excluded from public reporting if their denominator size is less than 30 residents.

#### 2287 Functional Change: Change in Motor Score

While the measure can be stratified by specific impairment type, the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

#### 2321 Functional Change: Change in Mobility Score

While the measure can be stratified by specific impairment type (IGC), the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

#### Risk Adjustment

0429 Change in Basic Mobility as Measured by the AM-PAC

Statistical Risk Model

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

N/A

- 2287 Functional Change: Change in Motor Score Stratification by risk category/group
- 2321 Functional Change: Change in Mobility Score

Stratification by risk category/group

#### Stratification

0429 Change in Basic Mobility as Measured by the AM-PAC

N/A

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

N/A

2287 Functional Change: Change in Motor Score

While the measure can be stratified by specific impairment type, the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

#### 2321 Functional Change: Change in Mobility Score

While the measure can be stratified by specific impairment type (IGC), the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

#### Type Score

#### 0429 Change in Basic Mobility as Measured by the AM-PAC

N/A

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

Rate/Proportion

2287 Functional Change: Change in Motor Score

Ratio

2321 Functional Change: Change in Mobility Score

Ratio

2612 CARE: Improvement in Mobility

2643 Average change in functional status following lumbar spine fusion surgery 2653 Average change in functional status following total knee replacement surgery 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

#### Steward

#### 2612 CARE: Improvement in Mobility

American Health Care Association

- 2643 Average change in functional status following lumbar spine fusion surgery MN Community Measurement
- 2653 Average change in functional status following total knee replacement surgery MN Community Measurement
- 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

Uniform Data System for Medical Rehabilitation

#### Description

#### 2612 CARE: Improvement in Mobility

The measure calculates a skilled nursing facility's (SNFs) average change in mobility for patients admitted from a hospital who are receiving therapy. The measure calculates the average change in mobility score between admission and discharge for all residents admitted to a SNF from a hospital or another post-acute care setting for therapy (i.e., PT or OT) regardless of payor status. This is a risk adjusted outcome measure, based on the mobility subscale of the Continuity Assessment and Record Evaluation (CARE) Tool and information from the admission MDS 3.0 assessment. The measure is calculated on a rolling 12 month, average updated quarterly.

#### 2643 Average change in functional status following lumbar spine fusion surgery

For patients age 18 and older undergoing lumbar spine fusion surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oswestry Disability Index (ODI version 2.1a) patient reported outcome tool.

#### 2653 Average change in functional status following total knee replacement surgery

For patients age 18 and older undergoing total knee replacement surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oxford Knee Score (OKS) patient reported outcome tool.

#### 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

Change in rasch derived values of mobility function from admission to discharge among adult short term rehabilitation skilled nursing facility patients aged 18 years and older who were discharged alive. The time frame for the measure is 12 months. The measure includes the following 4 mobility items:Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

#### Туре

2612 CARE: Improvement in Mobility

Outcome

- 2643 Average change in functional status following lumbar spine fusion surgery Outcome: PRO-PM
- 2653 Average change in functional status following total knee replacement surgery Outcome: PRO-PM
- 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities Outcome

#### Data Source

2612 CARE: Improvement in Mobility

Electronic Health Records, Other

- 2643 Average change in functional status following lumbar spine fusion surgery Instrument-Based Data, Other, Paper Medical Records
- 2653 Average change in functional status following total knee replacement surgery Instrument-Based Data, Other, Paper Medical Records
- 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities Electronic Health Records, Other

#### Level

- 2612 CARE: Improvement in Mobility Facility
- 2643 Average change in functional status following lumbar spine fusion surgery Clinician: Group/Practice
- 2653 Average change in functional status following total knee replacement surgery Clinician: Group/Practice
- 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities Facility

## Setting

## 2612 CARE: Improvement in Mobility

Nursing Home/SNF

- 2643 Average change in functional status following lumbar spine fusion surgery Outpatient Services
- 2653 Average change in functional status following total knee replacement surgery Outpatient Services

#### 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

#### Post-Acute Care

#### Numerator Statement

#### 2612 CARE: Improvement in Mobility

The measure assesses the change in mobility. The numerator is the risk adjusted sum of the change in the CARE Tool mobility subscale items between admission and discharge for each individual admitted from a hospital or another post acute care setting regardless of payor status and are receiving therapy (PT or OT) for any reason in a skilled nursing center.

#### 2643 Average change in functional status following lumbar spine fusion surgery

There is not a traditional numerator for this measure; the measure is calculating the average change in functional status score from pre-operative to post-operative functional status score. The measure is NOT aiming for a numerator target value for a post-operative ODI score.

For example:

The average change in low back function was an increase in 17.2 points one year postoperatively on a 100 point scale.

#### 2653 Average change in functional status following total knee replacement surgery

There is not a traditional numerator for this measure; the measure is calculating the average change in functional status score from pre-operative to post-operative functional status score. The measure is NOT aiming for a numerator target value for a post-operative OKS score.

For example:

The average change in knee function was an increase of 15.9 points one year postoperatively on a 48 point scale.

#### 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

Average change in rasch derived mobility functional score (Items Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) from admission to discharge at the facility level. Average is calculated as (sum of change at the patient level/total number of patients). Cases aged less than 18 years at admission to the facility or patients who died within the facility are excluded.

#### Denominator Statement

#### 2612 CARE: Improvement in Mobility

Patients are excluded for two broad reasons:

1. if they have conditions where improvement in mobility is very unlikely,

OR

2. have missing data necessary to calculate the measure

Additionally, facilities with denominator size of fewer than 30 patients during a 12 month period are excluded from reporting their data.

#### 2643 Average change in functional status following lumbar spine fusion surgery

Exclusions are for patients with spine related cancer, fracture and infection and idiopathic or congenital scoliosis.

#### 2653 Average change in functional status following total knee replacement surgery

There are no denominator exclusions from the initial patient population for this measure.

#### 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

Excluded in the measure are patients who died in the SNF or patients less than 18 years old.

#### **Exclusions**

2612 CARE: Improvement in Mobility

N/A

#### 2643 Average change in functional status following lumbar spine fusion surgery

Clinical Condition Reason for Procedure field is collected for purposes of stratification (potential) or use in a risk adjustment model (more likely). The choices for this variable are: 1 = Degenerative Disc Disease, 2 = Disc Herniation, 3 = Spinal Stenosis, 4 = Spondylolisthesis. These conditions are definable by ICD-9/ ICD-10 codes and are provided in the data dictionary at S.2.b.

The use of this variable for stratification of outcomes is dependent on procedure volume at the practice level; it has been our experience so far that the volumes at a practice level do not support reliable stratification by four variables as they may result in volumes that do not meet our standards for public reporting at the practice level. These variables, however, are important for several reasons. The may prove appropriate for inclusion in a future risk adjustment model. They also serve analytical purposes for further understanding of the patient reported outcome rates as some of the conditions represent an area of controversy in terms of appropriateness of procedures and successful outcomes for the patient.

#### 2653 Average change in functional status following total knee replacement surgery

Primary versus revision total knee replacement is the stratification variable for this measure; it is the intent of the measure development group that the outcome rates for this variable are always used and reported separately.

As part of the patient level submission of demographic data and PRO tool scores that are submitted to MNCM's HIPAA secure data portal, a field called Procedure Type is included. Definitions and directions for this field include the following:

Procedure Type:

Enter the type of total knee replacement for this procedure date:

1 = Primary Total Knee Replacement

2 = Revision Total Knee Replacement

This field will be used to stratify results by primary or revision patients.

May use the primary CPT codes to determine the status of primary or revision.

This variable is defined by CPT codes as follows:

Primary Total Knee Replacement Procedures:

CPT Code CPT Procedure Code Description

27445 Arthroplasty, knee hinge prosthesis

27446 Arthroplasty, knee condyle and plateau, medial OR lateral compartment

27447 Arthroplasty, knee condyle and plateau, medial AND lateral compartment with or without patellar resurfacing (total knee arthroplasty)

Revision Total Knee Replacement Procedures:

CPT Code CPT Procedure Code Description 27486 Revision of total knee arthroplasty, with or without allograft, 1 component

27487 Revision of total knee arthroplasty, with or without allograft, femoral and entire tibial component

#### 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

See definition of the SNF-CMGs in the excel file provided.

#### Risk Adjustment

2612 CARE: Improvement in Mobility

Statistical Risk Model

- 2643 Average change in functional status following lumbar spine fusion surgery Statistical Risk Model
- 2653 Average change in functional status following total knee replacement surgery Statistical Risk Model
- 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities Stratification by risk category/subgroup

#### Stratification

#### 2612 CARE: Improvement in Mobility

#### N/A

#### 2643 Average change in functional status following lumbar spine fusion surgery

Clinical Condition Reason for Procedure field is collected for purposes of stratification (potential) or use in a risk adjustment model (more likely). The choices for this variable are: 1 = Degenerative Disc Disease, 2 = Disc Herniation, 3 = Spinal Stenosis, 4 = Spondylolisthesis. These conditions are definable by ICD-9/ ICD-10 codes and are provided in the data dictionary at S.2.b.

The use of this variable for stratification of outcomes is dependent on procedure volume at the practice level; it has been our experience so far that the volumes at a practice level do not support reliable stratification by four variables as they may result in volumes that do not meet our standards for public reporting at the practice level. These variables, however, are important for several reasons. The may prove appropriate for inclusion in a future risk adjustment model. They also serve analytical purposes for further understanding of the patient reported outcome rates as some of the conditions represent an area of controversy in terms of appropriateness of procedures and successful outcomes for the patient.

#### 2653 Average change in functional status following total knee replacement surgery

Primary versus revision total knee replacement is the stratification variable for this measure; it is the intent of the measure development group that the outcome rates for this variable are always used and reported separately.

As part of the patient level submission of demographic data and PRO tool scores that are submitted to MNCM's HIPAA secure data portal, a field called Procedure Type is included. Definitions and directions for this field include the following:

Procedure Type:

Enter the type of total knee replacement for this procedure date:

1 = Primary Total Knee Replacement

2 = Revision Total Knee Replacement

This field will be used to stratify results by primary or revision patients.

May use the primary CPT codes to determine the status of primary or revision.

This variable is defined by CPT codes as follows:

Primary Total Knee Replacement Procedures:

CPT Code CPT Procedure Code Description

27445 Arthroplasty, knee hinge prosthesis

27446 Arthroplasty, knee condyle and plateau, medial OR lateral compartment

27447 Arthroplasty, knee condyle and plateau, medial AND lateral compartment with or without patellar resurfacing (total knee arthroplasty)

**Revision Total Knee Replacement Procedures:** 

CPT Code CPT Procedure Code Description 27486 Revision of total knee arthroplasty, with or without allograft, 1 component

27487 Revision of total knee arthroplasty, with or without allograft, femoral and entire tibial component

2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

N/A

#### Type Score

#### 2612 CARE: Improvement in Mobility

Continuous variable, e.g. average

- 2643 Average change in functional status following lumbar spine fusion surgery Continuous variable, e.g. average
- 2653 Average change in functional status following total knee replacement surgery Continuous variable, e.g. average

## 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities Ratio

2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities

2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities

Steward

- 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities Uniform Data System for Medical Rehabilitation
- 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities Uniform Data System for Medical Rehabilitation
- 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities Uniform Data System for Medical Rehabilitation

#### Description

#### 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities

Change in rasch derived values of motor function from admission to discharge among adult short term rehabilitation skilled nursing facility patients aged 18 years and older who were discharged alive. The time frame for the measure is 12 months. The measure includes the following 12 items:Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

#### 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities

Change in rasch derived values of motor function from admission to discharge among adult long term acute care facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 12 items:Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

#### 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities

Change in rasch derived values of mobility function from admission to discharge among adult LTAC patients aged 18 years and older who were discharged alive. The time frame for the measure is 12 months. The measure includes the following 4 mobility items:Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

#### Туре

- 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities Outcome
- 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities Outcome
- 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities Outcome

#### Data Source

2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities Electronic Health Records, Paper Medical Records, Other

- 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities Electronic Health Records, Paper Medical Records, Other
- 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities Electronic Health Records, Paper Medical Records, Other

#### Level

- 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities Facility
- 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities Facility
- 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities Facility

#### Setting

- 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities Post-Acute Care
- 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities Post-Acute Care
- 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities Post-Acute Care

#### Numerator Statement

#### 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities

Average change in rasch derived motor functional score from admission to discharge at the facility level for short term rehabilitation patients. Average is calculated as (sum of change at the patient level/total number of patients). Cases aged less than 18 years at admission to the SNF or patients who died within the SNF are excluded.

#### 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities

Average change in rasch derived motor functional score from admission to discharge at the facility level for short term rehabilitation patients. Average is calculated as (sum of change at the patient level/total number of patients). Cases aged less than 18 years at admission to the LTAC or patients who died within the LTAC are excluded.

#### 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities

Average change in rasch derived mobility functional score (Items Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) from admission to discharge at the facility level. Average is calculated as (sum of change at the patient level/total number of patients). Cases aged less than 18 years at admission to the facility or patients who died within the facility are excluded.

#### **Denominator Statement**

#### 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities

Facility adjusted expected change in rasch derived values, adjusted for SNF-CMG (Skilled Nursing Facility Case Mix Group), based on impairment type, admission functional status, and age.

#### 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities

Facility adjusted expected change in rasch derived values, adjusted for CMG (Case Mix Group), based on impairment type, admission functional status, and age.

#### 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities

Facility adjusted adjusted expected change in rasch derived values, adjusted at the Case Mix Group level.

#### Exclusions

#### 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities

Patients age at admission less than 18 years old.

Patients who died in the SNF.

#### 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities

Patients age at admission less than 18 years old Patients who died in the LTAC.

2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities Excluded in the measure are patients who died in the LTAC or patients less than 18 years old.

#### Risk Adjustment

## 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities Stratification by risk category/subgroup

- 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities Stratification by risk category/subgroup
- 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities Stratification by risk category/subgroup

#### Stratification

- 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities See definition of the SNF-CMGs in the excel file provided.
- 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities N/A
- 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities N/A

## Type Score

- 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities Ratio
- 2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities Ratio
- 2778: Functional Change: Change in Mobility Score for Long Term Acute Care Facilities Ratio

## Comparison of NQF 2633, 2635, 0174, 2613, 2769, 2777

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

0174 Improvement in bathing

#### Steward

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Centers for Medicare & Medicaid Services

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Centers for Medicare & Medicaid Services

#### 0174 Improvement in bathing

Centers for Medicare & Medicaid Services

#### Description

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

This measure estimates the risk-adjusted mean change in self-care score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients.

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

This measure estimates the percentage of IRF patients who meet or exceed an expected discharge self-care score.

#### 0174 Improvement in bathing

Percentage of home health episodes of care during which the patient got better at bathing self.

#### Туре

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Outcome

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Outcome

0174 Improvement in bathing

Outcome

#### Data Source

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Instrument-Based Data

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Instrument-Based Data

#### 0174 Improvement in bathing

Electronic Health Data

#### Level

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Facility

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Facility

0174 Improvement in bathing

Facility

#### Setting

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Post-Acute Care

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Post-Acute Care

#### 0174 Improvement in bathing

Home Care

#### Numerator Statement

#### 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

The measure does not have a simple form for the numerator and denominator. This measure estimates the risk-adjusted change in self-care score between admission and discharge among Inpatient Rehabilitation Facility (IRF) Medicare Part A and Medicare Advantage patients age 21 or older. The change in self-care score is calculated as the difference between the discharge self-care score and the admission self-care score.

#### 2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

The numerator is the number of patients in an IRF with an observed discharge self-care score that is equal to or higher than the calculated expected discharge self-care score.

#### 0174 Improvement in bathing

Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in bathing at discharge than at start (or resumption) of care.

#### **Denominator Statement**

#### 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

The denominator is the number of Inpatient Rehabilitation Facility Medicare patient stays, except those that meet the exclusion criteria.

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare Part A and Medicare Advantage beneficiaries, and have complete stays.

#### 0174 Improvement in bathing

All home health episodes of care (except those defined in the denominator exclusions) in which the patient was eligible to improve in bathing (i.e., were not at the optimal level of health status according to the "Bathing" OASIS-C2 item M1830).

#### Exclusions

#### 2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

This quality measure has six patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients who are independent with all self-care activities at the time of admission.

Rationale: Patients who are independent with all the self-care items at the time of admission are assigned the highest score on all the self-care items, and thus, would not be able to show functional improvement on this same set of items at discharge.

3) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; or severe anoxic brain damage, cerebral edema or compression of the brain.

Rationale: These patients are excluded because they may have limited or less predictable self-care improvement with the selected self-care items.

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

5) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

6) Patients who are not Medicare Part A and Medicare Advantage beneficiaries.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

#### 2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

This quality measure has five patient-level exclusion criteria:

1) Patients with incomplete stays.

Rationale: When a patient has an incomplete stay, for example, the patients leave urgently due to a medical emergency, it can be challenging to gather accurate discharge functional status data. Patients with incomplete stays include patients who are unexpectedly discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital); patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; and patients with a length of stay less than 3 days.

2) Patients with the following medical conditions on admission: coma; persistent vegetative state; complete quadriplegia; locked-in syndrome; or severe anoxic brain damage, cerebral edema or compression of the brain.

Rationale: These patients are excluded because they may have limited or less predictable self-care improvement with the selected self-care items.

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for individuals with Medicare who are younger than 21.

4) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay, and functional improvement may no longer be a goal for a patient discharged to hospice.

5) Patients not covered by the Medicare Part A and Medicare Advantage program.

Rationale: IRF-PAI data for patients not covered by the Medicare program are not submitted to the Centers for Medicare and Medicaid Services.

Facility-level quality measure exclusion: For IRFs with fewer than 20 patient stays, data for this quality measure are not publicly reported.

#### 0174 Improvement in bathing

All home health episodes where at the start (or resumption) of care assessment the patient had minimal or no impairment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death at home, or was covered by the generic exclusions.

#### Risk Adjustment

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Statistical Risk Model

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Statistical Risk Model

#### 0174 Improvement in bathing

Statistical Risk Model

#### Stratification

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

N/A

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

N/A

0174 Improvement in bathing

N/A

#### Type Score

2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Continuous variable, e.g. average

2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Rate/Proportion

#### 0174 Improvement in bathing

Rate/Proportion

2613 CARE: Improvement in Self Care

2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities

2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities

#### Steward

#### 2613 CARE: Improvement in Self Care

American Health Care Association

- 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities Uniform Data System for Medical Rehabilitation
- 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities Uniform Data System for Medical Rehabilitation

#### Description

#### 2613 CARE: Improvement in Self Care

The measure calculates a skilled nursing facility's (SNFs) average change in self care for patients admitted from a hospital who are receiving therapy. The measure calculates the average change in self care score between admission and discharge for all residents admitted to a SNF from a hospital or another post-acute care setting for therapy (i.e., PT or OT) regardless of payor status. This is a risk adjusted outcome measure, based on the self care subscale of the Continuity Assessment and Record Evaluation (CARE) Tool and information from the admission MDS 3.0 assessment. The measure is calculated on a rolling 12 month, average updated quarterly.

#### 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities

Change in rasch derived values of self-care function from admission to discharge among adult patients treated as short term rehabilitation patients in a skilled nursing facility who were discharged alive. The time frame for the measure is 12 months. The measure includes the following 8 items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

#### 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities

Change in rasch derived values of self-care function from admission to discharge among adult patients treated in a long term acute care facility who were discharged alive. The time frame for the measure is 12 months. The measure includes the following 8 items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

#### Туре

2613 CARE: Improvement in Self Care

Outcome

- 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities Outcome
- 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities Outcome

#### Data Source

#### 2613 CARE: Improvement in Self Care

Electronic Health Records, Other

- 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities Electronic Health Records, Paper Medical Records, Other
- 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities Electronic Health Records, Paper Medical Records, Other

#### Level

2613 CARE: Improvement in Self Care Facility

- 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities Facility
- 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities Facility

#### Setting

2613 CARE: Improvement in Self Care

Nursing Home/SNF

- 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities Post-Acute Care
- 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities Post-Acute Care

#### Numerator Statement

#### 2613 CARE: Improvement in Self Care

This outcome measure assesses the change in self-care. The numerator is the risk adjusted sum of the change in the CARE Tool self care subscale items between admission and discharge for each individual admitted from a hospital or another post-acute care setting regardless of payor status and are receiving therapy (PT or OT) for any reason in a skilled nursing center.

#### 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities

Average change in rasch derived self-care functional score from admission to discharge at the facility level, including items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

#### 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities

Average change in rasch derived self-care functional score from admission to discharge at the facility level, including items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

#### **Denominator Statement**

#### 2613 CARE: Improvement in Self Care

The denominator includes all residents admitted to a SNF from a hospital or another postacute care setting who receive either PT or OT therapy for any reason during their stay regardless of payor status, have a completed self care subscale of the CARE Tool at admission and discharge and do not meet any of the exclusion criteria and do not have missing data. The self care items used from the CARE tool are listed below and rated on a 1-6 scale (see Appendix for CARE Tool).

The items included in the CARE Tool self care subscale include:

- A1. Eating
- A3. Oral Hygiene
- A4. Toilet Hygiene
- A5. Upper Body Dressing

- A6. Lower Body Dressing
- C1. Wash Upper Body
- C2. Shower / Bathe
- C6. Putting on / taking off footwear

#### 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities

Facility adjusted expected change in rasch derived values, adjusted for SNF-CMG (Skilled Nursing Facility Case Mix Group), based on impairment type, admission functional status, and age

#### 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities

Facility adjusted expected change in rasch derived values, adjusted for CMG (Case Mix Group), based on impairment type, admission functional status, and age

#### Exclusions

#### 2613 CARE: Improvement in Self Care

Individual patients are excluded for two broad reasons:

1. if they have conditions where improvement in self-care is very unlikely,

OR

2. have missing data necessary to calculate the measure

Additionally, facilities with denominator size of fewer than 30 patients during a 12 month period are excluded from reporting of their data.

#### 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities

Excluded in the measure are patients who died in the SNF or patients less than 18 years old.

#### 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities

Excluded in the measure are patients who died in the LTAC or patients less than 18 years old.

#### Risk Adjustment

#### 2613 CARE: Improvement in Self Care

Statistical Risk Model

2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities Stratification by risk category/subgroup

## 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities Stratification by risk category/subgroup

#### Stratification

#### 2613 CARE: Improvement in Self Care

N/A

## 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities N/A

# 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities N/A

## Type Score

2613 CARE: Improvement in Self Care

Continuous variable, e.g. average

- 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities Ratio
- 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities Ratio

## **Appendix F: Pre-Evaluation Comments**

Comments received as of June 12, 2019.

## 2286 Functional Change: Change in Self Care Score

#### Peg Graham

As a family caregiver, I have been following the conversation re self-care/mobility scores across the care continuum, including discharge to community. In the Fall 2017 report of the Patient Experience and Function Standing Committee, there appeared to be uncertainty about the merits of Section GG vs FIMS. I've searched the Fall 2018 report and have had a hard time discerning whether of not this issue has been settled. In the event that the Standing Committee is still accepting comments on this issue, I urge that Section GG be selected. The Section GG 6pt scale clearly communicates the level to which a patient relies on personal assistance in a manner that the patient, clinician and family member can understand. Particularly in discharges to home, the family needs to appreciate the degree to which their loved one will be depending on their presence to perform self-care tasks.

Please note: Study examined how similar summary scores of physical functioning using the Functional Independence Measure (FIM) can represent different patient clinical profiles. Data were analyzed for 765,441 Medicare fee-for-service beneficiaries discharged from inpatient rehabilitation. Patients' scores on items of the FIM were used to quantify their level of independence on both self-care and mobility domains. Patients requiring "no physical assistance" at discharge from inpatient rehabilitation were identified by using a rule and score-based approach. In patients with FIM self-care and mobility summary scores suggesting no physical assistance needed, the study found that physical assistance was in fact needed frequently in bathroom-related activities (e.g., continence, toilet and tub transfers, hygiene, clothes management) and with stairs. It was not uncommon for actual performance to be lower than what may be suggested by a summary score of those domains. The authors conclude that further research is needed to create clinically meaningful descriptions of summary scores from combined performances on individual items of physical functioning. Citation: Fisher, Steve R., Middleton, Addie, Graham, James E., Ottenbacher, Kenneth J.. (2018). Same but different: FIM summary scores may mask variability in physical functioning profiles. Archives of Physical Medicine and Rehabilitation , 99(8), Pgs. 1479-1482, 1482.e1. Retrieved 12/6/2018, from REHABDATA database.

## 2286 Functional Change: Change in Self Care Score

#### Sharon Sprenger, The Joint Commission

While this is not an eCQM, we would encourage the measure steward to use a standard terminology such as LOINC for encoding the FIM instrument in their measure. Without this level of standardization, interoperability will be a perpetual challenge, and impact the ability to measure a patient's functional status across the continuum of care.

## 2321 Functional Change: Change in Mobility Score

#### Peg Graham

As a family caregiver, I have been following the conversation re self-care/mobility scores across the care continuum, including discharge to community. In the Fall 2017 report of the Patient Experience and Function Standing Committee, there appeared to be uncertainty about the merits of Section GG vs FIMS. I've searched the Fall 2018 report and have had a hard time discerning whether of not this issue has been settled. In the event that the Standing Committee is still accepting comments on this issue, I urge that Section GG be selected. The Section GG 6pt scale clearly communicates the level to which a patient relies on personal assistance in a manner that the patient, clinician and family member can understand. Particularly in discharges to home, the family needs to appreciate the degree to which their loved one will be depending on their presence to perform self-care tasks.

Please note: Study examined how similar summary scores of physical functioning using the Functional Independence Measure (FIM) can represent different patient clinical profiles. Data were analyzed for 765,441 Medicare fee-for-service beneficiaries discharged from inpatient rehabilitation. Patients' scores on items of the FIM were used to quantify their level of independence on both self-care and mobility domains. Patients requiring "no physical assistance" at discharge from inpatient rehabilitation were identified by using a rule and score-based approach. In patients with FIM self-care and mobility summary scores suggesting no physical assistance needed, the study found that physical assistance was in fact needed frequently in bathroom-related activities (e.g., continence, toilet and tub transfers, hygiene, clothes management) and with stairs. It was not uncommon for actual performance to be lower than what may be suggested by a summary score of those domains. The authors conclude that further research is needed to create clinically meaningful descriptions of summary scores from combined performances on individual items of physical functioning. Citation: Fisher, Steve R., Middleton, Addie, Graham, James E., Ottenbacher, Kenneth J.. (2018). Same but different: FIM summary scores may mask variability in physical functioning profiles. Archives of Physical Medicine and Rehabilitation , 99(8), Pgs. 1479-1482, 1482.e1. Retrieved 12/6/2018, from REHABDATA database.

## 2321 Functional Change: Change in Mobility Score

#### Sharon Sprenger, The Joint Commission

While this is not an eCQM, we would encourage the measure steward to use a standard terminology such as LOINC for encoding the FIM instrument in their measure. Without this level of standardization, interoperability will be a perpetual challenge, and impact the ability to measure a patient's functional status across the continuum of care.

# 2548 Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) Survey

#### Lauren Agoratus, Family Voices New Jersey

We agree that HCAHPS would increase patient-centered care, inform consumer choice and quality improvement, and address health disparities (Asian/Hispanic children). We would suggest text outreach in additional to mail/phone. Under "when your child was in the hospital" question 1, there is no contingency for when a child is rushed to the nearest E.R. for stabilization then transported to a children's hospital so we would suggest adding a response category regarding possible transfers. Regarding "your experience with doctors" question 16 there is nothing on communication between providers which is essential for care coordination. We would recommend a question "how well do your child's doctors communicate with each other" otherwise parents a left connecting the dots. In the same section question 28, there is no mention of it all medications were available in the hospital formulary or addressing medication interactions/contraindications as medication administration is the largest cause of medical error and preventable rehospitalization. We would suggest adding one question regarding if all of the medications were available during hospitalization and another on if the hospital was aware of medications which could not be taken concurrently. Under "your child's care in this hospital" question #1 there is no distinction between the regular nurse call button and the emergency button and response. We would recommend a separate question regarding the emergency button and response times. Regarding, "the hospital environment" question #32 there is nothing about patient cleanliness or infection control as hospital acquired infections are a common preventable complication. We could suggest a question on both keeping the patient clean to prevent infection as well as another on environmental infection prevention. Thus, communication between providers, medication administration, and hospital acquired infections must be accounted for if HCAHPS is to be an effective measure of continuity of care, medical errors, and preventable complications.

## 3461 Functional Status Change for Patients with Neck Impairments

#### Sharon Sprenger, The Joint Commission

While this is not an eCQM, we would encourage the measure steward to use a standard terminology such as LOINC for encoding the FIM instrument in their measure. Without this level of standardization, interoperability will be a perpetual challenge, and impact the ability to measure a patient's functional status across the continuum of care.

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