

# Person- and Family- Centered Care 2015-2016

TECHNICAL REPORT

January 11, 2017

This report is funded by the Department of Health  
and Human Services under contract HHSM-500-  
2012-00009I Task Order HHSM-500-T0008



**NATIONAL  
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# Person- and Family-Centered Care

## TECHNICAL REPORT

### Executive Summary

There are various definitions of person- and family-centered care (PFCC) but all illuminate the need for higher quality care that is organized around the needs of individuals and their families. Often, healthcare is received in a manner that does not account for the preferences and goals of individuals and their families. Over the past decade, efforts have been underway to shift the healthcare paradigm from one that identifies persons as passive recipients of care to one that empowers persons to participate actively in their own care. The National Quality Strategy (NQS) priority of “ensuring that each person and family is engaged as partners in their care” emphasizes this approach. Emerging evidence points to the positive impact of collaborative partnerships among persons, families, and their healthcare providers on outcomes and cost.

The National Quality Forum’s (NQF) definition of person- and family-centered care is:

*An approach to the planning and delivery of care across settings and time that is centered around collaborative partnerships among individuals, their defined family, and providers of care. It supports health and well-being by being consistent with, respectful of, and responsive to an individual’s priorities, goals, needs, and values.*

The definition is consistent with definitions used by the Institute for Patient- and Family-Centered Care and the Institute of Medicine (IOM).<sup>1</sup> Over the past five years, NQF has engaged in various projects highlighting the importance of PFCC and promoting progress in measure prioritization, measure implementation, and the closure of gaps across the healthcare delivery system. The projects have included multiple phases of consensus development process (CDP) work, and NQF has reviewed and endorsed a number of new measures. Additionally, the Measure Applications Partnership (MAP) makes recommendations on families of measures in order to promote the alignment of performance measurement across federal programs and private-sector initiatives. MAP identified priority areas for measuring PFCC, which include interpersonal relationships, patient and family engagement, care planning and delivery, access to support, and quality of life, including measures of physical and cognitive functioning, symptom and symptom burden (e.g., pain, fatigue), and treatment burden (on patients, families, caregivers, siblings).

NQF’s PFCC portfolio includes measures focused on quality of life, functional status, experience of care, shared decision making, symptom/symptom burden, and communication.

In this third phase of PFCC CDP work, the Standing Committee evaluated 12 newly submitted measures and one measure undergoing maintenance review against NQF’s standard evaluation criteria. All 13 measures were recommended by the Standing Committee and later endorsed:

- 0420 Pain Assessment and Follow Up, Centers for Medicare & Medicaid Services (CMS)

- 2614 CoreQ: Short Stay Discharge Measure, American Health Care Association
- 2615 CoreQ: Long-Stay Resident Measure, American Health Care Association
- 2616 CoreQ: Long-Stay Family Measure, American Health Care Association
- 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities, Uniform Data System for Medical Rehabilitation (UDSMR)
- 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities, UDSMR
- 2775 Functional Change: Change in Motor Score for Skilled Nursing Facilities, UDSMR
- 2962 Shared Decision Making, Healthwise
- 2776 Functional Change: Change in Motor Score for Long Term Acute Care Facilities, UDSMR
- 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities, UDSMR
- 2778 Functional Change: Change in Mobility Score for Long Term Acute Care Facilities, UDSMR
- 2958 Informed, Patient Centered Hip and Knee Replacement Surgery, Massachusetts General Hospital
- 2967 CAHPS® Home and Community Based Services (HCBS) Measures, CMS

Brief summaries of the measures 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 [Appendix A](#).

In addition to evaluating measures for maintenance or new endorsement, the Committee provided feedback on seven measures that it will evaluate in the future for maintenance endorsement. These measures, based on the Communication Climate Assessment Toolkit (C-CAT), were originally reviewed by NQF’s Disparities Steering Committee. While due for maintenance review, the measures have been in a transition process between stewards, and thus a request for deferment was granted. NQF staff will work with the measure steward to ensure a maintenance review is conducted in a timely manner. A brief overview of the Committee discussion is included in the body of the report.

## Introduction

One of the priorities of the NQS,<sup>2</sup> first published in 2011, is ensuring that each person and family is engaged as partners in their care. As such, the healthcare community has the opportunity to build upon the concept of person- and family-centeredness to guide efforts to improve health and healthcare quality. NQF has multiple projects underway related to patient-centeredness. Over the past few years, developers have submitted an increasing number of new measures that reflect interest in patient-centeredness for endorsement consideration. As with measurement in other priority areas, expanding measurement to include the issues that patients and caregivers value and find important has started to show results.

A 2015 study published in the *Journal of General Internal Medicine* examined the implementation of a patient-centered medical home (PCMH) pilot program in 15 small and medium primary care practices in Colorado. Over a three-year period, the study found that the patient-centered primary care delivered in the PCMH model led to sustained decreases in the number of annual emergency department visits and primary care visits, as well as increased screening for some types of cancer.<sup>3</sup>

While this pilot program proved very successful, person-centered care needs to become a reality across all settings—not just medical homes. As outlined in the NQS, successful person-centered care entails more than just the successful completion of clinical care; it also means that patients achieve their own desired outcomes.

According to the fifth anniversary update of the NQS, person-centered care improved quickly, but person-centered care disparities were common, especially for Hispanics and poor people. As is true for access, disparities by income are larger than disparities by race/ethnicity. Effective and respectful provider-patient communication is at the core of person-centered care. The 2013 enhanced National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care<sup>4</sup> provides a framework to help organizations deliver services that respond to patients' diverse cultural health beliefs and practices, preferred languages, health literacy, and other communication needs.<sup>5</sup>

In addition, the report indicates that such efforts have led to widespread improvements in person-centered care: 80 percent of measures tracked showed improvement. However, many disparities exist and only about 30 percent of the disparities are getting smaller over time. An additional decrease in disparities is expected, in part, because of enforcement of Section 1557 of the Affordable Care Act, which prohibits organizations from discriminating on the grounds of race, color, national origin, age, disability, or sex, under any health program or activity, any part of which is receiving federal financial assistance, or under any program or activity that is administered by HHS, including the Health Insurance Marketplaces.

As developers have explored new measurement approaches to assess person- and family-centeredness and NQF has reviewed the resulting measures for endorsement, challenges in meeting the evaluation criteria have emerged. This is especially true for measures derived from surveys, instruments, and other tools. In previous phases of PFCC work, the Committee has assessed measures based on patient-reported outcome measures (e.g., Consumer Assessment of Healthcare Providers and Systems (CAHPS)

surveys) and clinician assessment tools (e.g., functional status instruments). As the complexity of performance measures has increased, NQF criteria continue to evolve to overcome challenges in interpretation. In this project, the Committee urged NQF to provide additional guidance on scientific acceptability criteria to ensure that developers provide enough information, specifically data, to ensure the ability to compare measure performance and evaluate entities at the level of accountability or analysis. The Committee was especially interested in the availability of data to assess variation and reliability between reporting entities which extends beyond within-entity or unit testing.

## Communication Climate Assessment Toolkit

The C-CAT was originally developed by the American Medical Association (AMA), and is the basis of seven currently endorsed measures. These measures are due for endorsement review; however, upon submission to this project, it was recognized that the measures were not ready for maintenance review due to a dormant period when the measure stewardship transitioned from the AMA to the University of Colorado. NQF staff worked with the University of Colorado and has approved rescheduling the maintenance review. Because these measures will come to the PFCC Standing Committee, Matt Wynia, the principal investigator and developer of the C-CAT measures, was invited to the in-person meeting to discuss the measures and obtain feedback from the Committee to facilitate resubmission.

Dr. Wynia provided an overview of the toolkit. He indicated that the original development team included the American Hospital Association, the American Nurses Association, The Joint Commission, National Committee for Quality Assurance, CMS, Agency for Healthcare Research and Quality, and patient organizations, including the National Health Council. Based on the original measure exploration, the team wanted to measure whether organizations were doing a good job of creating an environment which provides excellent care to minority patients, people with limited English proficiency, and people with low literacy. To assess these issues, the C-CAT team recognized the need to look at the communication climate, so they developed a toolkit assessing nine domains of communication. Seven of those domains were endorsed as performance measures: performance evaluation, literacy, language services, cross cultural communication, patient engagement, and shared decisions, work force development, and leadership commitment. The two domains that were not endorsed were community engagement and data collection. The measures are based on a patient and staff survey that can be considered a 360 evaluation of the organization.

Dr. Wynia indicated that the team is struggling with the need for risk adjustment and indicated that the results are currently stratified by race, ethnicity, and other variables. The Committee provided feedback including:

- Recommendation not to risk adjust, as the issues are important to highlight and there is variation around the country
- Request to demonstrate how the toolkit and measures are associated with improvements in care
- Consideration for the “game-ability” of the metrics, and, if found, how they would be addressed
- Examination of whether this is really a set of measures, or a set of services

Based on the discussion at the meeting, and an update from the developer indicating plans for a substantial update to its assessment data and analyses, the PFCC Committee approved a deferment for the consideration of maintenance endorsement. NQF will work with the developers to remain updated on progress and expects to review the measures in 2017.

## NQF Portfolio of Performance Measures for Person- and Family-Centered Care

The PFCC Standing Committee (see [Appendix D](#)) oversees NQF’s portfolio of PFCC measures that includes measures for symptom/symptom burden, experience of care, functional status, health-related quality of life (HRQoL), patient activation, and communication (see [Appendix B](#)). This portfolio contains 62 measures: seven process measures, 54 outcome measures, and one structure measure (see table 1 below).

**Table 1. NQF Person- and Family-Centered Care Portfolio of Measures**

	Process	Outcome	Structure	Composite
<b>Symptom/symptom burden</b>	1	1	0	0
<b>Experience of care</b>	0	14	0	0
<b>Functional status</b>	3	30	0	0
<b>Health-related quality of life</b>	1	1	0	0
<b>Patient activation</b>	0	1	0	0
<b>Communication</b>	2	7	1	0
<b>Total</b>	7	54	1	0

Additional measures related to PFCC are assigned to other projects. These include measuring the experience of hospice patients and pain assessments ([Palliative and End-of-Life Care project](#)) and HRQoL assessments in dialysis patients ([Renal project](#)).

### Use of Measures in the Portfolio

Many of the measures in the PFCC portfolio are in use in at least one federal program, such as Home Health Quality Reporting, Hospital Compare, Hospital Inpatient Quality Reporting, Nursing Home Compare, or the Physician Quality Reporting System. In addition, some of these measures have been used as part of state, regional, and community measurement initiatives. A number of the measures in use in federal programs were submitted and endorsed in response to the government charge in the IMPACT Act; in addition, many have been included in the MAP families of measures. The families of measures serve as a starting place and guide for MAP recommendations to HHS about the best available measures for specific programs. See [Appendix C](#) for details of federal program use for the measures in the portfolio. Only one measure in this current project is in use in a federal program: #0420 Pain Assessment and Follow-Up.



## Improving NQF's Person- and Family-Centered Care Portfolio

Although the number of new measures submitted for endorsement has continued to grow, measure gaps remain in specific focus areas that individuals, families, and the broader healthcare community may value. During its discussions, the Committee identified numerous areas where additional measure development is needed, including:

- Pediatric measures, especially for shared decision making
- Measures derived from shorter versions of the CAHPS surveys
- The next level of functional measures: measures not tied to traditional inpatient settings, and that focus on functional restoration, becoming independent, and nonmedical outcomes (e.g., return to employment)
- Setting-specific measures that ensure issues and outcomes specific to that site are measured, for example, measures for ventilator care, which would only happen in Long Term Acute Care (LTAC) Facilities and would not apply to Skilled Nursing Facilities (SNF) or Inpatient Rehabilitation Facilities (IRFs)
- Measures for partnerships between large health systems and community-based agencies, to help health systems partner with high-quality community agencies
- Additional measures of informed and shared decision making, to ensure people are effective advocates for their healthcare, including: how to choose and change a provider; how to use the healthcare system to best advantage; how to use technology to benefit the patient; how to interpret quality data
- Measures across the continuum of care, starting in primary care or emergency departments, through the completion of all services for the patient
- The medical neighborhood extending past the medical home and into other areas of the community where care is received
- Measures that specifically address eliciting and aligning patient goals with the plan of care

Due to the cross-cutting nature of the topic, gaps in the PFCC portfolio have been identified in other projects. In addition to the gaps identified by the PFCC Committee, the MAP Dual Eligible Beneficiaries workgroup has [recently noted gaps](#) in both its family of measures and the NQF portfolio in the following areas:

- Goal-directed, person-centered care planning and implementation
- Shared decision making
- Systems to coordinate acute care, long-term services and supports, and nonmedical community resources
- Beneficiary sense of control/autonomy/self-determination
- Psychosocial needs
- Community integration/inclusion and participation
- Optimal functioning
- Home and community-based services
- Patient engagement and activation in healthcare

## Person- and Family-Centered Care Measure Evaluation

The PFCC Standing Committee (see [Appendix D](#)) oversees NQF’s portfolio of measures for PFCC. On June 6-7, 2016, the PFCC Standing Committee evaluated 12 new measures and one measure undergoing maintenance review against [NQF’s standard evaluation criteria](#).

**Table 2. Person- and Family-Centered Care Measure Evaluation Summary**

	Maintenance	New	Total
Measures under consideration	1	12	13
Endorsed measures	1	12	13

### Comments Received Prior to Committee Evaluation

NQF solicits comments on endorsed measures on an ongoing basis through the [Quality Positioning System \(QPS\)](#). In addition, NQF solicits comments prior to the evaluation of the measures via an online tool located on the project webpage. For this evaluation cycle, the pre-evaluation comment period was open from April 27-May 10, 2016, for the 13 measures under review. A total of five pre-evaluation comments were received ([Appendix G](#)).

All submitted comments were provided to the Committee prior to its initial deliberations during the in-person meeting.

### Overarching Issues

Several overarching issues that emerged during Committee discussions factored into the Committee’s ratings and recommendations for multiple measures. The individual measure summaries in the section below do not repeat the discussion of the overarching issues described in this section.

#### *Jimmo v. Sebelius*

Six measures considered in phase 3 assess improvement in functional status for patients in Skilled Nursing Facilities and Long Term Acute Care Facilities. Consistent with conversations during [phase 2](#) of the project, the Committee urged developers to consider the implications of the settlement in *Jimmo v. Sebelius* and how to recognize that improvement is not the only goal with these populations. This is a very important consideration for the LTAC population in which patients tend to require more intensive care and their longer term goals may differ. The Committee suggested that in some cases facilities should focus on assessing the maintenance of function or slowing further deterioration in patients who require skilled services regardless of the underlying illness, disability, or injury.

In *Jimmo v. Sebelius*,<sup>6</sup> the Center for Medicare Advocacy (CMA) alleged that contractors were inappropriately denying Medicare claims involving skilled care based on a rule-of-thumb “Improvement Standard”—under which a claim would be summarily denied due to a beneficiary’s lack of restoration potential, even though the beneficiary did require a covered level of skilled care in order to prevent or slow further deterioration in his or her clinical condition. The settlement agreement is intended to clarify that when skilled services are required in order to provide care that is reasonable and

necessary to prevent or slow further deterioration, coverage cannot be denied based on the absence of potential for improvement or restoration. The settlement applies to Medicare coverage for home healthcare, skilled nursing facility services, outpatient therapies, and, to some extent, care provided by inpatient rehabilitation facilities. The Jimmo settlement is intended to ensure that Medicare claims will be adjudicated consistently and appropriately.

### *Testing and Scientific Acceptability Criteria*

As the PFCC portfolio has grown and the complexity of measures has increased, NQF staff and committees have identified areas where the existing endorsement criteria may need refinements. Tool-based measures—those measures that derive data from surveys, assessments, and other instruments—require evaluation of reliability and validity testing results at the performance measurement level. Requiring performance score level testing allows evaluation to ensure variability in performance and the ability to differentiate between the facilities whose performance is being assessed. Although measure developers have made great strides in submitting data to support the reliability and validity of their measures under consideration, the Committee has encouraged NQF and the developer community to consider additional testing approaches to ensure that measures meet scientific acceptability criteria. In addition, the Committee identified an interest in seeing results of cognitive testing to further support the validity of proposed measures that are based on patient reports. The Committee expects that this will lead to measures that include a patient’s perspective on the design and selection of questions to make sure that the questions are understood, meaningful, and impactful.

### *Measures of Shared Decision Making and Patient Engagement*

As the awareness and importance of patient engagement becomes more widespread among healthcare providers, providers and developers must take the steps necessary to ensure that patients are engaged as decision makers in their own care. The Committee agreed that involving patients in their care is critical in building high-quality care systems and encouraged developers to continue to consider outcome measures that drive improvement in this area. The Committee also acknowledged challenges that developers face in acquiring data to satisfy the scientific acceptability criteria for PRO-PM and other instrument-based measures.

### *Competing Functional Status Measures*

The PFCC Committee has deferred decisions regarding related or competing measures. In the previous project (phase 2), competing measures were ultimately endorsed when neither the PFCC Committee nor the Consensus Standards Approval Committee were able to designate a best-in-class measure. A similar scenario evolved in this current phase of work where two sets of measures were identified as competing. In this case, a new set of self-care and mobility functional status change measures were recommended for endorsement in the skilled nursing facility setting, and these new measures compete with measures endorsed in the prior project. Due to the complexities recognized in the prior phase and NQF’s interest in understanding performance of all of the measures identified as competing, the Committee decided to defer the related/competing/harmonization/best-in-class discussions. NQF staff will revisit guidance documents internally and monitor the applicable measures prior to returning to the PFCC Committee for disposition.

## Summary of Measure Evaluation

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

### ENDORSED MEASURES

#### **0420 Pain Assessment and Follow-Up (CMS): Endorsed**

**Description:** Percentage of visits for patients aged 18 years and older with documentation of a pain assessment using a standardized tool(s) on each visit AND documentation of a follow-up plan when pain is present; **Measure Type:** Process; **Level of Analysis:** Clinician: Group/Practice, Clinician: Individual; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic, Ambulatory Care: Outpatient Rehabilitation, Behavioral Health/Psychiatric: Outpatient; **Data Source:** Administrative claims, Paper Medical Records

This process measure was first endorsed in 2008 and is used in Physician Quality Reporting System (PQRS). Committee members noted that assessing pain is crucial in order to treat it, but the literature that supports better outcomes after assessment is limited, in part because it is very difficult to do a controlled study on pain management without violating ethical guidelines. However, there was also acknowledgement that additional evidence exists supporting assessment of symptoms more globally and the benefits to patients. NQF staff reported other pain assessment measures have met the evidence criteria by using the insufficient evidence with exception option. In the vote on evidence, the Committee did not reach consensus. However, the Committee did reach consensus on allowing the evidence exception. Performance gaps were noted, especially by race/ethnicity, with a high of 84.2 percent for white patients and a low of 68.2 percent for black patients. The Committee noted some concerns with the testing results given that 90 percent of providers reporting are in the 25th percentile, yet the mean score is 82 percent. However, this is a voluntary measure, and only 10 percent of eligible providers are reporting, which tends to skew results. As the measure is based on administrative data and has been in use for several years, the Committee had no concerns with the feasibility. They did note potential unintended consequences of narcotics overuse, but agreed that this issue did not outweigh the importance of the measure. Ultimately, the Committee recommended #0420 for continued endorsement.

#### **2614 CoreQ: Short Stay Discharge Measure (American Health Care Association): Endorsed**

**Description:** The measure calculates the percentage of individuals discharged in a six month time period from a SNF, within 100 days of admission, who are satisfied. This patient reported outcome measure is based on the CoreQ: Short Stay Discharge questionnaire that utilizes four items; **Measure Type:** PRO; **Level of Analysis:** Facility; **Setting of Care:** Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility; **Data Source:** Patient Reported Data/Survey

This new patient-reported outcome performance measure (PRO-PM) assesses patient satisfaction of SNF patients who have been discharged within 100 days of admission and derives from data collected via the CoreQ Short Stay Discharge questionnaire. The Committee agreed that measuring and reporting satisfaction with care helps patients and their families choose and trust a healthcare facility and can help facilities improve the quality of the care they provide. The Committee raised concerns about whether

the exclusions might limit the generalizability to a small proportion of nursing home patients in a single facility, around the consistency of implementation across facilities, and the possibility that scores could be compromised by the low response rate, but the developer adequately addressed all of these concerns. The major concern with validity was around cognitive impairment and the effect this has on overall responses. The developer agreed that cognitive impairment does have an effect in this setting and that having everyone use the Brief Interview for Mental Status (BIMs) score—which is used to get a snapshot of how well someone is functioning cognitively at a given moment—allows for a more consistent approach across all nursing home residents. Committee members agreed with the decision not to risk adjust as it is inappropriate to control for differences based on sociodemographic factors. There were no concerns around use and usability, and many appreciated that this tool is concise, as staffing in this area tends to be sparse. Ultimately, this measure was recommended for endorsement. This measure was identified as related to #2615 CoreQ: Long-Stay Resident Measure and #2616 CoreQ: Long-Stay Family Measure, submitted by the same developer.

#### **2615 CoreQ: Long-Stay Resident Measure (American Health Care Association): Endorsed**

**Description:** The measure calculates the percentage of long-stay residents, those living in the facility for 100 days or more, who are satisfied (see: S.5 for details of the time-frame). This patient reported outcome measure is based on the CoreQ: Long-Stay Resident questionnaire that is a three item questionnaire; **Measure Type:** PRO; **Level of Analysis:** Facility; **Setting of Care:** Post Acute/Long Term Care Facility; Nursing Home/Skilled Nursing Facility; **Data Source:** Patient Reported Data/Survey

This new PRO-PM is very similar to #2614 CoreQ: Short Stay Discharge Measure and #2616 CoreQ: Long-Stay Family Measure. The Committee had questions about validity and whether staff members were allowed to fill out the surveys on behalf of patients. The developer responded that there is no way to stop staff from doing so, but if staff indicate that they have responded on behalf of a patient, those data will be excluded. The Committee agreed that the measure was very similar to #2614 and did not require additional discussion or voting. Ultimately, the Committee recommended this measure for endorsement.

#### **2616 CoreQ: Long-Stay Family Measure (American Health Care Association): Endorsed**

**Description:** The measure calculates the percentage of family or designated responsible party for long stay residents (i.e., residents living in the facility for 100 days or more), who are satisfied (see: S.5 for details of the timeframe). This consumer reported outcome measure is based on the CoreQ: Long-Stay Family questionnaire that has three items; **Measure Type:** PRO; **Level of Analysis:** Facility; **Setting of Care:** Post Acute/Long Term Care Facility; Nursing Home/Skilled Nursing Facility; **Data Source:** Patient Reported Data/Survey

This new PRO-PM is very similar to #2614 CoreQ: Short Stay Discharge Measure and #2615 CoreQ: Long-Stay Resident Measure. One Committee member asked if the survey is available in other languages, and the developer responded that it is currently only available in English, but they are exploring other options for the future. The Committee agreed that the measure was very similar to #2614 and did not require additional discussion or voting. Ultimately, the Committee recommended this measure for endorsement.

### **2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities (UDSMR): Endorsed**

**Description:** 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; **Measure Type:** Outcome; **Level of Analysis:** Facility; **Setting of Care:** Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility; **Data Source:** Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

This new outcome measure is similar to a set of measures for inpatient rehabilitation facilities endorsed in phase 2 of this work. Based in the Functional Independence Measure (FIM) tool, this measure is for skilled nursing facility patients and focuses on restoration and improvement of function during the course of treatment. The Committee discussed this measure in relation to Jimmo v. Sebelius and was reassured by the developer's statement that the measure looks at change in function (not just improvement), and also is intended to flag patients who may need a change in care plan based on their functional assessment. The Committee was concerned about the overlap and potential burden of data collection between this measure and those being explored for implementation based on the Continuity Assessment Record and Evaluation (CARE) tool developed by CMS in response to the IMPACT Act. This is one of the measures for which the Committee expressed interest in additional reliability testing that would demonstrate variation between facilities (versus within) and the ability to distinguish between facilities. The major concern around usability focused on the need of training for staff to administer the tool, since it is not as widely implemented in SNFs as compared to IRFs. However, the Committee agreed that training to ensure accurate data collection is especially important for measures that may be used for payment. Committee members returned to Jimmo v. Sebelius for a discussion of potential unintended consequences, noting the potential for patients who cannot improve becoming "less desirable" but agreed that was not a reason not to endorse. Committee members also warned that this measure should not be used to make comparisons to other levels of care (IRF versus SNF for example) as they are not comparable (in terms of patient complexity, levels of care, etc.), even though the measures are very similar. Ultimately, the Committee recommended this measure for endorsement. This measure was identified as competing with measure #2613 CARE: Improvement in Self Care; however, the committee decided to defer competing measure discussions until 2017 when more data are available.

### **2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities (UDSMR): Endorsed**

**Description:** 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; **Measure Type:** Outcome; **Level of Analysis:** Facility; **Setting of Care:** Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility; **Data Source:** Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

This new outcome measure is very similar to #2769 Functional Change in Self Care. The Committee questioned why there is also a Functional Change in Motor Skills measure, which includes both the self-

care and mobility domains. The developer explained that there are patients who may have restricted mobility, but still be able to do self-care; the different measures are intended to provide different levels of functional measurement for different types of facilities. It was further clarified that the composite score would not require duplicate data collection since it requires the same data. The Committee agreed that the measure was very similar to #2769 and did not require additional discussion. Ultimately, the Committee recommended this measure for endorsement. This measure was identified as competing with measure #2612 CARE: Improvement in Mobility; however, the Committee decided to defer competing measure discussions until 2017 when more data is available.

#### **2775 Functional Change: Change in Motor Score for Skilled Nursing Facilities (UDSMR): Endorsed**

**Description:** 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; **Measure Type:** Outcome; **Level of Analysis:** Facility; **Setting of Care:** Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility; **Data Source:** Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

This new outcome measure is very similar to #2769 Functional Change in Self Care. The Committee agreed that the measure did not require additional discussion. Ultimately, the Committee recommended this measure for endorsement. This measure is the “parent” to the mobility and self-care measures that have been identified as related to measures: #2612 CARE Improvement in Mobility and #2613 Care Improvement in Self-Care; however, the Committee decided to defer related/competing measure discussions until 2017 when more data is available.

#### **2776 Functional Change: Change in Motor Score in Long Term Acute Care Facilities (UDSMR): Endorsed**

**Description:** 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; **Measure Type:** Outcome; **Level of Analysis:** Facility; **Setting of Care:** Post Acute/Long Term Care Facility: Long Term Acute Care Hospital; **Data Source:** Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

This is a new outcome measure. The Committee agreed that many of the issues discussed for #2769 would be similar as the main difference for this measure is the setting: LTAC instead of SNF. However, Committee members pointed out that LTACs are a new setting for the FIM tool, and the data on their use are limited thus far. The developer noted that the same drastic level of functional improvement is not expected or seen in LTACs, but that a slight improvement can be possible, and the measure can also be used both to identify patients that may be declining and to assess the level of care a patient needs. The Committee had some concerns with the limited performance gap. While the developer indicated



that this may be an artifact of the small sample size, the Committee was unable to reach consensus on the performance gap criterion. The Committee agreed that aside from the new setting and limited data, the issues for this measure were very similar to #2769, specifically that the data provided did not demonstrate variation in performance across facilities nor the reliability of performance between facilities. However, because the setting for these measures is newer and number of facilities represented in the testing data was limited in comparison to the SNF measures, the Committee did not reach consensus on reliability or validity. There were no concerns raised for feasibility, but the Committee was unable to come to consensus on usability. Ultimately, the Committee did not reach consensus on an endorsement decision. The developer agreed to bring back additional testing data after the comment period. This measure received one comment in support of endorsement. During the comment period, the developer submitted the additional information requested by the Committee, including more information on the performance gap, and a new testing analysis including more facilities and more patients, which provided improved reliability and validity scores. During the post-comment call, the Committee voted to recommend the measure for endorsement.

#### **2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities (UDSMR): Endorsed**

**Description:** 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; **Measure Type:** Outcome; **Level of Analysis:** Facility; **Setting of Care:** Post Acute/Long Term Care Facility: Long Term Acute Care Hospital; **Data Source:** Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

The Committee agreed that this new outcome measure is very similar to #2776 Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on the criteria over from that measure. They did not reach consensus on performance gap, reliability, validity, usability, and an overall recommendation for endorsement. The developer agreed to bring back additional testing data after the comment period. This measure received one comment in support of endorsement. During the comment period, the developer submitted the additional information requested by the Committee, including more information on the performance gap, and a new testing analysis including more facilities and more patients, which provided improved reliability and validity scores. During the post-comment call, the Committee voted to recommend the measure for endorsement.

#### **2778 Functional Change: Change in Mobility Score for Long Term Acute Care Facilities (UDSMR): Endorsed**

**Description:** 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; **Measure Type:** Outcome; **Level of Analysis:** Facility; **Setting of**



**Care:** Post Acute/Long Term Care Facility; Long Term Acute Care Hospital; **Data Source:** Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

The Committee agreed that this new outcome measure is very similar to #2776 Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on the criteria over from that measure. The Committee did not reach consensus on performance gap, reliability, validity, and usability. During the meeting, the Committee voted not to recommend this measure for endorsement. The developer agreed to bring back additional testing data after the comment period. This measure received one comment in support of endorsement, and the developer submitted the additional information requested by the Committee, including more information on the performance gap, and a new testing analysis including more facilities and more patients, which provided improved reliability and validity scores. During the post-comment call, the Committee voted to recommend the measure for endorsement.

### **2958 Informed, Patient Centered Hip and Knee Replacement Surgery (Massachusetts General Hospital): Endorsed**

**Description:** The measure is derived from patient responses to the Hip or Knee Decision Quality Instruments. Participants who have a passing knowledge score (60 percent or higher) and a clear preference for surgery are considered to have met the criteria for an informed, patient-centered decision. The target population is adult patients who had a primary hip or knee replacement surgery for treatment of hip or knee osteoarthritis; **Measure Type:** PRO; **Level of Analysis:** Clinician: Group/Practice; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic; **Data Source:** Patient Reported Data/Survey

This new PRO-PM assesses the extent to which patients who had elective surgery were well informed and had a clear preference for surgery beforehand. The survey instrument is based on six items: five knowledge questions and one question that elicits a patient's preference and focuses on the surgical benefits, harms, and recovery time. Hip and knee replacements are very common, and the Committee agreed that simply being clinically eligible for one of these procedures does not mean it is the best choice of treatment. Concerns were raised around the measure's reliability testing, i.e., how the developer found the sample of patients and the length of the post-operative timeline for giving the instrument to patients. The developer noted that ideally the instrument would be collected close to the time of the surgery, but in order to obtain a large enough sample to improve the validity and reliability of performance results, a clinic may need up to two years to collect data. Since this measure deals with both hip and knee replacement surgeries, the Committee was concerned about why the correct answer to recovery time was the same for both procedures. The developer indicated that experts in both surgical procedures were involved in the development of the instruments and that the measure was not seeking a precise answer, just acknowledgement that recovery times can vary. Committee members asked about the burden of collecting the data and how much time is required in collecting the responses. The developer explained that the patient burden is very limited as it only takes a few minutes to complete the questions. In terms of burden on the provider, the developer thought it depended on the practice as some likely already have resources in place to assess patient-reported outcomes. The measure is currently used in a quality recognition program but is not publicly reported or used in an

accountability program. During the comment period, the developer submitted additional information as requested by the Committee, including clarification of the exclusions and the time period for the measure, additional information on the testing conducted, as well as more reliability testing results, and more information on usability. During the post-comment call, the Committee voted to recommend the measure for endorsement.

### **2962 Shared Decision Making (Healthwise): Endorsed**

**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. **Measure Type:** PRO; **Level of Analysis:** Clinician: Group/Practice; **Setting of Care:** Ambulatory Care: Clinician Office/Clinic; **Data Source:** Patient Reported Data/Survey.

This new patient-reported outcome performance measure (PRO-PM) assesses the extent to which healthcare providers involve patients in a decision making process when there is more than one reasonable option. The Committee agreed that this measure demonstrated the value of the shared decision making approach and the four items within the tool adequately address the three essential concepts, as it was designed. The developer noted that this measure works best when applied to a specific kind of clinical decision (e.g., decision to have surgery for herniated disc).

One of the greatest challenges in this type of measure is that it is restricted to patients who have had the treatment or procedure, meaning that patients who have been faced with the same decision and chose not to have the specific treatment are not included. While it would be desirable to include them, the data are not available. The Committee raised concerns with the small, nondiverse sample of patients included in testing, but the developer responded by suggesting there would be more variability with larger numbers. The Committee voiced concerns about the importance of health literacy for patients and how improving the delivery of adequate information to patients could greatly affect participation in the decision making process. The Committee also discussed a need for engaging the participation of various demographics, including all ethnicities and ages. The general consensus was that shared decision making is appropriate for all patients. Although this measure is not currently in use, the Committee noted that Accountable Care Organization evaluations could find shared decision making useful within quality improvement efforts. The Committee agreed that this measure met the criteria and voted to recommend it for endorsement.

### **2967 CAHPS® Home and Community Based Services (HCBS) Measures (CMS): Endorsed**

**Description:** CAHPS® Home and Community Based Services (HCBS) 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. 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

**Measure Type:** PRO; **Level of Analysis:** HCBS Program; **Setting of Care:** Other; **Data Source:** Patient Reported Data/Survey

This new PRO-PM is a package of 19 different measures calculated from data from a newly developed experience-of-care survey focusing on HCBS programs. Numerous challenges were identified with this measure submission including level of accountability and variation in the types of programs and services offered both across and between states. The developer noted that the survey and reporting of the measures are being introduced for voluntary use by states and relevant programs and would help programs to identify areas for quality improvement interventions. Committee members with experience in this area noted that what matters to consumers is that their needs are met, not who is meeting them. The Committee decided to vote on evidence all together, and then split the measure set into five measure domains and vote on each of the domains separately for performance gap and the remaining criteria. The performance and testing data submitted for these measures were limited due to the pilot testing of the survey, so the Committee found it challenging to understand the opportunity for improvement (performance gap) and reliability of some of the domain results. The Committee provided recommendations to the developer on opportunities to address some of the data challenges; however, ultimately, two of the measure domains failed performance gap, and the remaining measures failed reliability. The Committee encouraged the developers to determine if alternate testing procedures might better differentiate programs and better support the reliability of the metrics.

The recommendation, unmet needs, and global measures moved forward to the reliability discussion. Committee members continued to raise concerns with the specifications and testing and requested additional testing. The three remaining measure sets did not pass the reliability criteria.

Committee members supported the idea of these measures, noting their importance to the disability community, yet they had concerns and ultimately did not think the measures were ready for endorsement. They urged the developers to use their feedback to improve the measures and to resubmit later. The measures were included in the public comment period to elicit additional feedback.

During the comment period, the developer submitted extensive additional information, including reanalyzing the data with a larger sample that includes proxy respondents; conversion to the use of top-box scoring instead of mean scores, which is consistent with other CAHPS measures; statistical analysis of the correlation between global rating and recommendation items which suggests that, while related, they are measuring different constructs; clarification of several outstanding questions, including the unit of analysis (an HCBS program) and accountable entity (the operating entity), and further information on why the gaps are low for some of the components. The developer also responded to specific requests from the Committee about the rationale, testing, and feasibility. The developer also made minor changes to comply with CAHPS standardized requirements as the survey upon which the measure is based has received the CAHPS trademark. This measure received 11 comments, which primarily focused on requesting reconsideration of the measure by the Committee. It was noted during the post-comment call that the majority of public comments supported the endorsement of the HCBS survey and related to the NQF criteria as they applied to the measures derived from the survey. The Committee was reminded that NQF does not endorse surveys, instruments, or tools, and they should continue deliberations based on whether the measures met the NQF criteria. In response to the public comments questioning the decisions of the Committee, one Committee member expressed the belief that the NQF endorsement process was being followed with the purpose of endorsing only those performance measures that satisfy the existing criteria. The Committee discussed the new information submitted as well as the comments received. During voting conducted on a post-call voting survey, the Committee voted to recommend the measure for endorsement.

### Comments Received After Committee Evaluation

After the Committee's in-person evaluation of the measures, NQF solicited comments on the draft report via an online tool from July 14, 2016, through August 12, 2016. During this period, NQF received 21 comments from 11 commenters, including three member organizations. Comments included support for the Committee's work and the measures under review. Comments also addressed competing measures, noted additional measure gaps, and requested reconsideration of the HCBS measure. Measure-specific comments are included in the measure discussions in [Appendix A](#).

## References

- <sup>1</sup> National Quality Forum (NQF). *Priority Setting for Healthcare Performance Measurement: Addressing Performance Measure Gaps in Person-Centered Care and Outcomes*. Washington, DC: NQF; 2014. Available at [http://www.qualityforum.org/publications/2014/08/priority\\_setting\\_for\\_healthcare\\_performance\\_measurement\\_addressing\\_performance\\_measure\\_gaps\\_in\\_person-centered\\_care\\_and\\_outcomes.aspx](http://www.qualityforum.org/publications/2014/08/priority_setting_for_healthcare_performance_measurement_addressing_performance_measure_gaps_in_person-centered_care_and_outcomes.aspx). Last accessed December 2016.
- <sup>2</sup> Agency for Healthcare Research and Quality (AHRQ). *2015 National Healthcare Quality and Disparities Report and 5th Anniversary Update on the National Quality Strategy*. Rockville, MD: AHRQ; 2016. Available at <http://www.ahrq.gov/research/findings/nhqrdr/nhqdr15/priorities.html>. Last accessed December 2016.
- <sup>3</sup> Rosenthal MB, Alidina S, Friedberg MW, et al. A difference-in-difference analysis of changes in quality, utilization, and cost following the Colorado Multi-Payer Patient-Centered Medical Home Pilot. *J Gen Intern Med*. 2016;31(3):289-96.
- <sup>4</sup> HHS. *National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care: A Blueprint for Advancing and Sustaining CLAS Policy and Practice*. Rockville, MD: HHS, Office of Minority Health; 2013. Available at <https://www.thinkculturalhealth.hhs.gov/pdfs/EnhancedCLASStandardsBlueprint.pdf>. Last accessed June 2016.
- <sup>5</sup> Agency for Healthcare Research and Quality (AHRQ). *2015 National Healthcare Quality and Disparities Report and 5th Anniversary Update on the National Quality Strategy*. Rockville, MD: AHRQ; 2016. Available at <http://www.ahrq.gov/research/findings/nhqrdr/nhqdr15/priorities.html>. Last accessed December 2016.
- <sup>6</sup> Centers for Medicare & Medicaid Services (CMS). *Jimmo v. Sibelius Settlement Agreement Fact Sheet*. Baltimore, MD: CMS; 2013. Available at <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/SNFPPS/Downloads/Jimmo-FactSheet.pdf>. Last accessed June 2016.

## Appendix A: Details of Measure Evaluation

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

### Endorsed Measures

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#### 0420 Pain Assessment and Follow-Up

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

**Description:** Percentage of visits for patients aged 18 years and older with documentation of a pain assessment using a standardized tool(s) on each visit AND documentation of a follow-up plan when pain is present

**Numerator Statement:**

Percentage of visits for patients aged 18 years and older with documentation of a pain assessment using a standardized tool(s) on each visit AND documentation of a follow-up plan when pain is present.

**Denominator Statement:** All visits for patients aged 18 years and older

**Exclusions:** Not Eligible – A patient is not eligible if one or more of the following reason(s) is documented:

Severe mental and/or physical incapacity where the person is unable to express himself/herself in a manner understood by others. For example, cases where pain cannot be accurately assessed through use of nationally recognized standardized pain assessment tools

Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status

**Adjustment/Stratification:** No risk adjustment or risk stratification

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

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

**Type of Measure:** Process

**Data Source:** Administrative claims, Paper Medical Records

**Measure Steward:** Centers for Medicare & Medicaid Services

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#### STANDING COMMITTEE MEETING [06/06/2016]

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

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

1a. Evidence: **H-0; M-7; L-5; I-9**; 1b. Performance Gap: **H-9; M-12; L-0; I-0**; Evidence Exception: **Y-19; N-2**

Rationale:

- Committee members noted that assessing pain is crucial in order to treat it, but the literature that demonstrates better outcomes after such assessment is limited. The developer agreed that all of the published studies that look at the effectiveness of pain assessment are low quality, both those reporting a difference and those reporting no difference; the developer recommends further study.

- Committee members with expertise in palliative care also noted limitations of the current pain scales used to do these assessments, both in terms of providing meaningful data (particularly since the FACES scale was designed for children and the evidence for it was on low back pain) and because the assessments are relatively easy to game; patients who report higher numbers get stronger medications. The developer noted the measure does not require any particular pain assessment tool.
- Patient advocates on the committee strongly supported the need for pain assessment.
- The measure was originally developed for use by physical and occupational therapists.
- This is a process measure, but the committee agreed it is one step closer to an outcome measure since it includes both the assessment of pain and the development of a plan to address it. In response to questions, the developer noted that the intent of the measure is not to specify treatment, but to create a care plan, which could include non-pharmacological interventions.
- The committee discussed concerns around over-prescription of opioids and the opioid epidemic, noting that much research still needs to be done on how to best manage pain, and that providers are currently being encouraged to limit opioid prescriptions.
- The developer clarified that pain needed to be assessed by a valid pain tool, not just a simple question or two.
- The committee struggled with the lack of direct evidence linking better outcomes to pain assessment. The developer noted part of the reason there is a lack of data are because it is very difficult to do a controlled study on this particular topic since obtaining a patient history and developing a treatment plan is the standard of care; therefore, to not do an assessment in order to study outcomes would be unethical. Committee members noted there is general evidence supporting the practice of monitoring symptoms and then altering practice based on that monitoring.
- NQF staff noted, in response to questions, that other endorsed pain measures have passed the evidence criteria by using insufficient evidence with exception option. In the vote on evidence, the committee did not reach consensus. However, the committee did reach consensus on the evidence exception, and the measure moved forward.
- There are differences in assessment and treatment rates by race/ethnicity (Asian 76.2%, Black 68.2%, Hispanic 79.1%, Native 73.6%, White 84.2%, Other 79.6%, Unknown 86.1%), and this was highlighted as a gap area demonstrating the need for continuing endorsement of this measure.

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

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

2a. Reliability: **H-5; M-14; L-1; I-1** 2b. Validity: **H-2; M-11; L-6; I-2**

### Rationale:

- Committee members requested information on why patients under 18 were excluded, given that there are good tools for measuring pain in children. The developer explained that the measure was developed for use in adults and hasn't been updated, and agreed that was a concern.
- One committee member had questions about the reliability testing at the provider level and how well the measure demonstrates variability between providers; another noted that 90% of the providers reporting are in the 25<sup>th</sup> percentile. The developer responded that only 10% of eligible providers are reporting and so they believe the scores are skewed towards high



performance, especially since this is typical of voluntary measures; however, they cannot confirm this.

- During the validity discussion, the committee noted that while most providers (over 90%) are reporting very high scores, the mean is 82%; this means a small group of providers are reporting very poor scores. The measure also passed the validity criteria.

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### **3. Feasibility: H-14; M-6; L-1; I-0**

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

#### Rationale:

- The measure uses administrative data and has been in use for several years, so the committee had no concerns with the feasibility.

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### **4. Usability and Use: H-10; M-11; L-0; I-0**

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

#### Rationale:

- The measure has been in use for several years and the committee did not have major concerns with the usability. However, they did note the potential unintended consequence of narcotics overuse.
- Committee members noted that patients with chronic complex conditions are actually more likely to under report pain. Ultimately the committee agreed that the potential unintended consequences did not outweigh the importance of the measure.

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### **5. Related and Competing Measures**

This measure is related, but not competing, with a number of NQF-endorsed measures:

- 0383: Oncology: Plan of Care for Pain – Medical Oncology and Radiation Oncology (paired with 0384)
- 0676: Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay)
- 0677: Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay)
- 1628: Patients with Advanced Cancer Screened for Pain at Outpatient Visits
- 1634: Hospice and Palliative Care -- Pain Screening
- 1637: Hospice and Palliative Care -- Pain Assessment

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### **Standing Committee Recommendation for Endorsement: Y-20; N-1**

#### Rationale

- This measure did not pass Evidence but moved forward on the Evidence Exception.

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### **6. Public and Member Comment**

- No comments were received on this measure.



- The developer submitted additional evidence in support of the measure, but since the measure was already recommended, the committee did not make any changes to this recommendation.

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### 7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0

**Decision: Approved for continued endorsement**

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### 8. Board of Directors Vote: Yes (October 25, 2016)

**Decision: Ratified for continued endorsement**

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### 9. Appeals

- No appeals were received on this measure.

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## 2614 CoreQ: Short Stay Discharge Measure

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

**Description:** The measure calculates the percentage of individuals discharged in a six month time period from a SNF, within 100 days of admission, who are satisfied (see: S.5 for details of the time-frame). This patient reported outcome measure is based on the CoreQ: Short Stay Discharge questionnaire that utilizes four items.

**Numerator Statement:** The measure assesses the number of patients who are discharged from a SNF, within 100 days of admission, who are satisfied. The numerator is the sum of the individuals in the facility that have an average satisfaction score of  $\geq 3$  for the four questions on the CoreQ: Short Stay Discharge questionnaire.

**Denominator Statement:** The denominator includes all of the patients that are admitted to the SNF, regardless of payor source, for post-acute care, that are discharged within 100 days; who receive the survey (e.g. people meeting exclusions do not receive a questionnaire) and who respond to the CoreQ: Short Stay Discharge questionnaire within the time window (See: S.5).

**Exclusions:** Exclusions used are made at the time of sample selection and include:

- (1) Patients who died during their SNF stay;
- (2) Patients discharged to a hospital, another SNF, psychiatric facility, inpatient rehabilitation facility or long term care hospital;
- (3) Patients with court appointed legal guardian for all decisions;
- (4) Patients discharged on hospice;
- (5) Patients who left the nursing facility against medical advice (AMA);
- (6) Patients who have dementia impairing their ability to answer the questionnaire defined as having a BIMS score on the MDS as 7 or lower. [Note: we understand that some SNCCs may not have information on cognitive function available to help with sample selection. In that case, we suggest administering the survey to all residents and assume that those with cognitive impairment will not complete the survey or have someone else complete on their behalf which in either case will exclude them from the analysis.]

- (7) Patients who responded after the two month response period; and  
(8) Patients whose responses were filled out by someone else.

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility

**Type of Measure:** PRO

**Data Source:** Healthcare Provider Survey

**Measure Steward:** American Health Care Association

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## **STANDING COMMITTEE MEETING [06/06/2016]**

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

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

1a. Evidence: **Y-17; N-1**; 1b. Performance Gap: **H-7; M-10; L-1; I-0**

#### Rationale:

- Committee members noted that this is a very significant measure for those who go into a nursing home or a SNF who will not stay indefinitely or for a long period of time. Measuring patient satisfaction and the rate of discharges back into the community is very important to measurement as including the patient and their preferences is becoming an integral part of healthcare's changing landscape. Additionally, measuring and reporting satisfaction with care helps patients and their families choose and trust a healthcare facility and can help facilities improve the quality of the care they provide.
- One committee member had a question about the scale being used for this measure and felt that the choice of the response scale (poor, average, good, very good, and excellent) seemed heavily weighted towards positive responses. The developer explained that they did focus groups and cognitive testing of different response scales from ten points down to four point Likert scales and found that no matter how they captured responses, they had different satisfaction scores but the relative ranking remained the same.
- Overall, committee members liked that there was a conceptual framework at the beginning of the measure submission form that linked the measure with information on additional improvement programs, organizational change initiatives, and policies that are going on both at the federal level and the facility level.

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

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

2a. Reliability: **H-6; M-8; L-4; I-0** 2b. Validity: **H-6; M-9; L-3; I-0**

#### Rationale:

- One committee member felt that the exclusions may limit the generalizability to a small proportion of facility nursing home patients.
- There was additional concern around the consistency of implementation across facilities and the possibility that scores could be compromised by the low response rate.

- Committee members also questioned the test/retest reliability at the patient level and sample size. The developer explained that the data elements were tested using a test-retest methodology: the survey was sent out and responses received from 853 patients; 100 were re-surveyed one month later. The developer responded to these concerns by saying that while morbidity does occur, and may affect the data, there is an emphasis on making sure that both the voice of the patient and the voice of the family are heard.
- There was also discussion around cognitive impairment and the effect this has on the survey's overall responses. The developer agreed that cognitive impairment does have an effect in this setting and that by having everyone use the BIMs score, which is used to get a snapshot of how well someone is functioning cognitively at a given moment, allows for a more consistent approach across all nursing home residents. A standardized approach helps reduce the incidence of gaming.
- One committee member had a question on the methodology used to reduce the number of items in the tool and how they got from 22 to 4 items without losing some precision. The developer responded that the process was extremely iterative and was done hundreds of times. The purpose of this was to try and get to the items that were capturing the most satisfaction information that did not overlap with other items and if two items correlated very highly, it made sense to drop one of them.
- All members agreed with the decision not to risk adjust as it is inappropriate to control out differences based on sociodemographic factors.
- Cognitive testing was done with family members, residents, and with short stay residents. The developers collected more than 100 responses from each population at facilities in Pittsburgh. This testing was conducted by reading questions and having the testing groups respond back based on what they thought was being asked and if they felt it could be asked differently. The committee indicated providing the results of this testing, although supplemental, would have been useful information.

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### **3. Feasibility: H-5; M-13; 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 agreed that this tool is timely as there is currently no required experience of care reporting or measurement in the SNF population.
- Members appreciated that this tool is brief especially since the staffing in this area tends to be very sparse.

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### **4. Usability and Use: H-5; M-11; L-2; I-0**

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

#### Rationale:

- The committee did not have any concerns or questions about the use and usability.

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## 5. Related and Competing Measures

- This measure was identified as related with #2615: CoreQ: Long-Stay Resident Measure and #2616: CoreQ: Long-Stay Family Measure, submitted by the same developer.

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**Standing Committee Recommendation for Endorsement: Y-16; N-1**

## 6. Public and Member Comment

- No comments were received on this measure.

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**7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0**

**Decision: Approved for endorsement**

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**8. Board of Directors Vote: Yes (October 25, 2016)**

**Decision: Ratified for endorsement**

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## 9. Appeals

- No appeals were received on this measure.

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## 2615 CoreQ: Long-Stay Resident Measure

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

**Description:** The measure calculates the percentage of long-stay residents, those living in the facility for 100 days or more, who are satisfied (see: S.5 for details of the time-frame). This patient reported outcome measure is based on the CoreQ: Long-Stay Resident questionnaire that is a three item questionnaire.

**Numerator Statement:** The numerator is the sum of the individuals in the facility that have an average satisfaction score of  $\geq 3$  for the three questions on the CoreQ: Long -Stay Resident questionnaire.

**Denominator Statement:** The denominator includes all of the residents that have been in the SNF for 100 days or more regardless of payer status; who received the CoreQ: Long-Stay Resident questionnaire (e.g. people meeting exclusions do not receive the questionnaire), who responded to the questionnaire within the two month time window, who did not have the questionnaire completed by somebody other than the resident, and who did not have more than one item missing.

**Exclusions:** Exclusions made at the time of sample selection are the following: (1) Residents who have poor cognition defined by the BIMS score; (2) residents receiving hospice; (3) residents with a legal court appointed guardian; and (4) residents who have lived in the SNF for less than 100 days.

Additionally, once the survey is administered, the following exclusions are applied: a) surveys received outside of the time window (two months after the administration date) b) surveys that have more than one questionnaire item missing c) surveys from residents who indicate that someone else answered the questions for the resident. (Note this does not include cases where the resident solely had help such as reading the questions or writing down their responses.)

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility

**Type of Measure:** PRO

**Data Source:** Healthcare Provider Survey

**Measure Steward:** American Health Care Association

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## **STANDING COMMITTEE MEETING [06/06/2016]**

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

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

1a. Evidence: **Y-17; N-1**; 1b. Performance Gap: **H-7; M-10; L-1; I-0**

Rationale:

- The committee agreed that this measure was very similar to #2614 and did not require additional discussion or voting. They agreed to carry the votes on [evidence and gap](#) from the previous measure.
- 

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

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

2a. Reliability: **H-6; M-8; L-4; I-0** 2b. Validity: **H-6; M-9; L-3; I-0**

Rationale:

- One committee member had questions around validity and whether staff members were allowed to fill out the surveys on patients' behalf. The developer responded that while there is no way to stop them from filling it out on the patient's behalf, if they do indicate as such, their data will be excluded.
  - The committee agreed that this measure was very similar to #2614 and did not require additional discussion or voting. They agreed to carry the votes on [reliability and validity](#) from the previous measure.
- 

**3. Feasibility:** **H-5; M-13; 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 agreed that this measure was very similar to #2614 and did not require additional discussion or voting. They agreed to carry the votes on [feasibility](#) from the previous measure.
- 

**4. Usability and Use:** **H-5; M-11; L-2; I-0**

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

Rationale:

- The committee agreed that this measure was very similar to #2614 and did not require additional discussion or voting. They agreed to carry the votes on [usability and use](#) from the previous measure.

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## 5. Related and Competing Measures

- This measure was identified as related with #2614: CoreQ: Short-Stay Discharge Measure and #2616: CoreQ: Long-Stay Family Measure, submitted by the same developer.

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## Standing Committee Recommendation for Endorsement: Y-17; N-1

- Although the committee carried the discussions and votes through to each of these SNF experience of care measures, they voted separately for Recommendation for Endorsement.

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## 6. Public and Member Comment

- No comments were received on this measure.

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## 7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0

**Decision: Approved for endorsement**

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## 8. Board of Directors Vote: Yes (October 25, 2016)

**Decision: Ratified for endorsement**

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## 9. Appeals

- No appeals were received on this measure.

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## 2616 CoreQ: Long-Stay Family Measure

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

**Description:** The measure calculates the percentage of family or designated responsible party for long stay residents (i.e., residents living in the facility for 100 days or more), who are satisfied (see: S.5 for details of the timeframe). This consumer reported outcome measure is based on the CoreQ: Long-Stay Family questionnaire that has three items.

**Numerator Statement:** The numerator assesses the number of family or designated responsible party for long stay residents that are satisfied. Specifically, the numerator is the sum of the family or designated responsible party members for long stay residents that have an average satisfaction score of =>3 for the three questions on the CoreQ: Long-Stay Family questionnaire.

**Denominator Statement:** The target population is family or designated responsible party members of a resident residing in a SNF for at least 100 days. The denominator includes all of the individuals in the target population who respond to the CoreQ: Long-Stay Family questionnaire within the two month time window (see S.5) who do not meet the exclusion criteria (see S.10).

**Exclusions:** Please note, the resident representative for each current resident is initially eligible regardless of their being a family member or not. Only one primary contact per resident should be selected.

Exclusions made at the time of sample selection include: (1) family or designated responsible party for residents with hospice; (2) family or designated responsible party for residents with a legal court appointed guardian; (3) representatives of residents who have lived in the SNF for less than 100 days; and (4) representatives who reside in another country.

Additionally, once the survey is administered, the following exclusions are applied: a) surveys received outside of the time window (more than two months after the administration date) and b) surveys that have more than one questionnaire item missing.

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility

**Type of Measure:** PRO

**Data Source:** Healthcare Provider Survey

**Measure Steward:** American Health Care Association

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## STANDING COMMITTEE MEETING [06/06/2016]

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

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

1a. Evidence: **Y-17; N-1**; 1b. Performance Gap: **H-7; M-10; L-1; I-0**

Rationale:

- The committee agreed that this measure was very similar to #2614 and did not require additional discussion or voting. They agreed to carry the votes on [evidence and gap](#) from the previous measure.

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

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

2a. Reliability: **H-6; M-8; L-4; I-0** 2b. Validity: **H-6; M-9; L-3; I-0**

Rationale:

- The committee agreed that this measure was very similar to #2614 and did not require additional discussion or voting. They agreed to carry the votes on [reliability and validity](#) from the previous measure.

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**3. Feasibility:** **H-5; M-13; 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 agreed that this measure was very similar to #2614 and did not require additional discussion or voting. They agreed to carry the votes on [feasibility](#) from the previous measure.
- 

#### **4. Usability and Use: H-5; M-11; L-2; I-0**

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

##### Rationale:

- One committee member had a question about other languages that this survey was available in. The developer responded and said that it is currently only available in English but they are exploring other options for the future.
  - The committee agreed that this measure was very similar to #2614 and did not require additional discussion or voting. They agreed to carry the votes on [usability and use](#) from the previous measure.
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#### **5. Related and Competing Measures**

- This measure was identified as related with #2614: CoreQ: Short-Stay Discharge Measure and #2615: CoreQ: Long-Stay Resident Measure, submitted by the same developer.
- 

#### **Standing Committee Recommendation for Endorsement: Y-17; N-1**

- Although the committee carried the discussions and votes through to each of these SNF experience of care measures, they voted separately for Recommendation for Endorsement.
- 

#### **6. Public and Member Comment**

- No comments were received on this measure.
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#### **7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0**

**Decision: Approved for endorsement**

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#### **8. Board of Directors Vote: Yes (October 25, 2016)**

**Decision: Ratified for endorsement**

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#### **9. Appeals**

- No appeals were received on this measure.



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## 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities

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

**Description:** 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.

**Numerator Statement:** 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:** 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

**Exclusions:** Excluded in the measure are patients who died in the SNF or patients less than 18 years old.

**Adjustment/Stratification:** Stratification by risk category/subgroup

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility

**Type of Measure:** Outcome

**Data Source:** Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

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

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### STANDING COMMITTEE MEETING [06/06/2016]

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

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

1a. Evidence: **Y-19; N-0**; 1b. Performance Gap: **H-3; M-13; L-1; I-2**

Rationale:

- This measure uses the FIM tool, and is similar to measures endorsed in the PFCC phase 2 project; those measures were for inpatient rehabilitation facilities while this measure is set in SNFs.
- The committee was concerned about the overlap and potential burden of data collection between this measure, which uses the FIM tool, and the mobility and self-care functional status changes measures that are derived from the CARE tool as well as data collected through the Minimum Data Set (MDS). The developer explained this measure includes self-care items of both cognitive and physical function, while the CARE measure for self-care only covers physical function. They also noted that data shows a change over time when using the FIM-based measures but the change is not shown for reports using the MDS, which leads the developer to conclude they are measuring different functional domains.
- The submission form for this measure focuses on restoration and improvement of function as a goal of rehabilitation, which is a component of skilled nursing. Committee members expressed concern about this, noting that for some patients, the goal may be to maintain function and thus

facilities would be able to use these measures to potentially “cherry pick” patients and only choose those that have the opportunity to improve. They also brought up Jimmo v. Sebelius, the Medicare law requiring SNFs to provide services to maintain or slow deterioration of function, even for patients that cannot improve. The developer agreed their measure submission placed a heavy emphasis on improvement, but they are amenable to adding language that clarified the measures can not only identify improvement, but those patients who are maintaining or declining in function. They also indicated the performance measure is an aggregated population measure, and thus was looking more globally at performance of a facility versus singling out individuals.

- The developer explained how the expected performance range was developed; as the committee noted, almost half of the facilities reporting were below expectations in 2014. Using rasch modeling, the developer calculated the average patient’s function for each measure and compared each facility to that number; therefore, expected performance is a statistical value rather than a benchmark.
- The committee requested a distribution of the facility level scores to better assess the performance gaps. Committee members also requested information on whether functional performance has changed over time in response to the efforts made to improve quality in this area. The developer noted that differences are clear when the data are stratified.

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

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

2a. Reliability: **H-3; M-9; L-2; I-5** 2b. Validity: **H-4; M-13; L-1; I-1**

### Rationale:

- In response to questions on the exclusions, the developer explained they have another tool, the WeeFIM, for children under 18 that accounts for differences between adults and children; the developer thought it would make the measure simpler to exclude children from this measure. Patients who died in care are excluded due to the lack of discharge scores, which would make it impossible to measure change.
- The developer also noted that missing data are not an issue because their system requires all the information needed to calculate the measure. However, they are not able to track the percentage of patients that data was not collected on.
- The committee had questions about the 12-month window, since stays at SNFs are less than 12 months, and the developer explained that it was intended to allow smaller facilities to collect enough data (at least 30 cases). They also explained that facilities receive internal quarterly reports.
- After the submission, NQF suggested that the developer perform inter-class correlation testing at the facility level to provide additional reliability data. The results from this testing were submitted prior to the committee meeting. The intra-class correlation (ICC) between facilities was -0.03 with a P value of 0.59; according to the developer this is a score which demonstrates a good amount of variability between facilities. The within-facility ICC was 0.87 with a P value of less than 0.001, demonstrating consistency in ratings within a particular facility.
- Committee members questioned this interpretation and indicated the results demonstrate a lot variation within a single facility but not a lot of variation between facilities; lots of difference at the patient level makes it challenging to understand whether there are facility variations. It was noted by the committee that while this type of testing is important for identifying variation

within a facility and reliability, understanding the reliability of the performance measure *between* facilities requires different testing. The committee was asked to vote and make their recommendations with the data provided, and the developers are being provided the opportunity to assess if they have data to support the additional analyses for consideration. The committee specifically suggested the developers could do generalized estimation equations; and then perform the ICC.

- During the validity discussion, committee members asked about the response rate. The measure is currently voluntary, and the developers do not know the exact response rate but they believe it is the majority of patients.

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### **3. Feasibility: H-5; M-11; L-3; I-0**

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

#### Rationale:

- The committee had no major concerns with the feasibility of the measure.

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### **4. Usability and Use: H-3; M-11; L-2; I-3**

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

#### Rationale:

- The developer clarified that the FIM tool is free to use, but is not in the public domain, as the developer wants to maintain the integrity of the instrument through uniform use. Use of the tool requires training, and the developer does offer certification training to subscribers. Committee members noted concerns around burden for facilities that have not trained their staff. They noted that several groups of providers will need to be involved and there will need to be periodic retraining in response to staff turnover. The developer responded that there is free training available, and that it is important that the staff collecting the data understand what they are measuring to ensure the data are good. The committee agreed that training to ensure accurate data collection is especially important for measures that may be used for payment.
- Non-subscriber facilities have access to the instrument and the published training guide, but not the data repository. The developer clarified that if the measures are endorsed and adopted for use in federal programs, CMS will be able to use them royalty-free in any venue they choose.
- Committee members reiterated the potential unintended consequences of this measure in relation to *Jimmo vs. Sebelius*, with the possibility of making patients who cannot improve “less desirable”, but they noted this could be an issue for many measures and was not enough of a reason to not endorse this measure.
- Committee members also warned that this measure should not be used to make comparisons to other levels of care (IRF vs. SNF for example) as they are not comparable (in terms of patient complexity, levels of care, etc.), even though the measures are very similar. The developer stated that they agree, but others do not, and that collecting the same data across venues will provide data to prove that point.
- The developer also noted the IMPACT Act requires common measures that can be used across settings of care.
- Committee members who use the FIM-based measures in the IRF setting noted that they receive results at a facility, regional, and national level, so that they can compare themselves to

other providers. The developer added that they provide reports for facilities that take into account the average patient's change as well as the discharge dispositions, adjusting for case mix.

- In response to questions about potential manipulation of data, the developer added that they do not usually see major drastic changes in performance over short times without other significant changes at the facility such as a change in administration.

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## 5. Related and Competing Measures

- This measure was identified as competing with measure #2613: CARE: Improvement in Self Care. The committee has decided to delay the related/competing discussion until 2017, when additional consideration of the complexities of measuring functional status can be discussed and data from previously endorsed measures will be available.

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## Standing Committee Recommendation for Endorsement: Y-16; N-3

## 6. Public and Member Comment

- This measure received one supportive comment, commending the developer for the inclusion of toileting.

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## 7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0

**Decision: Approved for endorsement**

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## 8. Board of Directors Vote: Yes (October 25, 2016)

**Decision: Ratified for endorsement**

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## 9. Appeals

- No appeals were received on this measure.

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## 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

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

**Description:** 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.

**Numerator Statement:** 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:** Facility adjusted adjusted expected change in rasch derived values, adjusted at the Skilled Nursing Facility Case Mix Group level.

**Exclusions:** Excluded in the measure are patients who died in the SNF or patients less than 18 years old.

**Adjustment/Stratification:** Stratification by risk category/subgroup

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

**Type of Measure:** Outcome

**Data Source:** Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry

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

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## STANDING COMMITTEE MEETING [06/06/2016]

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

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

1a. Evidence: **Y-19; N-0**; 1b. Performance Gap: **H-3; M-13; L-1; I-2**

#### Rationale:

- This measure is very similar to #2769: Functional Change in Self Care. The committee questioned why there is also a Functional Change in Motor Skills measure, which includes both the self-care and mobility domains. The developer explained that there are patients who may have restricted mobility, but still be able to do self-care; the different measures are intended to provide different levels of functional measurement for different facilities and different patients. It was further clarified that the composite score would not require duplicate data collection since it is the same data.
- The developer reported that they did not see differences in performance by sociodemographic factors.
- The committee agreed that this measure was very similar to #2769 and did not require additional discussion or voting. They agreed to carry the votes on [evidence and gap](#) from the previous measure.

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

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

2a. Reliability: **H-3; M-9; L-2; I-5** 2b. Validity: **H-4; M-13; L-1; I-1**

#### Rationale:

- The committee agreed that this measure was very similar to #2769 and did not require additional discussion or voting. They agreed to carry the votes on [reliability and validity](#) from the previous measure.

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### **3. Feasibility:** **H-5; M-11; L-3; I-0**

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

Rationale:

- The committee agreed that this measure was very similar to #2769 and did not require additional discussion or voting. They agreed to carry the vote on [feasibility](#) from the previous measure.
- 

**4. Usability and Use: H-3; M-11; L-2; I-3**

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

Rationale:

- The committee agreed that this measure was very similar to #2769 and did not require additional discussion or voting. They agreed to carry the vote on [usability](#) from the previous measure.
- 

**5. Related and Competing Measures**

- This measure was identified as competing with measure #2612: CARE: Improvement in Mobility. The committee has decided to delay the related/competing discussion until 2017, when additional consideration of the complexities of measuring functional status can be discussed and data from previously endorsed measures will be available.
- 

**Standing Committee Recommendation for Endorsement: Y-15; N-4**

Rationale

- Although the committee decided to carry both the discussions and voting across the UDSMR SNF measures, they voted on overall recommendation for endorsement for each individually.
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**6. Public and Member Comment**

- This measure received one supportive comment, commending the developer for the inclusion of toileting.
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**7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0**

**Decision: Approved for endorsement**

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**8. Board of Directors Vote: Yes (October 25, 2016)**

**Decision: Ratified for endorsement**

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**9. Appeals**

- No appeals were received on this measure.

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## 2775 Functional Change: Change in Motor Score for Skilled Nursing Facilities

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

**Description:** 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.

**Numerator Statement:** 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.

**Denominator Statement:** 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.

**Exclusions:** Patients age at admission less than 18 years old  
Patients who died in the SNF.

**Adjustment/Stratification:** Stratification by risk category/subgroup

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

**Type of Measure:** Outcome

**Data Source:** Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

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

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### STANDING COMMITTEE MEETING [06/06/2016]

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

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

1a. Evidence: **Y-19; N-0**; 1b. Performance Gap: **H-3; M-13; L-1; I-2**

Rationale:

- The committee agreed that this measure was very similar to #2769 and did not require additional discussion or voting. They agreed to carry the votes on [evidence and gap](#) from the previous measure.

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

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

2a. Reliability: **H-3; M-9; L-2; I-5** 2b. Validity: **H-4; M-13; L-1; I-1**

Rationale:

- The committee agreed that this measure was very similar to #2769 and did not require additional discussion or voting. They agreed to carry the votes on [reliability and validity](#) from the previous measure.
- 

### **3. Feasibility: H-5; M-11; L-3; I-0**

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

#### Rationale:

- The committee agreed that this measure was very similar to #2769 and did not require additional discussion or voting. They agreed to carry the vote on [feasibility](#) from the previous measure.
- 

### **4. Usability and Use: H-3; M-11; L-2; I-3**

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

#### Rationale:

- The committee agreed that this measure was very similar to #2769 and did not require additional discussion or voting. They agreed to carry the vote on [usability](#) from the previous measure.
- 

### **5. Related and Competing Measures**

- This measure is the “parent” to the mobility and self-care measures that have been identified as competing with measures #2612: CARE Improvement in Mobility and #2613: Care Improvement in Self-Care. The committee has decided to delay the related/competing discussion until 2017, when additional consideration of the complexities of measuring functional status can be discussed and data from previously endorsed measures will be available.
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### **Standing Committee Recommendation for Endorsement: Y-15; N-4**

#### Rationale

- Although the committee decided to carry both the discussions and voting across the UDSMR SNF measures, they voted on overall recommendation for endorsement for each individually.
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### **6. Public and Member Comment**

- No comments were received on this measure.
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### **7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0**

**Decision: Approved for endorsement**

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### **8. Board of Directors Vote: Yes (October 25, 2016)**

**Decision: Ratified for endorsement**

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## 9. Appeals

- No appeals were received on this measure.

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## 2776 Functional Change: Change in Motor Score in Long Term Acute Care Facilities

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

**Description:** 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.

**Numerator Statement:** 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.

**Denominator Statement:** Facility adjusted expected change in rasch derived values, adjusted for CMG (Case Mix Group), based on impairment type, admission functional status, and age.

**Exclusions:** Patients age at admission less than 18 years old  
Patients who died in the LTAC.

**Adjustment/Stratification:** Stratification by risk category/subgroup

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility: Long Term Acute Care Hospital

**Type of Measure:** Outcome

**Data Source:** Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

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

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### STANDING COMMITTEE MEETING [06/06/2016]

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

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

1a. Evidence: **Y-18; N-1**; 1b. Performance Gap: **H-2; M-7; L-4; I-6; UPDATED GAP VOTE: H-0; M-15; L-1; I-0**

Rationale:

- The committee agreed that many of the issues discussed for measure #2769 would be applicable, as the main difference for this measure is the setting: LTAC instead of SNF. However, committee members pointed out that LTACs are a new setting for the FIM tool, and the data on their use are limited thus far: the reliability testing was performed using data from 6 facilities and ICC testing was performed using 16 LTAC facilities, as compared to almost 200 SNFs and more than 800 IRFs using the measure. Similar to SNFs, this measure is voluntary for LTACs.

- The developer noted that the same drastic level of functional improvement is not expected or seen in LTACs, but that a slight improvement can be possible. The measure can be used to identify patients who are starting to decline and need readmission to acute or intensive care. Patients at the lowest level – complete dependence – are also captured. In addition, the developer said that LTACs have not traditionally measured function, and they believe that asking questions about function can improve the quality of care by reminding providers of the importance of mobility and overall function.
- The measure also assesses the burden of care a patient needs by quantifying the help needed, therefore providing information needed by providers and families if patients are projected to go home.
- In response to questions, committee members explained that patients in LTACs are medically debilitated and require serious care such intravenous or respiratory therapy, or are dependent on ventilators; patients may have spinal cord or traumatic brain injuries.
- The data presented only reflect through 2011, but committee members noted a shrinking gap in care; the developer indicated they believe it is an artifact of the small sample size. Committee members noted that some premiere LTACs are providing significant rehabilitation services, but were uncomfortable with agreeing there was a gap based on testing in 6 facilities, especially since three were in one state (Massachusetts). The developer explained they now had more data on more facilities and could provide it if requested.
- At the in-person meeting, the measure passed evidence but did not reach consensus on performance gap.
- During the comment period, the developer provided additional data from 39 facilities. They submitted additional information on performance gap demonstrating opportunity for improvement. At the post-comment call, the committee revoted on gap and the measure passed this subcriterion.

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

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

2a. Reliability: **H-2; M-8; L-3; I-6** 2b. Validity: **H-1; M-10; L-4; I-4**

**UPDATED VOTES: Reliability: H-1; M-13; L-2; I-0 Validity: H-1; M-14; L-1; I-0**

### Rationale:

- The committee agreed that aside from the new setting and limited data, the issues for this measure were very similar to #2769 and did not require additional discussion on the reliability and validity. The committee did not reach consensus on reliability or validity.
- The developer completed and submitted additional testing during the comment period, including the intra-class correlation scores. The ICC score for this measure was 0.905,  $p < .001$ , which they indicated demonstrates very high consistency. Concurrent and predictive validity scores were also provided and were high. The committee agreed the new testing data was sufficient to ensure the reliability and validity of the measure, and it passed both during the voting on the post-comment call.

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## **3. Feasibility: H-4; M-11; L-3; I-1**

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

Rationale:

- The committee had no major concerns around the feasibility for this measure.
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**4. Usability and Use: H-2; M-9; L-3; I-5 UPDATED VOTE: H-2; M-14; L-0; I-0**

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

Rationale:

- The committee agreed that the issues for this measure were very similar to #2769 and did not require additional discussion on the usability. The committee did not reach consensus on usability.
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**5. Related and Competing Measures**

- No related or competing measures noted.
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**Standing Committee Recommendation for Endorsement: Y-11; N-8 UPDATED VOTE: Y-16; N-0**

Rationale

- After reviewing the additional data submitted by the developer, the committee voted to recommend the measure during the post-comment call.
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**6. Public and Member Comment**

- This measure received one comment supporting endorsement of the measure.
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**7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0**

**Decision: Approved for endorsement**

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**8. Board of Directors Vote: Yes (October 25, 2016)**

**Decision: Ratified for endorsement**

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**9. Appeals**

- No appeals were received on this measure.
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**2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities**

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

**Description:** 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.

**Numerator Statement:** 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:** Facility adjusted expected change in rasch derived values, adjusted for CMG (Case Mix Group), based on impairment type, admission functional status, and age

**Exclusions:** Excluded in the measure are patients who died in the LTAC or patients less than 18 years old.

**Adjustment/Stratification:** Stratification by risk category/subgroup

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility: Long Term Acute Care Hospital

**Type of Measure:** Outcome

**Data Source:** Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

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

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## STANDING COMMITTEE MEETING [06/06/2016]

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

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

1a. Evidence: **Y-18; N-1**; 1b. Performance Gap: **H-2; M-7; L-4; I-6** **UPDATED GAP VOTE: H-0; M-15; L-1; I-0**

#### Rationale:

- The committee agreed this measure is very similar to #2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on the criteria over from that measure. They did not reach consensus on [performance gap](#).
- During the comment period, the developer provided additional testing data from on 39 facilities. They submitted additional information on performance gap demonstrating opportunity for improvement. At the post-comment call, the committee revoted on gap and the measure passed this subcriterion.

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

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

2a. Reliability: **H-2; M-8; L-3; I-6** 2b. Validity: **H-1; M-10; L-4; I-4**

**UPDATED VOTES: Reliability: H-1; M-13; L-2; I-0 Validity: H-1; M-14; L-1; I-0**

#### Rationale:

- The developer noted they had provided both concurrent and predictive validity testing. They also explained they had attempted to have consistent sample sizes across facility types, which means they could show more variability in IRFs. However, they offered to provide more data on LTACs for the committee to review.
- The committee explained that LTACs are a new setting for both the tool and the measures, and that was why they wanted more data for this set of measures. Specifically, they requested

information on the facility level distribution of results, and the ICC coefficients at the facility level.

- The committee agreed this measure is very similar to #2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the votes on the criteria over from that measure. They did not reach consensus on either [reliability or validity](#).
- The developer completed and submitted additional testing during the comment period, including the intra-class correlation scores. The ICC score for this measure was 0.951,  $p < .001$ , which they indicated demonstrates very high consistency. Concurrent and predictive validity scores were also provided and were high. The committee agreed the new testing data was sufficient to ensure the reliability and validity of the measure, and it passed both during the voting on the post-comment call.

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### **3. Feasibility: H-4; M-11; L-3; I-1**

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

#### Rationale:

- The committee agreed this measure is very similar to #2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on the [criteria](#) over from that measure.

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### **4. Usability and Use: H-2; M-9; L-3; I-5 UPDATED VOTE: H-2; M-14; L-0; I-0**

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

#### Rationale:

- The committee agreed this measure is very similar to #2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on the [criteria](#) over from that measure. The committee did not reach consensus on usability.

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### **5. Related and Competing Measures**

- No related or competing measures noted.

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### **Standing Committee Recommendation for Endorsement: Y-9; N-10 UPDATED VOTE: Y-16; N-0**

#### Rationale

- After reviewing the additional data submitted during the comment period, the committee voted to recommend the measure for endorsement.

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### **6. Public and Member Comment**

- This measure received one comment supporting endorsement of the measure.

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### **7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0**

**Decision: Approved for endorsement**

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**8. Board of Directors Vote: Yes (October 25, 2016)**

**Decision: Ratified for endorsement**

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**9. Appeals**

- No appeals were received on this measure.

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**2778 Functional Change: Change in Mobility Score for Long Term Acute Care Facilities**

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

**Description:** 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.

**Numerator Statement:** 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:** Facility adjusted adjusted expected change in rasch derived values, adjusted at the Case Mix Group level.

**Exclusions:** Excluded in the measure are patients who died in the LTAC or patients less than 18 years old.

**Adjustment/Stratification:** Stratification by risk category/subgroup

**Level of Analysis:** Facility

**Setting of Care:** Post Acute/Long Term Care Facility: Long Term Acute Care Hospital

**Type of Measure:** Outcome

**Data Source:** Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

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

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**STANDING COMMITTEE MEETING [06/06/2016]**

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

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

1a. Evidence: **Y-18; N-1**; 1b. Performance Gap: **H-2; M-7; L-4; I-6** **UPDATED GAP VOTE: H-0; M-15; L-1; I-0**

Rationale:

- The committee agreed this measure is very similar to #2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on

[evidence and performance gap](#) over from that measure. The committee did not reach consensus on performance gap.

- During the comment period, the developer provided additional testing data from on 39 facilities. They submitted additional information on performance gap demonstrating opportunity for improvement. At the post-comment call, the committee revoted on gap and the measure passed this subcriterion.

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

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

2a. Reliability: **H-2; M-8; L-3; I-6** 2b. Validity: **H-1; M-10; L-4; I-4**

**UPDATED VOTES: Reliability: H-1; M-13; L-2; I-0 Validity: H-1; M-14; L-1; I-0**

### Rationale:

- The committee agreed this measure is very similar to #2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on the [reliability and validity](#) over from that measure. The committee did not reach consensus on either reliability or validity.
- The developer completed and submitted additional testing during the comment period, including the intra-class correlation scores. The ICC score for this measure was 0.938,  $p < .001$ , which they indicated demonstrates very high consistency. Concurrent and predictive validity scores were also provided and were high. The committee agreed the new testing data was sufficient to ensure the reliability and validity of the measure, and it passed both during the voting on the post-comment call.

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## **3. Feasibility: H-4; M-11; L-3; I-1**

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

### Rationale:

- The committee agreed this measure is very similar to #2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on [feasibility](#) over from that measure.

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## **4. Usability and Use: H-2; M-9; L-3; I-5 UPDATED VOTE: H-2; M-14; L-0; I-0**

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

### Rationale:

- The committee agreed this measure is very similar to #2776: Functional Change: Change in Motor Score in Long Term Acute Care Facilities, and elected to carry the discussion and votes on [usability](#) over from that measure. At the in-person meeting, they did not reach consensus on usability.
- The developer provided a verbal response to the concerns regarding number of LTACs using this measure. They explained that the 6 facilities used in the initial measure submission represented a sample of facilities, which they were able to augment with data from an additional 39 facilities

to update their analyses. They did acknowledge the FIM is not as widely used in LTACs as compared to other settings, but its use promotes alignment and some aspects of comparability that are needed in the market. After consideration of the additional information, the committee agreed the measure met the usability criterion.

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#### 5. Related and Competing Measures

- No related or competing measures noted.
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**Standing Committee Recommendation for Endorsement: Y-7; N-11 UPDATED VOTE: Y-16; N-0**

#### Rationale

- After reviewing the additional information and data submitted by the developer, the committee voted to recommend the measure for endorsement.
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#### 6. Public and Member Comment

- This measure received one comment supporting endorsement of the measure.
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**7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0**

**Decision: Approved for endorsement**

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**8. Board of Directors Vote: Yes (October 25, 2016)**

**Decision: Ratified for endorsement**

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#### 9. Appeals

- No appeals were received on this measure.
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### 2958 Informed, Patient Centered (IPC) Hip and Knee Replacement Surgery

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

**Description:** The measure is derived from patient responses to the Hip or Knee Decision Quality Instruments. Participants who have a passing knowledge score (60% or higher) and a clear preference for surgery are considered to have met the criteria for an informed, patient-centered decision.

The target population is adult patients who had a primary hip or knee replacement surgery for treatment of hip or knee osteoarthritis.

**Numerator Statement:** The numerator is the number of respondents who have an adequate knowledge score (60% or greater) and a clear preference for surgery.

**Denominator Statement:** The denominator includes the number of respondents from the target population of adults who have undergone primary knee or hip replacement surgery for treatment of knee or hip osteoarthritis.



**Exclusions:** Respondents who are missing 3 or more knowledge items do not get a total knowledge score and are excluded. Similarly, respondents who do not indicate a preferred treatment are excluded. No other exclusions as long as the respondent has the procedure for the designated condition.

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Clinician: Group/Practice

**Setting of Care:** Ambulatory Care: Clinician Office/Clinic

**Type of Measure:** PRO

**Data Source:** Patient Reported Data/Survey

**Measure Steward:** Massachusetts General Hospital

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## **STANDING COMMITTEE MEETING [06/07/2016]**

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

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

1a. Evidence: **Y-18; N-1**; 1b. Performance Gap: **H-1; M-14; L-4; I-0**

#### **Rationale:**

- This measure assesses the extent to which patients who had elective surgery for hip or knee replacement were well informed and had a clear preference for surgery beforehand. The survey instrument is based on six items: five knowledge questions and one that elicits a patient's preference. These questions focus on the surgical benefits, harms, recovery time, etc. The developer received input from both patients and providers when developing the questions.
- The committee agreed that asking a patient simple questions such as which treatment do they prefer, do they prefer to have surgery/non-surgical options, etc. should be standard for someone who is actually going to have surgery and if they are not given those options, then they should not be operated on.
- Hip and knee replacements are very common, and the committee agreed that just because a patient is clinically eligible for one of these procedures, does not mean it is the best choice of treatment. Thus, patients who elect to have one of these procedures should be well informed about the risks and benefits and have a clear preference.
- Additional questions were raised regarding how the questions in the instrument were derived and whether they are meant to be used in conjunction with Healthwise measure #2962: Shared Decision Making. The developer explained that while measuring the quality of the decision and the idea that someone is meaningfully involved in the decision making process is important; this measure is less generic and aims to ensure that a patient is more focused on knowledge.
- During their research, the developer found that there was no correlation between a patient's perception of feeling informed and their ability to answer knowledge-specific questions.
- The measure was tested at 3 different hospitals in the same geographic region in Massachusetts and therefore is not a nationally-representative sample.
- This instrument has a Spanish version available but has not been widely used.

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

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

2a. Reliability: **H-0; M-11; L-7; I-1** UPDATED VOTE: **Reliability: H-0; M-16; L-0; I-0**

2b. Validity: **H-0; M-13; L-5; I-1**

Rationale:

- One committee member questioned whether the developer did not or could not compare people with high scores to low scores. The developer responded that in order to test for discriminant validity, they split patients into 2 groups and gave only one of the groups decision aids. When comparing the two groups, they found significant differences on the knowledge questions, with the decision aids group scoring much higher.
- As with other measures considered during this phase of work, the committee suggested additional reliability testing, specifically testing at the practice level. It was suggested the developer should perform tests to assess between versus within practice variation.
- The committee questioned how the developer found the sample of patients and the post-operative timeline for giving the instrument given to patients. The developer noted that in order to get a reliable sample size, they had to survey patients who had received a hip or knee replacement within the last 2 years. The developer agreed that ideally, patients would be surveyed the week after surgery, but in order to collect enough data to calculate the measure, they recommended allowing a look back period of up to 2 years. The committee questioned the ability of patients to reliably and validly recollect conversations over that length of time.
- There were additional questions around what is considered to be a passing score when completing this instrument. The developer explained that they had set the criteria and in order to be considered well-informed, a patient must answer 3 or more of the 6 questions correctly.
- Since this measure deals with both hip and knee replacement surgeries, there were concerns about why the correct answer to recovery time was the same for both when those recovering from hip surgery are functional more quickly than those recovering from knee surgery. The developer responded to these concerns by saying that the instrument was not developed to assess actual precision, but more of the general realization that recovery takes a couple of months rather than a few days or a few years. To ensure that these questions and answers remain current, a multi-stakeholder expert panel reviews them every 2 years to ensure that the answers remain accurate and are updated if needed.
- An additional comment was raised around exclusions and looking at non-elective surgeries in addition to primary surgeries. The developer agreed to look into this but also noted that the most evidence supports the importance of shared decision making for elective or preference sensitive surgeries and procedures. It was also noted that non-elective surgeries are not considered exclusions.
- A number of committee members raised concerns with the instrument being given out up to 2 years after a surgery since so much can change in that time period; they argued that even those with a great memory would have a difficult time remembering such specific details about their surgery. In addition, they noted that patients could have done additional research after the surgery, thus giving them more knowledge than what was provided by their doctor. The developer agreed that it is important to have their knowledge assessed earlier, but explained that they have data on a study they did among breast cancer patients where they surveyed patients right after their surgery and then a year later. While they had predicted the numbers would drop, after data analysis they did not find a big difference in knowledge scores.
- Due to the testing concerns, the committee did not reach consensus on reliability at the in-person meeting. The measure passed validity.
- During the comment period, the developer submitted additional information for review, including: a clarification of the exclusions; the addition of clear time periods for the survey to be conducted after the surgery; and more information on the methods and results of the reliability

testing. They also conducted additional reliability testing by calculating the IPC within each sample. After reviewing this new data, the committee voted that the measure met the reliability criterion.

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### **3. Feasibility: H-0; M-15; L-3; I-1**

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

#### Rationale:

- Some committee members wanted information about the burden of collecting the data and how much time is required in collecting the responses. The developer explained the patient burden is very limited as it only takes a few minutes to complete the questions. In terms of burden on the provider, the developer thought it depended on the practice as some likely already have resources in place to assess patient-reported outcomes.
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### **4. Usability and Use: H-0; M-9; L-6; I-3 UPDATED VOTE: H-4; M-11; L-1; I-0**

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

#### Rationale:

- The measure is currently used in a quality recognition program but is not publically reported or used in an accountability program. The developer stated they would like to see this incorporated into programs that are assessing the quality of the surgical process of care, including whether the right patient was in the operating room, whether patients were well informed, and whether they had a clear preference for surgical treatments prior to surgery.
  - A committee member was concerned that if endorsed, this measure could be used for both evaluating quality improvement and for holding providers accountable, but the committee member did not think the measure was ready to be used for payment programs.
  - The measure is new, but is based on a patient reported survey that has been used by thousands of patients and has been well tested. The developer provided some additional information on use and usability, and at the post-comment call, the committee agreed the measure met this criterion.
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### **5. Related and Competing Measures**

- No related or competing measures noted.
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### **Standing Committee Recommendation for Endorsement: Y-10; N-8 UPDATED VOTE: Y-16; N-0**

#### Rationale

- After reviewing the clarifications and new information, the committee voted to recommend the measure during the post-comment call.
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### **6. Public and Member Comment**

- No comments were received on this measure.

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## 7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0

**Decision: Approved for endorsement**

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## 8. Board of Directors Vote: Yes (October 25, 2016)

**Decision: Ratified for endorsement**

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## 9. Appeals

- No appeals were received on this measure.
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## 2962 Shared Decision Making Process

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

**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.

**Numerator Statement:** 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.

**Denominator Statement:** 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.

**Exclusions:** 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.

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Clinician : Group/Practice

**Setting of Care:** Ambulatory Care : Clinician Office/Clinic

**Type of Measure:** PRO

**Data Source:** Patient Reported Data/Survey

**Measure Steward:** Informed Medical Decisions Foundation, a division of Healthwise

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## **STANDING COMMITTEE MEETING [06/07/2016]**

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

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

1a. Evidence: **Y-19; N-0**; 1b. Performance Gap: **H-10; M-8; L-1; I-0**

#### Rationale:

- The committee agreed that this PRO-PM demonstrated the value of the shared decision making approach and the 4 items within the questionnaire are based on the 3 essential concepts it was designed to address (ensuring that patients were informed and understood their issues; ensuring there was meaningful interaction between provider and patient to provide the opportunity for the patient's voice to be heard during the decision making process; and aligning the patient's goals, concerns and priorities by the end of the process).
- The developer noted that this measure works best when applied to a specific kind of decision (e.g. decision to have surgery for herniated disc).
- The committee voted to pass the evidence criteria for this measure.
- The committee noted a lack of diversity in the testing population and voiced their concerns about whether the developer had looked at health literacy and how that was accounted for in the tool, as health literacy level has been shown to impact people's ability to participate in the decision making process.
- The developer agreed the testing population was less heterogeneous than they would have liked, but said they reviewed the research carefully and were unable to find evidence that any groups (i.e., older or low educated patients) are resistant to being involved in decision making.
- Committee members noted the gap was smaller for back surgery patients. The developer explained they thought it was that back pain is often not fixable by surgery so back surgeons work particularly hard to ensure patients are aware of the pros and cons.
- Committee members wanted to know if there were some procedures not included because there is less of a choice in whether to have the procedure. The developer noted that shared decision making is appropriate for all medical care, but the procedures in the measure were selected because they thought they could both reliably sample the people who had made a decision at a given point, and they had the data.
- In response to committee questions, the developer noted that discussing the patient's goals and concerns is an essential part of real shared decision making, but they wanted to keep the questionnaire as short as they could. They hope to expand it in the future.
- The measure passed performance gap.

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

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

2a. Reliability: **H-2; M-14; L-3; I-0** 2b. Validity: **H-2; M-15; L-2; I-0**

#### Rationale:

- The committee discussed the challenge of reliably identifying people who are faced with a decision and decided not to do something (i.e., surgery), and agreed that there needs to be a reliable way of getting the same population of patients who have had the same experiences. They also understood the limitations the lack of such data places on measurement.
- The developer addressed this concern by stating the goals of the measure are to be able to identify a set of people that should actually have had a choice and to ensure that the same kind of patients can reliably be identified and compared across multiple clinical sites.
- The committee agreed that although the numbers in the testing population were small, there would likely be more variability with larger numbers and hospitals involved in the shared decision making process.
- Committee members requested more information about response rates, particularly the rate needed to ensure a valid sample (and whether that was feasible), and whether the homogeneity of the sample impacted the response rate. The developer noted that the way the survey is presented affects response rates, particularly when the clinical site follows up to ensure it is returned. The developer noted they are working on shared decision making on pregnancy and childbirth-related care, but did not currently have the data to include them. Their research thus far indicates the questions would not only apply to white men or to orthopedic decisions.
- The developer provided additional information on the cognitive testing performed.
- In response to questions, the developer explained they had randomized practices (not within practices) to ensure the samples were not contaminated.
- General consensus was reached that this measure met the reliability and validity criteria.

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### **3. Feasibility: H-0; M-12; L-7; I-0**

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

#### Rationale:

- The committee noted that mailed surveys and follow up calls are expensive and asked if there were IT ways to make gathering data easier. The developer explained that currently, the response rates were much lower with online surveys but it might be more feasible in other populations.
- The developer also noted this would not be performed all the time, but might be collected on back patients one year and hip patients the next, reducing the burden on any particular group.
- Despite some concerns, the measure did pass feasibility.

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### **4. Usability and Use: H-6; M-11; L-2; I-0**

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

#### Rationale:

- In response to questions, the developer noted that getting shared decision making right involves more providers than just physicians, and there are training programs available to teach providers how to incorporate shared decision making into their care.
- Although this measure is not currently in use for public reporting (and the developer indicated that while they support public reporting, they cannot have a direct role in implementing it), the committee noted that accountable care organization evaluations could find shared decision making useful within quality improvement.

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## 5. Related and Competing Measures

- The developer identified measure #1741: Patient Experience with Surgical Care Based on the Consumer Assessment of Healthcare Providers and Systems (CAHPS)<sup>®</sup> Surgical Care Survey, as a related measure and stated that the approved PCMH and ACO CAHPS measures of shared decision making were adaptations of the measures they developed and are proposing. The committee agreed they are similar but not competing.
- The developer mentioned that the measures were used for respondents who reported they had discussed starting or stopping a prescription medication (for PCMH) and for patients who reported discussion a prescription medication or a procedure with a provider (ACO). The shared decision making measure focuses measuring the process of patient and provider interaction and the extent it meets the process of shared-decision making.

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**Standing Committee Recommendation for Endorsement: Y-19; N-0**

## 6. Public and Member Comment

- This measure received two comments. One noted the continuing gap area of measures that “specifically address eliciting and aligning patient goals with their plan of care”; this was added to the measure gaps list.
- The second comment supported both the concept of shared decision making and the measure, as well as the committee’s consensus that shared decision making is appropriate for all patients, but suggested the measure needs to go further to include more patients. This comment was referred to the developer for a response:
  - **Developer response:** *This is a response to the public comment by Mark Dann from Compassion and Choices about the proposed measure of Shared Decision Making (SDM) Process. We proposed that the measure would be used to assess the extent to which patients reported they had an interaction with their providers that reflected shared decision making when they had decided to have any one of 7 surgical interventions: knee or hip replacement, surgery for herniated disc or spinal stenosis, PCI for stable angina, mastectomy for early stage breast cancer, or prostatectomy for prostate cancer. Mr. Dann comments that he would hope that the measure would be used to assess decision making for a much broader set of decisions for which there is more than one reasonable treatment approach. We could not agree more. Our proposal to NQF focused on those 7 decisions because we could reliably identify patients who had made those decisions and because we had data that supported the validity of the measure to distinguish those clinical practices making a special effort to do shared decision making from "usual care". However, we have used those questions in survey studies of patients who have made decisions about taking new long-term medications and about screening for cancer, as well as surgical procedures other than the 7 listed. We are confident that the measure does provide valid information about the decision making process, and we are very hopeful that we and others can collect data that help make the case for the value of extending the use of these questions to a wide variety of decisions beyond the 7 targeted in our proposal.*

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## 7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0

**Decision: Approved for endorsement**



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## 8. Board of Directors Vote: Yes (October 25, 2016)

Decision: Ratified for endorsement

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## 9. Appeals

- No appeals were received on this measure.

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## 2967 CAHPS® Home and Community Based Services (HCBS) Measures

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

**Description:** CAHPS® Home and Community Based Services (HCBS) 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.

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

**Numerator Statement:** The CAHPS Home- and Community-Based Services Survey 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 “No” 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:** The denominator for all measures is the number of survey respondents. Individuals eligible for the CAHPS Home- and Community-Based Services Survey Measures 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.

**Exclusions:** 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.

**Adjustment/Stratification:** Statistical risk model

**Level of Analysis:** HCBS Program

**Setting of Care:** Other: Home and Community-Based Services Program

**Type of Measure:** PRO

**Data Source:** Patient Reported Data/Survey

**Measure Steward:** Centers for Medicare and Medicaid Services

**STANDING COMMITTEE MEETING [06/06/2016]**

**1. Importance to Measure and Report:** this measure met the Importance criteria

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

1a. Evidence: **Y-17; N-1;**

1b. Performance Gap: **Split by domain**

Scale: **H-1; M-2; L-13; I-2 – Did not meet the Importance Criteria**

Global Ratings: H-0; M-10; L-7; I-1 – Did not reach consensus on the Importance Criteria

Recommendations: H-0; M-12; L-5; I-1 – Met the Importance Criteria

Unmet Needs: H-9; M-7; L-2; I-0 – Met the Importance Criteria

Physical Safety: H-0; M-4; L-7; I-7 – Did not meet the Importance Criteria

UPDATED VOTE (all domains together): H-5; M-11; L-0; I-0

Rationale:

- This is a package of 19 different measures, split into 5 domains: scale, global ratings, recommendations, unmet needs, and physical safety. The measures assess experience of care for long term home and community based service programs.
- The measures are scored at the state program level (Medicaid programs including both fee-for-service and Managed Long Term Services and Supports programs), and the developer noted there are 3-11 programs per state. The programs serve groups including frail elderly; people with physical, intellectual and developmental disabilities; and people with brain injuries. The data for the measures is collected via a 95 question survey (the developer noted there are many skip patterns so not all items are asked).
- Some of the committee members had serious concerns with the level of accountability for this measure. Since there are multiple agencies involved in providing services for the care of individual patients, the committee was concerned it would be difficult to make the measures actionable for improvement. Committee members with experience in this area noted that while the services are provided via “a hodgepodge of a lot of different programs” what matters to consumers is that their needs are met, not who is meeting them. Therefore, an overall assessment of whether care is being provided and the quality at the aggregate level is also important, not just the quality of any individual provider.
- It was also noted that these services are vital for many people to be able to live in the community with minimal support, and are particularly important to allow young people to live on their own, away from their parents. However, people who rely on these services may not be able to follow up on care issues independently, so being asked about the receipt of services is important.
- After an overview discussion, committee members turned to the specific measures within the submission. They requested clarification that the endorsement would be of the measure, not the experience of care survey, and on how many measures are potentially being endorsed. In addition, they wanted more information on whether all or some components would be used. It was clarified that states could select to only report on some of the measures. Committee members noted this could affect the reliability.
- Committee members asked the developer to explain why there are both a global ratings set and a recommendations set, given that they are assessing something very similar (patient satisfaction) using a different approach. The developer indicated that consistent with CAHPS surveys, the general overall ratings and recommendations are considered behavioral intentions and the global ratings are used a validation items for those subscales. Thus you want to keep that subscale structure because it tells a program where to focus improvement.
- It was noted that some HCBS programs also provide employment services. In response, the developer noted there was a supplement regarding employment, but because so few of the people in the testing population answered in a way that would trigger the appropriate series of questions, it was not adequately tested and therefore not included for potential endorsement.

- Committee members noted that the quality of these services is tremendously important to the disability community, and that the measures could be very useful for states as they assess whether their programs are meeting goals and are effective.
- Committee members discussed the possibility of deferring the measures, noting that while they agreed they address an important area they are still very new and that questions remain about the limited amount of testing conducted thus far. NQF staff provided information on the process for measure deferral.
- The committee decided to vote on evidence for all measures, and then split the measure set into 5 measure domains and vote on each of the domains separately for performance gap and the remaining criteria. They agreed that they were not comfortable voting as a single measure, but also did not think 19 separate votes were appropriate. The domains are: scale measures, global measures, recommendation measures, unmet needs measures, and physical safety.
- Committee members noted that some of the questions on the scale measure are similar to other surveys that patients may be receiving, and wanted to know if this would be duplicative. The developer explained that an HCBS program would likely field this survey at most once a year, and that while individuals may receive services and surveys from other providers, these will be administered either face to face or over the phone, making it a different kind of survey. They also noted that it would be conducted on a sample, not a full population, and states would likely be careful about burden for their participants.
- Each of the items in the measures are on a "never, sometimes, usually, always" scale which is then transformed to a 0 to 100 scale to make it easier to understand. After some discussion of this scale, committee members reviewed the data provided and were concerned about the lack of room for improvement on some of the measures. They requested information on whether the sampling or something about how the survey was administered may have led to much higher scores than might be expected based on the literature. The developer agreed the scores were high. They noted it was a random sample but only respondents who passed the cognitive screening were included, and that the modes of survey administration were appropriate for the population.
- Committee members discussed the potential for both "ceiling effect" and "floor effect" problems with the scores, given that some have very small standard deviations and some are very large, and also noted that since this is voluntary, they may only be getting high performers to participate.
- However, the committee noted that what both HCBS providers and patients really care about is whether people are doing well, and the details are less important to measure, except to the level that the details are needed to discover whether the reason people are not doing well is due to their needs not being met. They also noted this is a patient-reported outcome measure, and the data are reported by the people receiving the services. Committee members sought and were reassured that part of the consent process of the survey made it clear that this is a care optimizing tool and that patients were not at risk of losing care based on their answers.
- While the gap on most of the measures was small, it was very high on the unmet needs category; however, the committee was concerned that not all of this was under control of the program as the decision of what services to provide may be under the control of a state budget office.
- In a single vote, all of the measure domains passed evidence.
- The recommendation and unmet needs measures passed performance gap. The global measure did not achieve consensus on gap. The scale and physical safety measures did not pass performance gap and did not move forward in the discussion.

- During the comment period, the developer submitted additional information. The developer clarified that the small performance gaps for the personal safety-related measures are because they are “never events”. The unmet need measures are also expected to have a low prevalence and therefore a small gap. With this information, the committee agreed the measure met the performance gap subcriterion.

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## **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: Split by domain**

Scale: **H-X; M-X; L-X; I-X (originally did not move forward)**

Global Ratings: **H-0; M-7; L-8; I-3**

Recommendations: **H-0; M-4; L-12; I-2**

Unmet Needs: **H-1; M-2; L-12; I-3**

Physical Safety: **H-X; M-X; L-X; I-X (originally did not move forward)**

**UPDATED (one vote for all domains): H-2; M-13; L-1; I-0**

Validity: **H-1; M-14; L-1; I-0**

### Rationale:

- Committee members were concerned about the exclusion of people with cognitive limitations from the measure, as this group represents a substantial part of the population receiving these services, and reiterated the need for proxy reporters. However, they noted there are typically a lot of disagreements between proxy reporters and people reporting on their own behalf. They suggested that the proxy and self-reported scores be reported separately since they may not be comparable.
- Given that some states have one program and other states have multiple programs, committee members were concerned about being able to distinguish state variation from program variation as well as the within versus the between program variation within and across states. The developer explained that these will be administered by the states, so they might be administered differently within each state. The measures are not intended to be used to compare states to each other at this point, only to compare performance within a state. It will also be a voluntary measure.
- Committee members noted that people who cannot pass a cognitive screening would be excluded, which would include a lot of frail elderly who are receiving in-home services, and wondered whether the developer would consider including caregivers or family members. The developer explained that they had to exclude these patients for testing as they hoped for a CAHPS trademark, and CAHPS surveys do not allow proxies. However, as the testing progressed, they realized that they were receiving proxy responses so the testing pool was expanded to allow them after a period of time. In the Testing Experience and Functional Tools (TEFT) demonstration for round 2 of data collection, TEFT state grantees are including proxies since it became clear they were necessary. However, the measure testing submitted to NQF did not include these data because, at the time, it had not been consistently administered by proxy.
- In response to questions, the developer confirmed that three rounds of cognitive testing had been performed in both English and Spanish. The committee requested more information about the results of this testing and the developer agreed to provide it at a later date.

- Committee members wanted to know if the measures performed differently based on whether the survey was admitted by phone or in-person. The developer said the differences were significant on some but not all of the measures and said they recommend adjusting for survey mode to account for this.
- The committee noted the measures were tested in 26 different programs and the total responses were 2,300; they were concerned this sample was too small. The developer explained that going forward they recommend a larger sample size (400) in order to get a reliability score of 0.7. In addition, they noted in 2012, 25% of programs have less than 400 enrollees, 30% have between 400-3,000, and 41% have 3,000-50,000 enrollees. They noted that after the 2014 HCBS rule, waiver programs are expected to consolidate and grow over time. However, other committee members were concerned a larger sample might affect the validity as some programs will be assessed with half their population and others with a very small portion. They also noted potentially underrepresented samples such as traumatic brain injury patients.
- Committee members wanted to see additional testing, such as Spearman-Brown prophecy formula, to discover whether a larger sample or more items are needed to better distinguish between facility variation. They also requested ICC coefficients to better assess within versus between program comparisons.
- None of the measures passed the reliability criteria at the in-person meeting, but the committee offered some additional feedback to the developers to assist them in continuing to refine the measures.
- During the comment period, the developer completed additional testing and submitted more information. They reanalyzed the data with a larger sample that includes proxy respondents which improves both the gap and the reliability scores.
- The measure was changed to use of top-box scoring instead of mean scores, which is more consistent with CAHPS and which also improved the reliability. They also provided data from the Spearman-Brown prophecy formula, the inter-class correlations, and the factor analysis, as well as more information on the cognitive testing of the survey the measure uses.
- The developer also clarified several outstanding questions, including the unit of analysis (an HCBS program) and accountable entity (the operating entity), and summarized the minor changes made to comply with CAHPS standardized requirements as the survey the measure is based on is now a CAHPS survey.
- The committee requested clarification on whether the CAHPS designation included a review of the psychometric properties of the instrument and of the measures derived from the instrument. It was clarified that the CAHPS Consortium only evaluates at the instrument level, but would have found the reliability and validity of the tool acceptable to carry the CAHPS trademark.
- There continued to be some concerns about the reliability of some of the individual measures and clarification was sought regarding a threshold NQF would consider minimally acceptable. It was explained that NQF does not set threshold standards, but relies on the expertise of the respective committees to determine what satisfies the respective criteria. During the post-comment call, the committee discussed the new information submitted as well as the comments received. Voting was conducted on a post-call voting survey, and based on the information submitted, the committee came to consensus for voting on reliability for all domains of the measure in one vote and voted to recommend the measure.

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### **3. Feasibility: H-4; M-10; 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:

- During the feedback portion of the discussion, the committee requested more information on the feasibility of getting the optimal sample size of 400.
- The committee also requested information on how long the survey takes to complete and the burden on individual patients/caregivers.
- During the comment period the developer updated the Feasibility information, noting that the inclusion of proxy respondents significantly improves the response rate; they also noted improvements made to survey administration that improve rates.
- The developer estimates 30 minutes is needed to complete the survey, as compared to 20 minutes for Nursing Home CAHPS. They noted that the average response includes 51 out of 96 items (due to skip patterns) which would indicate an expected response time of around 13 minutes.

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### **4. Usability and Use: H-5; M-11; L-0; I-0**

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

#### Rationale:

- During the Importance section, the committee did discuss the intended use of this set of measures and wanted to know if this would be publically reported. Given that for some patients, the only way to receive improved care would be to move to a different state with a better program, committee members questioned how public reporting could be useful. The developer reiterated that the measures are still voluntary and that states could decide how to use it or report on it. Round 1 data were not reported publically, but were given to the states in individual reports, and the states wanted to keep the results internal.

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### **5. Related and Competing Measures**

- No related or competing measures noted.

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### **Standing Committee Recommendation for Endorsement: Y-15; N-1**

- The committee agreed that it is really important to capture the experience of patients who are provided with care by Home and Community Based services and to make sure that the measures used reflect that care appropriately. They noted that the reliability, feasibility, and usability should be monitored as the measure is implemented to ensure the measure remains psychometrically sound.

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### **6. Public and Member Comment**

- During the public and NQF Member comment period, the developer submitted additional information responding to the committee's concerns.
- This measure received 11 comments, which primarily focused on requesting reconsideration of the measure. Some of the comments recommended endorsing the actual survey and NQF



staff clarified for the committee that NQF does not endorse surveys; the committee recommends measures for endorsement if they meet the NQF evaluation criteria. The comments support the importance of experience of care measures for the HCBS community, which the committee had also previously supported.

- During the post-comment call, the committee discussed the new information submitted as well as the comments received. During voting conducted on a post-call voting survey, the committee voted to recommend all 19 measures included in the submission for endorsement. At this second vote, the committee voted on the measure as a single measure rather than splitting the measures into domains.

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**7. Consensus Standards Approval Committee (CSAC) Review (October 18, 2016): Y-16; N-0**

**Decision: Approved for endorsement**

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**8. Board of Directors Vote: Yes (October 25, 2016)**

**Decision: Ratified for endorsement**

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**9. Appeals**

- No appeals were received on this measure.



## Appendix B: NQF Person- and Family-Centered Care Portfolio and Related Measures

### Endorsed Measures

Measure Number	Measure Title	Measure Steward
0005	CAHPS Clinician & Group Surveys (CG-CAHPS)- 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	Adult Hospital CAHPS	Centers for Medicare & Medicaid Services
0167	Improvement in Ambulation/locomotion	Centers for Medicare & Medicaid Services
0174	Improvement in bathing	Centers for Medicare & Medicaid Services
0175	Improvement in bed transferring	Centers for Medicare & Medicaid Services
0176	Improvement in management of oral medications	Centers for Medicare & Medicaid Services
0177	Improvement in pain interfering with activity	Centers for Medicare & Medicaid Services
0208	Family Evaluation of Hospice Care	National Hospice and Palliative Care Organization
0228	3-Item Care Transition Measure (3-CTM)	University of Colorado
0258	CAHPS In-Center Hemodialysis Survey	Centers for Medicare & Medicaid Services
0420	Pain Assessment and Follow-Up	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
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

<b>Measure Number</b>	<b>Measure Title</b>	<b>Measure Steward</b>
0517	CAHPS® Home Health Care Survey (experience with care)	Centers for Medicare & Medicaid Services
0688	Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)	Centers for Medicare & Medicaid Services
0701	Functional Capacity in COPD patients before and after Pulmonary Rehabilitation	American Association of Cardiovascular and Pulmonary Rehabilitation
0726	Patient Experience of Psychiatric Care as Measured by the Inpatient Consumer Survey (ICS)	National Assoc. of State Mental Health Program Directors Research Institute, Inc. (NRI)
1623	Bereaved Family Survey	Department of Veterans Affairs / Hospice and Palliative Care
2286	Functional Change: Change in Self Care Score, Uniform Data System for Medical Rehabilitation (new)	Uniform Data System for Medical Rehabilitation
2287	Functional Change: Change in Motor Score, Uniform Data System for Medical Rehabilitation (new)	Uniform Data System for Medical Rehabilitation
2321	Functional Change: Change in Mobility Score, Uniform Data System for Medical Rehabilitation (new)	Uniform Data System for Medical Rehabilitation
2483	Patient Activation Measure	Insignia
2548	Child Hospital CAHPS (HCAHPS)	Agency for Healthcare Research and Quality
2612	The measure calculates a skilled nursing facility's (SNFs) average change in mobility for patients admitted from a hospital who are receiving therapy.	American Health Care Association
2613	CARE: Improvement in Self Care	American Health Care Association
2624	Functional Outcome Assessment	Centers for Medicare & Medicaid Services
2631	Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function	Centers for Medicare & Medicaid Services
2632	Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support	Centers for Medicare & Medicaid Services
2633	Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients	Centers for Medicare & Medicaid Services

<b>Measure Number</b>	<b>Measure Title</b>	<b>Measure Steward</b>
2634	Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility 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
2636	Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients	Centers for Medicare & Medicaid Services
2643	Average Change in Functional Status Following Lumbar Spine Fusion Surgery	Minnesota Community Measurement
2653	Average Change in Functional Status Following Total Knee Replacement Surgery	Minnesota Community Measurement

**Outstanding Measures**

<b>Measure Number</b>	<b>Measure Title</b>	<b>Measure Steward</b>
0010	Young Adult Health Care Survey (YAHCS)	Oregon Health & Science University
0011	Promoting Healthy Development Survey (PHDS)	Oregon Health & Science University
0429	Change in Basic Mobility as Measured by the AM-PAC:	CREcare
0430	Change in Daily Activity Function as Measured by the AM-PAC:	CREcare
0673	Physical Therapy or Nursing Rehabilitation/Restorative Care for Long-stay Patients with New Balance Problem	RAND Corporation
0676	Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay)	Centers for Medicare & Medicaid Services
0677	Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay)	Centers for Medicare & Medicaid Services
0700	Health-related Quality of Life in COPD patients before and after Pulmonary Rehabilitation	American Association of Cardiovascular and Pulmonary Rehabilitation
1741	Patient Experience with Surgical Care Based on the Consumer Assessment of Healthcare Providers and Systems (CAHPS) <sup>®</sup> Surgical Care Survey	American College of Surgeons
1821	L2: Patients receiving language services supported by qualified language services providers	Department of Health Policy, The George Washington University
1824	L1A: Screening for preferred spoken language for health care	Department of Health Policy, The George Washington University
1888	Workforce development measure derived from workforce development domain of the C-CAT	University of Colorado

<b>Measure Number</b>	<b>Measure Title</b>	<b>Measure Steward</b>
1892	Individual engagement measure derived from the individual engagement domain of the C-CAT	University of Colorado
1894	Cross-cultural communication measure derived from the cross-cultural communication domain of the C-CAT	University of Colorado
1896	Language services measure derived from language services domain of the C-CAT	University of Colorado
1898	Health literacy measure derived from the health literacy domain of the C-CAT	University of Colorado
1901	Performance evaluation measure derived from performance evaluation domain of the C-CAT	University of Colorado
1905	Leadership commitment measure derived from the leadership commitment domain of the C-CAT	University of Colorado
1919	Cultural Competency Implementation Measure	RAND Corporation

**Measures Assigned to Other Committees**

<b>Measure Number</b>	<b>Measure Title</b>	<b>Measure Steward</b>
0209	Comfortable Dying: Pain Brought to a Comfortable Level Within 48 Hours of Initial Assessment	National Hospice and Palliative Care Organization
0260	Assessment of Health-related Quality of Life in Dialysis Patients	Beth Witten, LLC
2651	CAHPS® Hospice Survey (experience with care)	Centers for Medicare & Medicaid Services

## Appendix C: Person- and Family-Centered Care Portfolio—Use in Federal Programs

NQF #	Title	Federal Programs: Finalized as of December 31, 2015
0005	CAHPS Clinician & Group Surveys (CG-CAHPS)- Adult, Child	Medicare Shared Savings Program;#Physician Compare; Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier
0006	Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 5.0 (Medicaid and Commercial)	Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults; Medicare Part C Display Measure;#Medicare Part C Plan Rating; Medicare
0166	HCAHPS	Hospital Compare; Hospital Inpatient Quality Reporting; Hospital Value-Based Purchasing; PPS-Exempt Cancer Hospital Quality Reporting
0167	Improvement in Ambulation/locomotion	Home Health Compare; Home Health Quality Reporting
0174	Improvement in bathing	Home Health Compare; Home Health Quality Reporting
0175	Improvement in bed transferring	Home Health Compare; Home Health Quality Reporting
0176	Improvement in management of oral medications	Home Health Compare; Home Health Quality Reporting
0177	Improvement in pain interfering with activity	Home Health Compare; Home Health Quality Reporting
0228	3-Item Care Transition Measure (3-CTM)	Hospital Inpatient Quality Reporting
0258	CAHPS In-Center Hemodialysis Survey	End-Stage Renal Disease Quality Incentive Program
0420	Pain assessment and follow up	Physician Quality Reporting System (PQRS)
0422	Functional status change for patients with knee impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0423	Functional status change for patients with hip impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0424	Functional status change for patients with foot/ankle impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0425	Functional status change for patients with lumbar spine impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program

<b>NQF #</b>	<b>Title</b>	<b>Federal Programs: Finalized as of December 31, 2015</b>
0426	Functional status change for patients with shoulder impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0427	Functional status change for patients with elbow, wrist or hand impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0428	Functional status change for patients with general orthopedic impairments	Physician Feedback; Physician Quality Reporting System (PQRS); Value-Based Payment Modifier Program
0517	CAHPS Home Health Care Survey (experience with care)	Home Health Compare; Home Health Quality Reporting
0676	Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay)	Nursing Home Compare; Nursing Home Quality Initiative and Nursing Home Compare
0677	Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay)	Nursing Home Compare; Nursing Home Quality Initiative and Nursing Home Compare
0688	Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)	Nursing Home Compare; Nursing Home Quality Initiative and Nursing Home Compare

## Appendix D: Project Standing Committee and NQF Staff

### STANDING COMMITTEE

#### **Lee Partridge (Co-Chair)**

Retired Senior Health Policy Advisor  
New York, NY

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**Kirsten Reed**

Project Manager

**Desmirra Quinnonez**

Project Analyst

## Appendix E: Measure Specifications

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### 2958 Informed, Patient Centered (IPC) Hip and Knee Replacement Surgery

#### STEWARD

Massachusetts General Hospital

#### DESCRIPTION

The measure is derived from patient responses to the Hip or Knee Decision Quality Instruments. Participants who have a passing knowledge score (60% or higher) and a clear preference for surgery are considered to have met the criteria for an informed, patient-centered decision.

The target population is adult patients who had a primary hip or knee replacement surgery for treatment of hip or knee osteoarthritis.

#### TYPE

Outcome: PRO

#### DATA SOURCE

Patient Reported Data The measure is derived from responses to the Hip and Knee Decision Quality Instruments. These patient reported surveys have been administered by mail, phone, and online for patients.

The method we have used most often is mail with a postage paid return envelope. A combination of mail, email, and phone reminders are often needed to achieve adequate response rates.

A third party vendor may also be used to administer the survey.

We have used these questions in English and Spanish.

Available in attached appendix at A.1 Attachment

NQF\_IPC\_Hip\_Knee\_Replacement\_Measure\_ICD10CPTcodes.xlsx

#### LEVEL

Clinician : Group/Practice

#### SETTING

Clinician Office/Clinic

#### NUMERATOR STATEMENT

The numerator is the number of respondents who have an adequate knowledge score (60% or greater) and a clear preference for surgery.

#### NUMERATOR DETAILS

The numerator is the number of respondents who have a positive decision quality assessment.

The numerator is calculated based on patient responses to 6 questions from the Hip or Knee Decision Quality Instruments (these items are listed below in S.18 and included as an appendix): five multiple choice knowledge items and one preference item. One point is awarded for each correct knowledge item and then a total knowledge score is calculated and scaled from (0-100%). Respondents who score 60% or higher on knowledge and who indicate a clear preference for surgery have a positive decision quality assessment and are counted in the

numerator. Those who score less than 60% and/or who are either unclear or prefer nonsurgical options have a negative decision quality assessment, and are not counted in the numerator.

#### DENOMINATOR STATEMENT

The denominator includes the number of respondents from the target population who have undergone primary knee or hip replacement surgery for treatment of knee or hip osteoarthritis.

#### DENOMINATOR DETAILS

The denominator is all adult patients who had a primary hip or knee replacement surgery for treatment of osteoarthritis and responded to the Hip or Knee Decision Quality Instrument. There is an attached sheet with ICD 10 and CPT codes needed to identify eligible patients to be surveyed for inclusion in the measure.

#### EXCLUSIONS

Respondents who are missing 3 or more knowledge items do not get a total knowledge score and are excluded. Similarly, respondents who do not indicate a preferred treatment are excluded. No other exclusions as long as the respondent has the procedure for the designated condition.

#### EXCLUSION DETAILS

Respondents missing 3, 4, or 5 knowledge responses. Respondents missing a response to the preference item.

#### RISK ADJUSTMENT

No risk adjustment or risk stratification

No risk stratification used.

#### STRATIFICATION

#### TYPE SCORE

Categorical, e.g., yes/no passing score defines better quality

#### ALGORITHM

The following steps need to be taken to calculate the measure: (1) identify eligible patients (2) administer the Hip or Knee Decision Quality Instrument (3) collect and code responses (4) calculate total knowledge scores and exclude those with 3 or more knowledge items missing (5) calculate the numerator (informed and clear preference for surgery or not) for each individual, excluding those with no knowledge score and/or no preference item and (6) aggregate the measure into a rate over the center or practice.

Responses to five knowledge questions and one preference item from the Hip or Knee Decision Quality Instrument are needed to calculate the Informed, Patient Centered (IPC) surgery measure and are coded and scored as indicated below.

Scoring of Knee Items used to generate the measure

1. Which treatment is most likely to provide relief from knee pain caused by osteoarthritis?

Surgery (Coded- 1)

Non-surgical treatments (coded =0)

Both are about the same (coded= 0)

Multiple responses = 0

Missing response = 0.33

2. After knee replacement surgery, about how many months does it take most people to get back to doing their usual activities?

Less than 2 months (coded= 0)

2 to 6 months (coded = 1)

7 to 12 months (coded= 0)

More than 12 months (coded= 0)

Multiple responses = 0

Missing response = 0.25

3.If 100 people have knee replacement surgery, about how many will have less knee pain after the surgery?

20 (coded= 0)

40 (coded= 0)

60 (coded= 0)

80 (coded = 1)

Multiple response = 0

Missing response = 0.25

4.If 100 people have knee replacement surgery, about how many will have a serious complication within 3 months after surgery?

4 (Coded=1)

10 (coded= 0)

14 (coded= 0)

20 (coded= 0)

Multiple responses = 0

Missing response = 0.25

5. If 100 people have knee replacement surgery, about how many will need to have the same knee replaced again in less than 15 years?

More than half (coded= 0)

About half (coded= 0)

Less than half (coded =1)

Multiple responses = 0

Missing = 0.33

Scoring of Preference Item for Knee:

6. Which treatment did you want to have to treat your knee osteoarthritis?

Surgery (coded=1)

Non-surgical treatments (coded= 0)

Not sure (coded= 0)

Multiple responses (coded=0)

Scoring of Hip Items used to generate the measure:

1. Which treatment is most likely to provide relief from hip pain caused by osteoarthritis?

Surgery (Coded- 1)

Non-surgical treatments (coded =0)  
Both are about the same (coded= 0)

Multiple responses = 0

Missing response = 0.33

2. After hip replacement surgery, about how many months does it take most people to get back to doing their usual activities?

Less than 2 months (coded= 0)  
2 to 6 months (coded = 1)  
7 to 12 months (coded= 0)  
More than 12 months (coded= 0)

Multiple responses = 0

Missing response = 0.25

3. If 100 people have hip replacement surgery, about how many will have less hip pain after the surgery?

30 (coded= 0)  
50 (coded= 0)  
70 (coded= 0)  
90 (coded = 1)

Multiple response = 0

Missing response = 0.25

4. If 100 people have hip replacement surgery, about how many will have a serious complication within 3 months after surgery?

4 (Coded=1)  
10 (coded= 0)  
14 (coded= 0)  
20 (coded= 0)

Multiple responses = 0

Missing response = 0.25

5. If 100 people have hip replacement surgery, about how many will need to have the same hip replaced again in less than 20 years?

More than half (coded= 0)  
About half (coded= 0)  
Less than half (coded =1)

Multiple responses = 0

Missing = 0.33

Scoring of Preference Item for Hip:

6. Which treatment did you want to have to treat your hip osteoarthritis?

Surgery (coded=1)  
Non-surgical treatments (coded= 0)  
Not sure (coded= 0)

Multiple responses (coded=0)

Knowledge: The responses are coded as indicated above. A total knowledge score is calculated by summing the five items, dividing by 5 and converting to percentage to get scores 0-100%. Missing answers are imputed with  $1/k$  where  $k$  is the number of possible responses (essentially equivalent to guessing). Multiple responses (e.g. on paper survey) are considered incorrect and coded as 0. A total knowledge score is calculated for all surveys that have three or more knowledge items completed.

Preference item: Respondents who mark surgery are considered to indicate a clear preference for surgery. Respondents that mark either non surgical treatments or not sure, are not considered to have a clear preference for surgery. Missing responses are not counted. Multiple responses (e.g. on a paper survey) are considered “not sure” and coded as 0.

A positive assessment “yes” for decision quality requires a knowledge score of 60% or higher and a clear preference for surgery. Otherwise, decision quality is “no.” No diagram provided

#### COPYRIGHT / DISCLAIMER

Copyright holder of the Hip and Knee Decision Quality Instruments used to generate the measure is Massachusetts General Hospital (MGH). MGH makes the survey available for use free of charge under the creative commons license agreement, with the provision it is not modified or sold.

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## 2614 CoreQ: Short Stay Discharge Measure

#### STEWARD

American Health Care Association

#### DESCRIPTION

The measure calculates the percentage of individuals discharged in a six month time period from a SNF, within 100 days of admission, who are satisfied (see: S.5 for details of the time-frame). This patient reported outcome measure is based on the CoreQ: Short Stay Discharge questionnaire that utilizes four items.

#### TYPE

Outcome: PRO

#### DATA SOURCE

Patient Reported Data The collection instrument is the CoreQ: Short Stay Discharge questionnaire and Resident Assessment Instrument Minimum Data Set (MDS) version 3.0. Available in attached appendix at A.1 No data dictionary

#### LEVEL

Facility

#### SETTING

Nursing Home / SNF

#### NUMERATOR STATEMENT

The measure assesses the number of patients who are discharged from a SNF, within 100 days of admission, who are satisfied. The numerator is the sum of the individuals in the facility that

have an average satisfaction score of  $\geq 3$  for the four questions on the CoreQ: Short Stay Discharge questionnaire.

#### NUMERATOR DETAILS

The numerator includes all of the patients who were discharged within 100 days of admission and had an average response  $\geq 3$  on the CoreQ: Short Stay Discharge questionnaire.

The calculation of the individual patient's average satisfaction score is done in the following manner:

-A numeric score is associated with each response scale option on the CoreQ: Short Stay Discharge questionnaire (that is, Poor=1, Average=2, Good=3, Very Good=4, and Excellent=5).

-The following formula is utilized to calculate the individual's average satisfaction score:  
[Numeric Score Question 1 + Numeric Score Question 2 + Numeric Score Question 3 + Numeric Score Question 4]/4

-The number of respondents whose average satisfaction score  $\geq 3$  are summed together and function as the numerator.

For patients with one missing data point (from the four items included in the questionnaire) imputation is used (representing the average value from the other three available responses). Patients with more than one missing data point, are excluded from the analyses (i.e., no imputation will be used for these patients). Imputation details are described further below (S.22).

No risk-adjustment is used (See S.18).

#### DENOMINATOR STATEMENT

The denominator includes all of the patients that are admitted to the SNF, regardless of payor source, for post-acute care, that are discharged within 100 days; who receive the survey (e.g. people meeting exclusions do not receive a questionnaire) and who respond to the CoreQ: Short Stay Discharge questionnaire within the time window (See: S.5).

#### DENOMINATOR DETAILS

The target population includes all of the individuals who respond to the CoreQ: Short Stay Discharge questionnaire within the time window (See: S.5).

The data is collected over a maximum 6 month time window. A shorter period can be used if the sample size (125) meets the specifications described below. The questionnaire is administered to discharged patients within 2 weeks of their discharge date. The discharge date is identified from nursing facility records (e.g., MDS, wherein a discharge MDS record is created that includes a discharge date). Note, the questionnaire must be administered after the patient is discharged and not on the day of the discharge. Patients must respond to the CoreQ: Short Stay Discharge questionnaire within 2 months of receiving the questionnaire.

#### EXCLUSIONS

Exclusions used are made at the time of sample selection and include:

- (1) Patients who died during their SNF stay;
- (2) Patients discharged to a hospital, another SNF, psychiatric facility, inpatient rehabilitation facility or long term care hospital;
- (3) Patients with court appointed legal guardian for all decisions;
- (4) Patients discharged on hospice;
- (5) Patients who left the nursing facility against medical advice (AMA);

(6) Patients who have dementia impairing their ability to answer the questionnaire defined as having a BIMS score on the MDS as 7 or lower. [Note: we understand that some SNCCs may not have information on cognitive function available to help with sample selection. In that case, we suggest administering the survey to all residents and assume that those with cognitive impairment will not complete the survey or have someone else complete on their behalf which in either case will exclude them from the analysis.]

(7) Patients who responded after the two month response period; and

(8) Patients whose responses were filled out by someone else.

#### EXCLUSION DETAILS

Individuals are excluded based on information from the admission Minimum Data Set (MDS) 3.0 assessment.

(1) Patients who die: This is recorded in the MDS as Deceased (A2100 = 08).

(2) Patients who were discharged to a hospital, another SNCC, psychiatric facility, Inpatient Rehabilitation Facilities (IRF), or MR/DD facility: This is recorded in the MDS as Discharge to hospital (A2100 = 03); another SNCC (A2100 = 02); psychiatric facility (A2100 = 04); Inpatient Rehabilitation Facilities (A2100 = 05); ID/DD facility (A2100 = 06).

(3) Patients with Court appointed legal guardian for all decisions as identified from the nursing facility health information system.

(4) Patients on hospice: This is recorded in the MDS as Hospice O0100K1 = 1 ("the patient was on hospice in the last 14 days while not a resident"), O0100K2 = 1 ("the patient was on hospice in the last 14 days while a resident"), A1800=07 ("entered from hospice"), or A2100=07 ("discharged to hospice").

(5) Patients who left the nursing facility against medical advice (AMA) as identified from nursing facility health information systems.

(6) Patients with a BIMS score on the MDS as 7 or lower. This is recorded in the MDS as C0500 <= 7.

(7) Patients who respond after the two month response period.

(8) Patients whose responses were filled out by somebody other than him/herself, as identified by the additional questions on the questionnaire.

Surveys returned as undeliverable are also excluded from the denominator.

#### RISK ADJUSTMENT

No risk adjustment or risk stratification

Not Applicable

#### STRATIFICATION

No stratification is used (see below).

#### TYPE SCORE

Other (specify): Non-weighted score. Score is a percentage. better quality = higher score

#### ALGORITHM

1. Identify SNF patients that are discharged within 100 days after admission

a. Calculate the duration of the SNF stay [MDS discharge date (A2000) - MDS admission date (A1900)] to determine if it is = 100 days.

2. Take the patients that have a SNF stay of = 100 days and exclude the following:



a. Patients who died; patients discharged to a hospital; patients with Court appointed legal guardian for all decisions; patients with hospice; patients who left the nursing facility against medical advice (AMA), and patients with a BIMS score of less than 7 do not receive that survey as a result of the exclusions (described in detail above).

i. Patients who die: This is recorded in the MDS as Die during stay (A2100 = 08)

ii. Patients who were discharged to a hospital, another SNCC, psychiatric facility, Inpatient Rehabilitation Facility, or MR/DD facility (A2100 = 06): This is recorded in the MDS as Discharge to hospital (A2100 = 03); another SNCC (A2100 = 02); psychiatric facility (A2100 = 04); Inpatient Rehabilitation Facility (A2100 = 05); MR/DD facility (A2100 = 06).

iii. Patients with Court appointed legal guardian for all decisions will be identified from nursing facility health information system.

iv. Patients on hospice: This is recorded in the MDS as Hospice O0100K1 = 1 ("the patient was on hospice in the last 14 days while not a resident"), O0100K2 = 1 ("the patient was on hospice in the last 14 days while a resident"), A1800=07 ("entered from hospice"), or A2100=07 ("discharged to hospice").

v. Patients who left the nursing facility against medical advice (AMA) will be identified from nursing facility health information systems.

vi. Patients with a BIMS score of 7 or less. This is recorded in the MDS as C0500 <= 7.

3. Administer the CoreQ: Short Stay Discharge questionnaire (See S.25) to these individuals. The questionnaire should be administered to patients discharged within 2 weeks of discharge. Provide individuals 2 months to respond to the survey.

a. Create a tracking sheet with the following columns:

i. Data Administered

ii. Data Response Received

iii. Time to Receive Response ([Date Response Received – Date Administered])

b. Exclude any surveys where Time to Receive Response >2 Months

4. Collect data over a maximum 6 month time window or until 125 consecutive usable surveys are received (See S.21).

5. Exclude responses not completed by the intended recipient (e.g. questions were answered by a friend or family members. It is important to note that cases in which the residents had help with reading the questions, or writing down their responses, are included in the measure, because in these cases the residents answer the questions themselves).

6. Exclude surveys that are returned after two months

7. Combine the CoreQ: Short Stay Discharge questionnaire items to calculate a patient level score. Responses for each item should be given the following scores:

a. Poor = 1,

b. Average = 2,

c. Good = 3,

d. Very good = 4 and

e. Excellent = 5.

8. Impute missing data if only one of the four questions are missing data by taking the average of the other questions responses.

9. Exclude any survey with 2 or more survey questions that have missing data.

10. Calculated patient score from usable surveys.

Patient score = (Score for Item 1 + Score for Item 2 + Score for Item 3 + Score for Item 4) / 4.

a. For example, a patient rates their satisfaction on the CoreQ questions as excellent = 5, very good = 4, very good = 4, and good = 3. The resident's total score will be 5 + 4 + 4 + 3 for a total of 16. The patient's total score (16) will then be divided by the number of questions (4), which equals 4. Thus the patient's average satisfaction rating is 4.0. This individual would be counted in the numerator since their average score is >3.0.

11. Flag those patients with an average score equal to or greater than 3.0

12. Calculate the CoreQ: Short Stay Discharge measure which represents the percent of patients with average scores of 3.0 or above.

CoreQ: Short Stay Measure = ([number of valid responses with an average score of =3.0] / [total number of valid responses]) \* 100

13. No risk-adjustment is used. No diagram provided

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None

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## 2615 CoreQ: Long-Stay Resident Measure

STEWARD

American Health Care Association

DESCRIPTION

The measure calculates the percentage of long-stay residents, those living in the facility for 100 days or more, who are satisfied (see: S.5 for details of the time-frame). This patient reported outcome measure is based on the CoreQ: Long-Stay Resident questionnaire that is a three item questionnaire.

TYPE

Outcome: PRO

DATA SOURCE

Patient Reported Data The collection instrument is the CoreQ: Long-Stay Resident questionnaire and exclusions are from the Resident Assessment Instrument Minimum Data Set (MDS) version 3.0.

Available in attached appendix at A.1 No data dictionary

LEVEL

Facility

SETTING

Nursing Home / SNF

NUMERATOR STATEMENT

The numerator is the sum of the individuals in the facility that have an average satisfaction score of =>3 for the three questions on the CoreQ: Long -Stay Resident questionnaire.

## NUMERATOR DETAILS

The numerator includes all of the long-stay residents that had an average response  $\geq 3$  on the CoreQ: Long Stay Resident questionnaire that do not meet any of the exclusions (see exclusions).

The calculation of an individual patient's average satisfaction score is done in the following manner:

- Respondents within the appropriate time window (see: S.5) and who do not meet the exclusions (See: S.11) are identified.
- A numeric score is associated with each response scale option on the CoreQ: Long-Stay Resident questionnaire (that is, Poor=1, Average=2, Good=3, Very Good=4, and Excellent=5).
- The following formula is utilized to calculate the individual's average satisfaction score.  
[Numeric Score Question 1 + Numeric Score Question 2 + Numeric Score Question 3]/3
- The number of respondents whose average satisfaction score  $\geq 3$  are summed together and function as the numerator.

For residents with one missing data point (from the 3 items included in the questionnaire) imputation is used (representing the average value from the other two available questions). Residents with more than one missing data point, are not counted in the measure (i.e., no imputation is used for these residents since their responses are excluded). Imputation details are described in Section S.22.

No risk-adjustment is used (see S.13).

## DENOMINATOR STATEMENT

The denominator includes all of the residents that have been in the SNF for 100 days or more regardless of payer status; who received the CoreQ: Long-Stay Resident questionnaire (e.g. people meeting exclusions do not receive the questionnaire), who responded to the questionnaire within the two month time window, who did not have the questionnaire completed by somebody other than the resident, and who did not have more than one item missing.

## DENOMINATOR DETAILS

The target population includes all current individuals in the SNF on a given day who have been in the SNF for 100 days or more and respond to the CoreQ: Long-Stay Resident questionnaire and completed the survey within the two month time window (See: S.5).

Residents have up to 2 months to complete and return the survey. The length-of-stay is identified from nursing facility records (MDS item A1600 "Entry Date").

## EXCLUSIONS

Exclusions made at the time of sample selection are the following: (1) Residents who have poor cognition defined by the BIMS score; (2) residents receiving hospice; (3) residents with a legal court appointed guardian; and (4) residents who have lived in the SNF for less than 100 days.

Additionally, once the survey is administered, the following exclusions are applied: a) surveys received outside of the time window (two months after the administration date) b) surveys that have more than one questionnaire item missing c) surveys from residents who indicate that someone else answered the questions for the resident. (Note this does not include cases where the resident solely had help such as reading the questions or writing down their responses.)

## EXCLUSION DETAILS

Individuals are excluded based on information from the Minimum Data Set (MDS) 3.0 assessment.

(1) Residents who have poor cognition: Then the Brief Interview for Mental Status (BIMS), a well validated dementia assessment tool is used. BIMS ranges are 0-7 (lowest); 8-12; and 13-15 (highest). Residents with BIMS scores of equal or less than 7 are excluded. (MDS Section C0200-C0500 items are used) (Saliba, et al., 2012).

(2) Patients receiving or having received any hospice. This is recorded in the MDS as Hospice O0100K1 = 1 (“the patient was on hospice in the last 14 days while not a resident”), O0100K2 = 1 (“the patient was on hospice in the last 14 days while a resident”), A1800=07 (“entered from hospice”), or A2100=07 (“discharged to hospice”).

(3) Patients with court appointed legal guardian for all decisions will be identified from nursing facility health information system.

(4) Residents who have lived in the SNF for less than 100 days will be identified from the MDS. This is recorded in the MDS (Section A1600, Entry Date).

(5) Residents that respond after the 2 month response period (see S.18, section 3.a on how this is determined).

(6) Residents whose responses were completed by someone other than the resident will be excluded. Identified from an additional question on the CoreQ: Long-Stay Resident questionnaire.

(7) Residents without usable data (defined as missing data for 2 or 3 of the survey questions).

Saliba D, Buchanan J, Edelen MO, Streim J, Ouslander J, Berlowitz D, Chodosh J.

J Am Med Dir Assoc. 2012 Sep;13(7):611-7. doi: 10.1016/j.jamda.2012.06.004. Epub 2012 Jul 15.

## RISK ADJUSTMENT

No risk adjustment or risk stratification

Not Applicable

## STRATIFICATION

No stratification is used (see below).

## TYPE SCORE

Other (specify): Non-weighted score. Score is a percent. better quality = higher score

## ALGORITHM

1. Identify the residents that have been residing in the SNF for 100 days or more. Length of stay so far is the MDS target date (TRGT\_DT) - MDS admission date (A1900).

2. Take the residents that have been residing in the SNF for  $\geq 100$  days and exclude the following:

a. Residents who have poor cognition defined as any residents with BIMS scores of 7 or lower. (MDS Section C0200-C0500 used) (Saliba, et al., 2012).

b. Patients receiving or having received any hospice. This is recorded in the MDS as Hospice O0100K1 = 1 (“the patient was on hospice in the last 14 days while not a resident”), O0100K2 = 1 (“the patient was on hospice in the last 14 days while a resident”), A1800=07 (“entered from hospice”), or A2100=07 (“discharged to hospice”). c. Residents with Court appointed legal guardian for all decisions will be identified from nursing facility health information system.

3. Administer the CoreQ: Long-stay Resident questionnaire (See S.25) to these individuals. The questionnaire should be administered to all residents in the SNF after exclusions in step 2 above. Communicate that residents have four weeks to respond to the survey. Note, we will include surveys received up to two months from administration but specify four weeks to help increase response rate and completion within a timely manner. This also allows providers to use follow-up strategy at 4 weeks to get responses by the 8 week cut off.
  4. Create a tracking sheet with the following columns:
    - i. Data Administered
    - ii. Data Response Received
    - iii. Time to Receive Response ([Date Response Received – Date Administered])
  5. Exclude any surveys received after 2 months from administration.
  6. Exclude responses not completed by the intended recipient (e.g. questions were answered by a friend or family members (Note: this does not include cases where the resident solely had help such as reading the questions or writing down their responses).
  7. Exclude responses that are missing data for 2 or 3 of the CoreQ questions.
  8. All of the remaining surveys are totaled and become the denominator.
  9. Combine the CoreQ: Long-Stay Resident questionnaire items to calculate a resident level score. Responses for each item should be given the following scores:
    - a. Poor = 1,
    - b. Average = 2,
    - c. Good = 3,
    - d. Very Good = 4 and
    - e. Excellent = 5.
  10. Impute missing data if only one of the three questions are missing data.
  11. Calculate resident score from usable surveys.
    - a. Patient score= (Score for Item 1 + Score for Item 2 + Score for Item 3) / 3.
      - i. For example, a resident rates their satisfaction on the three CoreQ questions as excellent = 5, very good = 4, and good = 3. The resident's total score will be 5 + 4 + 3 for a total of 12. The resident total score (12) will then be divided by the number of questions (3), which equals 4.0. Thus the residents average satisfaction rating is 4.0. Since the resident's score is >3.0, this resident will be counted in the numerator.
      - b. Flag those patients with a score equal to or greater than 3.0. These residents will be included in the numerator.
  12. Calculate the CoreQ: Long-Stay Resident Measure which represents the percent of residents with average scores of 3.0 or above. CoreQ: Long-Stay Resident Measure= ([number of respondents with an average score of =3.0] / [total number of respondents])\*100.
  13. No risk-adjustment is used.
- Saliba, D., Buchanan, J., Edelen, M.O., Streim, J., Ouslander, J., Berlowitz, D, & Chodosh J. (2012). MDS 3.0: brief interview for mental status. Journal of the American Medical Directors Association, 13(7): 611-617. No diagram provided

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None

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## 2616 CoreQ: Long-Stay Family Measure

### STEWARD

American Health Care Association

### DESCRIPTION

The measure calculates the percentage of family or designated responsible party for long stay residents (i.e., residents living in the facility for 100 days or more), who are satisfied (see: S.5 for details of the timeframe). This consumer reported outcome measure is based on the CoreQ: Long-Stay Family questionnaire that has three items.

### TYPE

Outcome: PRO

### DATA SOURCE

Patient Reported Data The collection instrument is the CoreQ: Long-Stay Family questionnaire and for exclusions the Resident Assessment Instrument Minimum Data Set (MDS) version 3.0 is used

Available in attached appendix at A.1 No data dictionary

### LEVEL

Facility

### SETTING

Nursing Home / SNF

### NUMERATOR STATEMENT

The numerator assesses the number of family or designated responsible party for long stay residents that are satisfied. Specifically, the numerator is the sum of the family or designated responsible party members for long stay residents that have an average satisfaction score of  $\geq 3$  for the three questions on the CoreQ: Long-Stay Family questionnaire.

### NUMERATOR DETAILS

The numerator includes all of the family or designated responsible party members for long stay residents that had an average response  $\geq 3$  on the CoreQ: Long-Stay Family questionnaire.

We calculate the average satisfaction score for the individual family or designated responsible party member for long stay residents in the following manner:

- Respondents within the appropriate time window (see S.5) and who do not meet the exclusions (see S.11) are identified.
- A numeric score is associated with each response scale option on the CoreQ: Long-Stay Family questionnaire (that is, Poor=1, Average=2, Good=3, Very Good=4, and Excellent=5).
- The following formula is utilized to calculate the individual's average satisfaction score:  
$$[\text{Numeric Score Question 1} + \text{Numeric Score Question 2} + \text{Numeric Score Question 3}] / 3$$
- The number of respondents whose average satisfaction score  $\geq 3$  are summed together and function as the numerator.

For respondents with one missing data point (from the 3 items included in the questionnaire) imputation will be used (representing the average value from the other two available

questions). For respondents with more than one missing data point, they will be excluded from the analyses (i.e., no imputation will be used for these family members). Imputation details are described further below (S.18).

No risk-adjustment is used (see S.13).

#### DENOMINATOR STATEMENT

The target population is family or designated responsible party members of a resident residing in a SNF for at least 100 days. The denominator includes all of the individuals in the target population who respond to the CoreQ: Long-Stay Family questionnaire within the two month time window (see S.5) who do not meet the exclusion criteria (see S.10).

#### DENOMINATOR DETAILS

The denominator includes all of the family or the designated responsible party members for residents that have been in the SNF for 100 days or more regardless of payer status; who received the CoreQ: Long-Stay Family questionnaire (e.g. people meeting exclusions do not receive the questionnaire), and who responded to the questionnaire within the two month time window.

The length-of-stay (of the resident of the family member or designated responsible party) will be identified from MDS nursing facility records (MDS item A1600 “Entry Date”).

#### EXCLUSIONS

Please note, the resident representative for each current resident is initially eligible regardless of their being a family member or not. Only one primary contact per resident should be selected.

Exclusions made at the time of sample selection include: (1) family or designated responsible party for residents with hospice; (2) family or designated responsible party for residents with a legal court appointed guardian; (3) representatives of residents who have lived in the SNF for less than 100 days; and (4) representatives who reside in another country.

Additionally, once the survey is administered, the following exclusions are applied: a) surveys received outside of the time window (more than two months after the administration date) and b) surveys that have more than one questionnaire item missing.

#### EXCLUSION DETAILS

Exclusions will be based on information from the Minimum Data Set (MDS) 3.0 assessment. Representatives of residents with the following criteria will be excluded:

(1) Residents on hospice. This is recorded in the MDS as Hospice O0100K1 = 1 (“the patient was on hospice in the last 14 days while not a resident”), O0100K2 = 1 (“the patient was on hospice in the last 14 days while a resident”), A1800=07 (“entered from hospice”), or A2100=07 (“discharged to hospice”).

(2) Residents with court appointed legal guardian for all decisions will be identified from nursing facility health information system.

(3) Residents who have lived in the SNF for less than 100 days will be identified from the MDS. This is recorded in the MDS (item A1600 “Entry Date”).

(4) Respondents who reside in another country, to be identified from nursing facility health information system.

(5) Respondents who have two or more missing data point are excluded from the analysis.

(6) Respondents that respond after the two month response period will be excluded.

## RISK ADJUSTMENT

No risk adjustment or risk stratification  
Not Applicable.

## STRATIFICATION

No stratification is used.

## TYPE SCORE

Other (specify): Non-weighted score. Score is a percent. better quality = higher score

## ALGORITHM

1. Identify the representatives of residents that have been residing in the SNF for 100 days or more. Length of stay so far is the MDS target date (TRGT\_DT) - MDS admission date (A1900).
2. Take the representatives of residents that have been residing in the SNF for  $\geq 100$  days and exclude the following:
  - a. Representatives of residents on hospice. This is recorded in the MDS as Hospice O0100K1 = 1 (“the patient was on hospice in the last 14 days while not a resident”), O0100K2 = 1 (“the patient was on hospice in the last 14 days while a resident”), A1800=07 (“entered from hospice”), or A2100=07 (“discharged to hospice”).
  - b. Residents with Court appointed legal guardian for all decisions as identified from nursing facility health information system.
3. Exclude representatives of residents who reside in another country.
4. Administer the CoreQ: Long-Stay Family questionnaire (See S.25) to the representatives that do not meet these exclusion criteria. Provide the family or designated responsible party member for the resident two months to respond to the survey.
  - a. Create a tracking sheet with the following columns:
    - i. Date Administered
    - ii. Date Response Received
    - iii. Time to Receive Response: ([Date Response Received – Date Administered])
  - b. Exclude any surveys where Time to Receive Response  $> 60$  days (2 months)
5. Combine the CoreQ: Long-Stay Family questionnaire items to calculate a resident’s representative satisfaction score. Responses for each item should be given the following scores:
  - a. Poor = 1,
  - b. Average = 2,
  - c. Good = 3,
  - d. Very good = 4 and
  - e. Excellent = 5.
6. Impute missing data if only one of the three questions are missing data. Drop all survey response if 2 or more survey questions have missing data.
7. Calculate resident’s representative score from usable surveys.
  - a. Representative average score = (Score for Item 1 + Score for Item 2 + Score for Item 3) / 3.
  - b. Flag those representatives with a score equal to or greater than 3.0
    - i. For example, a representative of a resident rates their satisfaction on the three CoreQ questions as excellent = 5, very good = 4, and good = 3. The family member’s total score will be



5 + 4 + 3 for a total of 12. The representative of the long-stay resident total score (12) will then be divided by the number of questions (3), which equals 4.0. Thus the representative's average satisfaction rating is 4.0. Since this person's average response is >3.0 they would be counted in the numerator. If it was <3.0 they would not be counted.

8. Calculate the facility's CoreQ: Long-Stay Family Measure which represents the percent of respondents with average scores of 3.0 or above.

a. CoreQ: Long-Stay Family Measure =  $\left(\frac{\text{number of respondents with an average score of } \geq 3.0}{\text{total number of valid responses}}\right) * 100$

9. No risk-adjustment is used. No diagram provided

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None

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## 2962 Shared Decision Making Process

### STEWARD

Informed Medical Decisions Foundation, a division of Healthwise

### 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 or 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.

### TYPE

Outcome: PRO

### DATA SOURCE

Patient Reported Data We have used these questions in mail surveys most often, but we have also use them on the Internet and in a national telephone survey using telephone interviewers. We have used these questions in English and Spanish.

No data collection instrument provided Attachment ICD\_Codes.xlsx

### LEVEL

Clinician : Group/Practice

### SETTING

Clinician Office/Clinic

### NUMERATOR STATEMENT

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

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

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

See S2. There is an attached sheet with ICD 10 and CPT codes needed to identify eligible patients.

#### EXCLUSIONS

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

Included in attached file

#### RISK ADJUSTMENT

No risk adjustment or risk stratification

N/A

#### STRATIFICATION

none

#### TYPE SCORE

Continuous variable, e.g. average better quality = higher score

#### ALGORITHM

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. No diagram provided

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N/A

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### 0420 Pain Assessment and Follow-Up

#### STEWARD

Centers for Medicare & Medicaid Services

#### DESCRIPTION

Percentage of visits for patients aged 18 years and older with documentation of a pain assessment using a standardized tool(s) on each visit AND documentation of a follow-up plan when pain is present

#### TYPE

Process

#### DATA SOURCE

Claims (Only), Paper Records The data source is the patient medical record. Medicare Part B claims data and registry data is provided for test purposes.

No data collection instrument provided Attachment Data\_Dictionary\_033016.xlsx

#### LEVEL

Clinician : Group/Practice, Clinician : Individual

#### SETTING

Clinician Office/Clinic, Behavioral Health : Outpatient, Outpatient Rehabilitation

## NUMERATOR STATEMENT

Percentage of visits for patients aged 18 years and older with documentation of a pain assessment using a standardized tool(s) on each visit AND documentation of a follow-up plan when pain is present.

## NUMERATOR DETAILS

### Definitions:

**Pain Assessment** – Documentation of a clinical assessment for the presence or absence of pain using a standardized tool is required. A multi-dimensional clinical assessment of pain using a standardized tool may include characteristics of pain; such as: location, intensity, description, and onset/duration.

**Standardized Tool** – An assessment tool that has been appropriately normed and validated for the population in which it is used. Examples of tools for pain assessment, include, but are not limited to: Brief Pain Inventory (BPI), Faces Pain Scale (FPS), McGill Pain Questionnaire (MPQ), Multidimensional Pain Inventory (MPI), Neuropathic Pain Scale (NPS), Numeric Rating Scale (NRS), Oswestry Disability Index (ODI), Roland Morris Disability Questionnaire (RMDQ), Verbal Descriptor Scale (VDS), Verbal Numeric Rating Scale (VNRS) and Visual Analog Scale (VAS).

**Follow-Up Plan** – A documented outline of care for a positive pain assessment is required. This must include a planned follow-up appointment or a referral, a notification to other care providers as applicable OR indicate the initial treatment plan is still in effect. These plans may include pharmacologic and/or educational interventions.

**Not Eligible** – A patient is not eligible if one or more of the following reason(s) is documented:

- Severe mental and/or physical incapacity where the person is unable to express himself/herself in a manner understood by others. For example, cases where pain cannot be accurately assessed through use of nationally recognized standardized pain assessment tools
- Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status

**NUMERATOR NOTE:** The standardized tool used to assess the patient's pain must be documented in the medical record (exception: A provider may use a fraction such as 5/10 for Numeric Rating Scale without documenting this actual tool name when assessing pain for intensity).

G-codes are defined as Quality Data Codes (QDCs), which are subset of HCPCs II codes. QDCs are non-billable codes that providers will use to delineate their clinical quality actions, which are submitted with Medicare Part B Claims. There are 6 G-code options for this measure.

Numerator Quality-Data Coding Options for Reporting Satisfactorily:

Pain Assessment Documented as Positive AND Follow-Up Plan Documented

(One quality-data code [G8730 or G8731] is required on the claim form to submit this numerator option)

Performance Met: G8730: Pain assessment documented as positive using a standardized tool AND a follow-up plan is documented

OR

Pain Assessment Documented as Negative, No Follow-Up Plan Required

Performance Met: G8731: Pain assessment using a standardized tool is documented as negative, no follow-up plan required

OR

Pain Assessment not Documented Patient not Eligible

(One quality-data code [G8442 or G8939] is required on the claim form to submit this numerator option)

Other Performance Exclusion: G8442: Pain assessment NOT documented as being performed, documentation the patient is not eligible for a pain assessment using a standardized tool

OR

Pain Assessment Documented as Positive, Follow-Up Plan not Documented, Patient not Eligible

Other Performance Exclusion: G8939: Pain assessment documented as positive, follow-up plan not documented, documentation the patient is not eligible

OR

Pain Assessment not Documented, Reason not Given

(One quality-data code [G8732 or G8509] is required on the claim form to submit this numerator option)

Performance Not Met: G8732: No documentation of pain assessment, reason not given

OR

Pain Assessment Documented as Positive, Follow-Up Plan not Documented, Reason not Given

Performance Not Met: G8509: Pain assessment documented as positive using a standardized tool, follow-up plan not documented, reason not.

#### DENOMINATOR STATEMENT

All visits for patients aged 18 years and older

#### DENOMINATOR DETAILS

Denominator Criteria (Eligible Cases): Patient encounter during the reporting period (CPT or HCPCS): 90791, 90792, 92002, 92004, 92012, 92014, 92507, 92508, 92526, 96116, 96118, 96150, 96151, 97001, 97002, 97003, 97004, 97532, 98940, 98941, 98942, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, D7140, D7210, G0101, G0402, G0438, G0439

Lists of individual codes with descriptors for the measure specifications are provided in an Excel file at S.2b

#### EXCLUSIONS

Not Eligible – A patient is not eligible if one or more of the following reason(s) is documented:

Severe mental and/or physical incapacity where the person is unable to express himself/herself in a manner understood by others. For example, cases where pain cannot be accurately assessed through use of nationally recognized standardized pain assessment tools

Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status

#### EXCLUSION DETAILS

Pain Assessment not Documented Patient not Eligible

(One quality-data code [G8442 or G8939] is required on the claim form to submit this numerator option)

Other Performance Exclusion: G8442: Pain assessment NOT documented as being performed, documentation the patient is not eligible for a pain assessment using a standardized tool

OR

Pain Assessment Documented as Positive, Follow-Up Plan not Documented, Patient not Eligible  
Other Performance Exclusion: G8939: Pain assessment documented as positive, follow-up plan not documented, documentation the patient is not eligible

#### RISK ADJUSTMENT

No risk adjustment or risk stratification  
n/a

#### STRATIFICATION

All eligible patients are subject to the same numerator criteria

#### TYPE SCORE

Rate/proportion better quality = higher score

#### ALGORITHM

Satisfactory reporting criteria are met by valid submission of one of six G codes on claims that meet denominator criteria.

A rate of quality performance is calculated by dividing the number of records with G codes indicating that the quality actions were performed or that the patient was not eligible by total number of valid G code submissions.

THIS SECTION PROVIDES DEFINITIONS & FORMULAS FOR THE NUMERATOR (A), TOTAL DENOMINATOR POPULATION (TDP), DENOMINATOR EXCLUSIONS (B) CALCULATION & PERFORMANCE DENOMINATOR (PD) CALCULATION.

NUMERATOR (A): HCPCS Clinical Quality Codes G8730, G8731

TOTAL DENOMINATOR POPULATION (TDP): Patient aged 18 years and older on the date of the encounter of the 12-month reporting period, with denominator defined encounter codes & Medicare Part B Claims reported HCPCS Clinical Quality Codes G8730, G8731, G8442, G8939, G8732, G8509

DENOMINATOR EXCLUSION (B): HCPCS Clinical Quality Code G8442, G8939

DENOMINATOR EXCLUSION CALCULATION: Denominator Exclusion (B): # of patients with valid exclusions # G8442+G8939 / # TDP

PERFORMANCE DENOMINATOR CALCULATION: Performance Denominator (B): Patients meeting criteria for performance denominator calculation # A / (# TDP - # B)

(Refer to section V. Measure Logic Flow Diagram for Performance Rate Calculation in attached "NQF Endorsement Measurement Submission Summary Materials" Document) Available in attached appendix at A.1

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## 2967 CAHPS® Home- and Community-Based Services Measures

### STEWARD

Centers for Medicare and Medicaid Services

### DESCRIPTION

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

#### TYPE

Outcome: PRO

#### DATA SOURCE

Patient Reported Data CAHPS Home- and Community-Based Services Survey

In-person and phone

English and Spanish

Available in attached appendix at A.1 Attachment HCBS\_EoC\_Supplementary\_Tables\_3\_29\_16-635948620440450044.xlsx

#### LEVEL

Other

#### SETTING

Other Home and Community-Based Services Program

#### NUMERATOR STATEMENT

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 “No” 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)

#### NUMERATOR DETAILS

Attached Excel Table S.2b includes the specific item wording for each measure and the response options that go into the numerator .

To calculate the program-level scores:

Score each item using the top box method; calculate a mode adjusted score for each respondent; calculate case mix adjusted scores for each program; and calculate means for the scale measures.

Scale Measures:

For each survey item, the top box numerator is the number of respondents who selected the most positive response category.

Staff are reliable and helpful – survey items 13 14 15 19 37 38

- 13: In the last 3 months, how often did {personal assistance/behavioral health staff} come to work on time?
- 14: In the last 3 months, how often did {personal assistance/behavioral health staff} work as long as they were supposed to?
- 15: In the last 3 months, when staff could not come to work on a day that they were scheduled, did someone let you know that {personal assistance/behavioral health staff} could not come that day?
- 19: In the last 3 months, how often did {personal assistance/behavioral health staff} make sure you had enough personal privacy when you dressed, took a shower, or bathed?
- 37: In the last 3 months, how often did {homemakers} come to work on time?
- 38: In the last 3 months, how often did {homemakers} work as long as they were supposed to?  
Staff listen and communicate well – survey items 28 29 30 31 32 33 41 42 43 44 45
- 28: In the last 3 months, how often did {personal assistance/behavioral health staff} treat you with courtesy and respect?
- 29: In the last 3 months, how often were the explanations {personal assistance/behavioral health staff} gave you hard to understand because of an accent or the way {personal assistance/behavioral health staff} spoke English?
- 30: In the last 3 months, how often did {personal assistance/behavioral health staff} treat you the way you wanted them to?
- 31: In the last 3 months, how often did {personal assistance/behavioral health staff} explain things in a way that was easy to understand?
- 32: In the last 3 months, how often did {personal assistance/behavioral health staff} listen carefully to you?
- 33: In the last 3 months, did you feel {personal assistance/behavioral health staff} knew what kind of help you needed with everyday activities, like getting ready in the morning, getting groceries, or going places in your community?
- 41: In the last 3 months, how often did {homemakers} treat you with courtesy and respect?
- 42: In the last 3 months, how often were the explanations {homemakers} gave you hard to understand because of an accent or the way the {homemakers} spoke English?
- 43: In the last 3 months, how often did {homemakers} treat you the way you wanted them to?
- 44: In the last 3 months, how often did {homemakers} listen carefully to you?
- 45: In the last 3 months, did you feel {homemakers} knew what kind of help you needed?  
Case manager is helpful – survey items 49 51 53
- 49: In the last 3 months, could you contact this {case manager} when you needed to?
- 51: In the last 3 months, did this {case manager} work with you when you asked for help with getting or fixing equipment?
- 53: In the last 3 months, did this {case manager} work with you when you asked for help with getting other changes to your services?
- Choosing the services that matter to you – survey items 56 57
- 56: In the last 3 months, did your [program-specific term for “service plan”] include . . .

57: In the last 3 months, did you feel {personal assistance/behavioral health staff} knew what's on your [program-specific term for "service plan"], including the things that are important to you?

Transportation to medical appointments – survey items 59 61 62

59: Medical appointments include seeing a doctor, a dentist, a therapist, or someone else who takes care of your health. In the last 3 months, how often did you have a way to get to your medical appointments?

61: In the last 3 months, were you able to get in and out of this ride easily?

62: In the last 3 months, how often did this ride arrive on time to pick you up?

Personal safety and respect – survey items 64 65 68

64: In the last 3 months, was there a person you could talk to if someone hurt you or did something to you that you didn't like?

65: In the last 3 months, did any {personal assistance/behavioral health staff, homemakers, or your case managers} take your money or your things without asking you first?

68: In the last 3 months, did any {staff} yell, swear, or curse at you?"

Planning your time and activities – survey items 75 77 78 79 80 81

75: In the last 3 months, when you wanted to, how often could you get together with these family members who live nearby?"

77: In the last 3 months, when you wanted to, how often could you get together with these friends who live nearby? "

78: In the last 3 months, when you wanted to, how often could you do things in the community that you like?

79: In the last 3 months, did you need more help than you get from {personal assistance/behavioral health staff} to do things in your community?

80: In the last 3 months, did you take part in deciding what you do with your time each day?

81: In the last 3 months, did you take part in deciding when you do things each day—for example, deciding when you get up, eat, or go to bed?

Global Ratings Measures:

The numerator for each Global measure includes the number of respondents who answered 9 or 10 for the item (on ascale of 0 to 10).

Global rating of personal assistance and behavioral health staff– survey item 35

35: Using any number from 0 to 10, where 0 is the worst help from {personal assistance/behavioral health staff} possible and 10 is the best help from {personal assistance/behavioral health staff} possible, what number would you use to rate the help you get from {personal assistance/behavioral health staff}?

Global rating of homemaker – survey item 46

46: Using any number from 0 to 10, where 0 is the worst help from {homemakers} possible and 10 is the best help from {homemakers} possible, what number would you use to rate the help you get from {homemakers}?

Global rating of case manager– survey item 54

54: Using any number from 0 to 10, where 0 is the worst help from {case manager} possible and 10 is the best help from {case manager}possible, what number would you use to rate the help you get from {case manager}?

#### Recommendation Measures:

The numerator for each Recommendation measure includes the number of respondents who answered “Definitely yes” for the item (on a scale of “Definitely no”, “Probably no”, “Probably yes”, “Definitely yes”). Item numbers and item text are listed below.

Would recommend personal assistance/behavioral health staff to family and friends – survey item 36

36: Would you recommend the {personal assistance/behavioral health staff} who help you to your family and friends if they needed help with everyday activities? Would you say you recommend the {personal assistance/behavioral health staff} . . .

Would recommend homemaker to family and friends – survey item 47

47: Would you recommend the {homemakers} who help you to your family and friends if they needed {program-specific term for homemaker services}? Would you say you recommend the {homemakers} . . .

Would recommend case manager to family and friends– survey item 55

55: Would you recommend the {case manager} who helps you to your family and friends if they needed {program-specific term for case-management services}? Would you say you recommend the {case manager} . . .

#### Unmet Needs Measures:

The numerator for each Unmet Needs measure includes the number of respondents who answered “no” for that item (these items are then reverse coded so that higher scores reflect a better experience). Item numbers and item text are listed below.

Unmet need in dressing/bathing due to lack of help - survey item 18

18: In the last 3 months, was this because there were no {personal assistance/behavioral health staff} to help you?

Unmet need in meal preparation/eating due to lack of help - survey item 22

22: In the last 3 months, was this because there were no {personal assistance/behavioral health staff} to help you?

Unmet need in medication administration due to lack of help - survey item 25

25: In the last 3 months, was this because there were no {personal assistance/behavioral health staff} to help you?

Unmet need in toileting due to lack of help - survey item 27

27: In the last 3 months, did you get all the help you needed with toileting from {personal assistance/behavioral health staff} when you needed it? (not reverse coded).

Unmet need with household tasks due to lack of help - survey item 40

40: In the last 3 months, was this because there were no {homemakers} to help you?

#### Physical Safety Measure:

The numerator for the following Physical Safety measure includes the number of respondents who answered “no” for this item. item (these items are then reverse coded so that higher scores reflect a better experience). The item number and item text is listed below.

Hit or hurt by staff – survey item 71

71: In the last 3 months, did any {staff} hit you or hurt you?

## DENOMINATOR STATEMENT

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 Home- and 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's in-home care for a majority of the day, having regular conversations with 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, including family members and friends who are paid to help the beneficiary and (b) guardians or conservators whose only responsibility is to oversee the beneficiary's finances.

6. According to guidance produced under the CMS TEFT Technical Assistance contract, individuals who are more likely to be good proxy respondents during the CAHPS Home- and 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's in-home care for a majority of the day, having regular conversations with 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, including family members and friends who are paid to help the beneficiary and (b) guardians or conservators whose only responsibility is to oversee the beneficiary's finances.

## DENOMINATOR DETAILS

While there are a myriad of home and community-based services and supports (HCBS) that Medicaid programs provide (at their discretion) to beneficiaries with long-term care needs, the proposed provider-related measures in this submission focus on the most common provider types for adults receiving Medicaid HCBS. These include personal assistance providers, behavioral health staff, homemakers and case managers.

While Medicare-certified home health agencies may provide similar services to Medicare beneficiaries, the Medicare benefit is a post-acute care benefit and typically limited to episodes following hospitalization. Medicaid home and community-based services are a long-term care benefit and support persons with long-term care needs over lengthier durations. Personal assistance services, help in the home by behavioral health staff, and homemaker services typically involve assistance with activities of daily living (bathing, dressing, grooming, toileting, eating; mobility) and instrumental activities of daily living (meal preparation, housework, laundry, food shopping). Case management is an integral component of Medicaid HCBS programs; the role of the case manager includes working with the beneficiary to assess his/her need for services/supports and to develop a person-centered care/service plan, monitoring service delivery, and responding to the individual's changing needs and circumstances.

Not all HCBS beneficiaries receive all services. Q4, Q6, Q8, and Q11 assess which services the beneficiary receives.

Beneficiaries are then eligible for different survey questions based on these responses.

These questions are:

Q4. In the last 3 months, did you get {program specific term for personal assistance} at home?

Q6. In the last 3 months, did you get {program specific term for behavioral health specialist services} at home?

Q8. In the last 3 months, did you get {program specific term for homemaker services} at home?

Q11. In the last 3 months, did you get help from {program specific term for case manager services} to help make sure that you had all the services you needed?

Scale Measure 1: Staff are reliable and helpful

Q13: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q14: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q15: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q19: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q37: the number of surveys completed by all those who responded "yes" to screener Q8

Q38: the number of surveys completed by all those who responded "yes" to screener Q8

Scale Measure 2: Staff listen and communicate well

Q28: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q29: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q30: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q31: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q32: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q33: the number of surveys completed by all those who responded "yes" to screener Q4 or Q6

Q41: the number of surveys completed by all those who responded "yes" to screener Q8

Q42: the number of surveys completed by all those who responded "yes" to screener Q8

Q43: the number of surveys completed by all those who responded "yes" to screener Q8

Q44: the number of surveys completed by all those who responded "yes" to screener Q8

Q45: the number of surveys completed by all those who responded "yes" to screener Q8

Scale Measure 3: Case manager is helpful

Q49: the number of surveys completed by all those who responded “yes” to screener Q11  
Q51: the number of surveys completed by all those who responded “yes” to screener Q11  
Q53: the number of surveys completed by all those who responded “yes” to screener Q11  
Scale Measure 4: Choosing the services that matter to you  
Q56: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q57: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Scale Measure 5: Transportation to medical appointments  
Q59: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q61: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q62: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Scale Measure 6: Personal safety and respect  
Q64: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q65: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q68: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Scale Measure 7: Planning your time and activities  
Q75: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q77: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q78: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q79: the number of surveys completed by all those who responded “yes” to screener Q4 or Q6  
Q80: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Q81: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11  
Global Rating Measures:  
Global rating of personal assistance and behavioral health staff  
Q35: the number of surveys completed by all those who responded “yes” to screener Q4 or Q6  
Global rating of homemaker  
Q46: the number of surveys completed by all those who responded “yes” to screener Q8  
Global rating of case manager  
Q54: the number of surveys completed by all those who responded “yes” to screener Q11  
Recommendation Measures:



Recommendation of personal assistance and behavioral health staff to family/friends  
Q36: the number of surveys completed by all those who responded “yes” to screener Q4 or Q6  
Recommendation of homemaker to family/friends  
Q47: the number of surveys completed by all those who responded “yes” to screener Q8  
Recommendation of case manager to family/friends  
Q55: the number of surveys completed by all those who responded “yes” to screener Q11  
Unmet Needs Measures:  
Unmet need in dressing/bathing due to lack of help -  
Q18: the number of surveys completed by all those who responded “yes” to Q17  
Unmet need in meal preparation/eating due to lack of help  
Q22: the number of surveys completed by all those who responded “yes” to Q21  
Unmet need in medication administration due to lack of help  
Q25: the number of surveys completed by all those who responded “yes” to Q24  
Unmet need in toileting due to lack of help -  
Q27: the number of surveys completed by all those who responded “yes” to Q26  
Unmet need with household tasks due to lack of help  
Q40: the number of surveys completed by all those who responded “yes” to Q39  
Personal Safety Measures:  
Hit or hurt by staff  
Q71: the number of surveys completed by all those who responded “yes” to screener Q4, Q6, Q8, or Q11

#### EXCLUSIONS

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.

#### EXCLUSION DETAILS

Individuals who are unable to answer one or more of the following cognitive screening items should be excluded. If the respondent is not able to answer (e.g., provides an invalid/nonsensical response, does not respond, or indicates “I don’t know”), the interviewer should end the interview.

1. Does someone come into your home to help you? (Yes, No)
2. How do they help you? (open ended)

Examples of correct responses include:

- “Helps me get ready every day”
- “Cleans my home”
- “Works with me at my job”
- “Helps me to do things”
- “Drives me around”



3. What do you call them? (open ended)

Examples of sufficient responses include:

- “My worker”
- “My assistant”
- Names of staff (“Jo”, “Dawn”, etc.)

RISK ADJUSTMENT

Statistical risk model

Case-mix adjustment is done via regression methodology or a covariance adjustment. We use case-mix adjustment to adjust scores for various patient and survey mode characteristics. The research team suggests general health rating, mental health rating, age, gender, whether respondent lives alone, and response option as case- mix adjusters for the CAHPS Home- and Community-Based Services measures based on our analysis. We also recommend including survey mode as an additional adjustment variable and proxy status if proxy respondents are utilized. Finally, future administrations of the survey should also include education to be consistent with CAHPS survey methodology.

The specific survey items used to develop case mix adjustment are:

82. In general, how would you rate your overall health? Would you say . . .

- Excellent,
- Very good,
- Good,
- Fair, or
- Poor?
- DON'T KNOW
- REFUSED
- UNCLEAR RESPONSE

83. In general, how would you rate your overall mental or emotional health? Would you say . . .

- Excellent,
- Very good,
- Good,
- Fair, or
- Poor?
- DON'T KNOW
- REFUSED
- UNCLEAR RESPONSE

84. What is your age?

- 18 TO 24 YEARS GO TO Q85
- 25 TO 34 YEARS GO TO Q85
- 35 TO 44 YEARS GO TO Q85
- 45 TO 54 YEARS GO TO Q85

55 TO 64 YEARS GO TO Q85  
65 TO 74 YEARS GO TO Q85  
75 YEARS OR OLDER GO TO Q85  
DON'T KNOW  
REFUSED? GO TO Q85  
UNCLEAR RESPONSE

85. Are you male or female?

MALE  
FEMALE  
DON'T KNOW  
REFUSED  
UNCLEAR RESPONSE

Education:

86. What is the highest grade or level of school that you have completed?

8th grade or less  
Some high school, but did not graduate  
High school graduate or GED  
Some college or 2-year degree  
4-year college graduate  
More than 4-year college degree  
DON'T KNOW  
REFUSED  
UNCLEAR RESPONSE

94. How many adults live at your home, including you?

1 [JUST THE RESPONDENT] ? END SURVEY  
2 TO 3  
4 OR MORE  
DON'T KNOW  
REFUSED  
UNCLEAR RESPONSE

Proxy response and had help completing survey

Did someone help the respondent complete this survey?

1 YES  
2 NO

HOW DID THAT PERSON HELP? [MARK ALL THAT APPLY.]

1 ANSWERED ALL THE QUESTIONS FOR RESPONDENT  
2 ANSWERED SOME OF THE QUESTIONS FOR THE RESPONDENT  
3 RESTATED THE QUESTIONS IN A DIFFERENT WAY OR REMINDED/PROMPTED THE RESPONDENT

- 4 TRANSLATED THE QUESTIONS OR ANSWERS INTO THE RESPONDENT'S LANGUAGE  
5 HELPED WITH THE USE OF ASSISTIVE OR COMMUNICATION EQUIPMENT SO THAT THE RESPONDENT COULD ANSWER THE QUESTIONS  
6 HELPED THE RESPONDENT IN ANOTHER WAY, SPECIFY \_\_\_\_\_  
Provided in response box S.15a

#### STRATIFICATION

The intended primary unit of analysis is the Medicaid HCBS program. However, states may wish to stratify by sub-state agencies such as counties or regional entities with program operational and budgetary authority. In some instances, a state may wish to

#### TYPE SCORE

Other (specify): Case-mix adjusted top box score better quality = higher score

#### ALGORITHM

Scoring specifications for the measures will follow the same general scoring approach as used by other CAHPS surveys that use the CAHPS analysis program. The measures are based on case-mix adjusted top box scores. The research team suggests general health rating, mental health rating, age, gender, whether respondent lives alone, and response option as case-mix adjusters for these measures. We also recommend including survey mode as an additional adjustment variable and proxy status if proxy responses are permitted. The team is also recommending adjusting for Education in future administrations to be consistent with other CAHPS surveys. More information about case-mix adjustment is available in Instructions for Analyzing Data from CAHPS Surveys (available from the downloadable zip file at <http://www.ahrq.gov/cahps/surveys-guidance/cg/instructions/index.html>).

To create scores for each scale measure:

1. Calculate the score for each item using the top box method.
2. Calculate a mode adjusted score for each item.
3. Calculate case-mix adjusted scores for each program.
4. Calculate means for the scale measures weighting each item equally.

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 from the downloadable zip file at <http://www.ahrq.gov/cahps/surveys-guidance/cg/instructions/index.html>.

To create scores for each global rating and individual item measure, follow steps 1-3 above. No diagram provided

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N/A

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## 2769 Functional Change: Change in Self Care Score for Skilled Nursing Facilities

### STEWARD

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

### DESCRIPTION

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.

### TYPE

Outcome

### DATA SOURCE

Electronic Health Record (Only), Other, Paper Records Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission\_Self\_Care\_SNF.xlsx

### LEVEL

Facility

### SETTING

Nursing Home / SNF

### NUMERATOR STATEMENT

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.

### NUMERATOR DETAILS

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived self-care functional score from admission to discharge for each patient at the facility level, including items: Eating, 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 (Eating, 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 values, adjusted for SNF-CMG (Skilled Nursing Facility Case Mix Group), based on impairment type, admission functional status, and age

### DENOMINATOR DETAILS

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum of 8 items ((Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) at the facility level. Age is the age of the patient at the time of admission to the

SNF. The denominator is meant to reflect the expected Self-Care functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

#### EXCLUSIONS

Excluded in the measure are patients who died in the SNF or patients less than 18 years old.

#### EXCLUSION DETAILS

Living at discharge and age at admission are collected through the MDS.

#### RISK ADJUSTMENT

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average self-care functional change score. The denominator is meant to reflect the expected Self-Care functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

#### STRATIFICATION

See definition of the SNF-CMGs in the appendix.

#### TYPE SCORE

Ratio better quality = higher score

#### ALGORITHM

1. Identify all short term rehabilitation patients during the assessment time frame (12 months).
2. Exclude any patients who died in the SNF.
3. Exclude any patients who are less than 18 at the time of admission to the SNF.
3. Calculate the total self-care change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in attached excel file).
5. Calculate the average rasch derived self-care change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average self-care change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average self-care change score/facility's national expected self-care change score. No diagram provided

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## 2774 Functional Change: Change in Mobility Score for Skilled Nursing Facilities

### STEWARD

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

### DESCRIPTION

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.

### TYPE

Outcome

### DATA SOURCE

Electronic Health Record (Only), Other, Registry Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission\_Mobility-635749898391586121.xlsx

### LEVEL

Facility

### SETTING

Nursing Home / SNF

### NUMERATOR STATEMENT

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.

### NUMERATOR DETAILS

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived mobility functional score from admission to discharge for each patient at the facility level, including items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).

### DENOMINATOR STATEMENT

Facility adjusted adjusted expected change in rasch derived values, adjusted at the Skilled Nursing Facility Case Mix Group level.

## DENOMINATOR DETAILS

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 4 items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected Mobility functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

## EXCLUSIONS

Excluded in the measure are patients who died in the SNF or patients less than 18 years old.

## EXCLUSION DETAILS

Living at discharge and age at admission are collected through the MDS.

## RISK ADJUSTMENT

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The

numerator is the facility's average mobility functional change score. The denominator is meant to reflect the expected Mobility functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

## STRATIFICATION

See definition of the SNF-CMGs in the excel file provided.

## TYPE SCORE

Ratio better quality = higher score

## ALGORITHM

1. Identify all short term rehabilitation patients during the assessment time frame (12 months).
2. Exclude any patients who died in the SNF.
3. Exclude any patients who are less than 18 at the time of admission to the SNF.
3. Calculate the total mobility change score for each of the remaining patients (sum of change at the patient level for all items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in the excel file).
5. Calculate the average rasch derived mobility change score at the facility level.

6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average mobility change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average mobility change score/facility's national expected mobility change score.

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## 2775 Functional Change: Change in Motor Score for Skilled Nursing Facilities

### STEWARD

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

### DESCRIPTION

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.

### TYPE

Outcome

### DATA SOURCE

Electronic Health Record (Only), Other, Paper Records Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission-635749892715380581.xlsx

### LEVEL

Facility

### SETTING

Nursing Home / SNF

### NUMERATOR STATEMENT

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.

### NUMERATOR DETAILS

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch



derived motor functional score from admission to discharge for each patient at the facility level, including items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).

#### DENOMINATOR STATEMENT

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.

#### DENOMINATOR DETAILS

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 12 items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

#### EXCLUSIONS

Patients age at admission less than 18 years old  
Patients who died in the SNF.

#### EXCLUSION DETAILS

Living at discharge and age at admission are collected through the MDS.

#### RISK ADJUSTMENT

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average motor functional change score. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

#### STRATIFICATION

See definition of the SNF-CMGs in the excel file provided.

#### TYPE SCORE

Ratio better quality = higher score

#### ALGORITHM

1. Identify all short term rehabilitation patients during the assessment time frame (12 months).
2. Exclude any patients who died in the SNF.
3. Exclude any patients who are less than 18 at the time of admission to the SNF.

3. Calculate the total motor change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in the attached excel file).
5. Calculate the average rasch derived motor change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average motor change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average motor change score/facility's national expected motor change score. Available in attached appendix at A.1

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**2776 Functional Change: Change in Motor Score in Long Term Acute Care Facilities**

**STEWARD**

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

**DESCRIPTION**

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.

**TYPE**

Outcome

**DATA SOURCE**

Electronic Health Record (Only), Other, Paper Records Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission-635749865761904393.xlsx

**LEVEL**

Facility

**SETTING**

Long Term Acute Care

**NUMERATOR STATEMENT**

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.

## NUMERATOR DETAILS

The target population is all LTAC patients, at least 18 years old, who did not die in the LTAC. The numerator is the average change in rasch derived motor functional score from admission to discharge for each patient at the facility level, including items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel,

Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).

## DENOMINATOR STATEMENT

Facility adjusted expected change in rasch derived values, adjusted for CMG (Case Mix Group), based on impairment type, admission functional status, and age.

## DENOMINATOR DETAILS

The target population is all LTAC patients, at least 18 years old, who did not die in the LTAC. Impairment type is defined as the primary medical reason for the LTAC stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 12 items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the LTAC. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

## EXCLUSIONS

Patients age at admission less than 18 years old

Patients who died in the LTAC.

## EXCLUSION DETAILS

Living at discharge and age at admission are collected through OASIS.

## RISK ADJUSTMENT

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average motor functional change score. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

## STRATIFICATION

See definition of the CMGs in the excel file provided.

## TYPE SCORE

Ratio better quality = higher score

## ALGORITHM

1. Identify all patients during the assessment time frame (12 months).

2. Exclude any patients who died in the LTAC.
3. Exclude any patients who are less than 18 at the time of admission to the LTAC.
3. Calculate the total motor change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in excel file).
5. Calculate the average rasch derived motor change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average motor change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average motor change score/facility's national expected motor change score. Available in attached appendix at A.1

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## 2777 Functional Change: Change in Self Care Score for Long Term Acute Care Facilities

STEWARD

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

DESCRIPTION

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.

TYPE

Outcome

DATA SOURCE

Electronic Health Record (Only), Other, Paper Records Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission\_Self\_Care-635749886179500305.xlsx

LEVEL

Facility

SETTING

Long Term Acute Care

#### NUMERATOR STATEMENT

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.

#### NUMERATOR DETAILS

The target population is all LTAC patients, at least 18 years old, who did not die in the LTAC. The numerator is the average change in rasch derived self-care functional score from admission to discharge for each patient at the facility level, including items: Eating, 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 (Eating, 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 values, adjusted for CMG (Case Mix Group), based on impairment type, admission functional status, and age

#### DENOMINATOR DETAILS

The target population is all LTAC patients, at least 18 years old, who did not die in the LTAC. Impairment type is defined as the primary medical reason for the LTAC stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 8 self-care items ((Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) at the facility level. Age is the age of the patient at the time of admission to the LTAC. The denominator is meant to reflect the expected Self-Care functional change score at the facility, if the facility had the same distribution of CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

#### EXCLUSIONS

Excluded in the measure are patients who died in the LTAC or patients less than 18 years old.

#### EXCLUSION DETAILS

Living at discharge and age at admission are collected through OASIS.

#### RISK ADJUSTMENT

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average self-care functional change score. The denominator is meant to reflect the expected Self-Care functional change score at the facility, if the facility had the same distribution of CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

#### STRATIFICATION

See definition of the CMGs in the excel file provided.

#### TYPE SCORE

Ratio better quality = higher score

#### ALGORITHM

1. Identify all patients during the assessment time frame (12 months).
2. Exclude any patients who died in the LTAC.
3. Exclude any patients who are less than 18 at the time of admission to the LTAC.
3. Calculate the total self-care change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in excel file).
5. Calculate the average rasch derived self-care change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average self-care change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average self-care change score/facility's national expected self-care change score. Available in attached appendix at A.1

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### 2778 Functional Change: Change in Mobility Score for Long Term Acute Care Facilities

#### STEWARD

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

#### DESCRIPTION

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.

#### TYPE

Outcome

#### DATA SOURCE

Electronic Health Record (Only), Other, Paper Records Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission\_Mobility-635749871757956568.xlsx

#### LEVEL

Facility

#### SETTING

Long Term Acute Care

#### NUMERATOR STATEMENT

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.

#### NUMERATOR DETAILS

The target population is all LTAC patients, at least 18 years old, who did not die in the LTAC. The numerator is the average change in rasch derived mobility functional score from admission to discharge for each patient at the facility level, including items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).

#### DENOMINATOR STATEMENT

Facility adjusted adjusted expected change in rasch derived values, adjusted at the Case Mix Group level.

#### DENOMINATOR DETAILS

The target population is all LTAC patients, at least 18 years old, who did not die in the LTAC. Impairment type is defined as the primary medical reason for the LTAC stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 4 items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the LTAC. The denominator is meant to reflect the expected Mobility functional change score at the facility, if the facility had the same distribution of CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

#### EXCLUSIONS

Excluded in the measure are patients who died in the LTAC or patients less than 18 years old.

#### EXCLUSION DETAILS

Living at discharge and age at admission are collected through OASIS

#### RISK ADJUSTMENT

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average mobility functional change score. The denominator is meant to reflect the expected Mobility functional change score at the facility, if the facility had the same distribution of CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

#### STRATIFICATION

See definition of the CMGs in the excel file provided.

#### TYPE SCORE

Ratio better quality = higher score

#### ALGORITHM

1. Identify all patients during the assessment time frame (12 months).
2. Exclude any patients who died in the LTAC.
3. Exclude any patients who are less than 18 at the time of admission to the LTAC.
3. Calculate the total mobility change score for each of the remaining patients (sum of change at the patient level for all items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in excel file).
5. Calculate the average rasch derived mobility change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average mobility change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average mobility change score/facility's national expected mobility change score. Available in attached appendix at A.1

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## Appendix F1: Related and Competing Measures (tabular format)

### Comparison of NQF #2613 and NQF #2769

	2613: CARE: Improvement in Self Care	2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities
Steward	American Health Care Association	Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc. and its successor in interest, UDSMR, LLC.
Description	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.	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.
Type	Outcome	Outcome
Data Source	Electronic Clinical Data, Other Resident Assessment Instrument Minimum Data Set (MDS) version 3.0 Continuity Assessment and Record Evaluation (CARE) tool; Self Care subscale Available in attached appendix at A.1 No data dictionary	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records Functional Change Form, as seen in the appendix. Available in attached appendix at A.1 Attachment NQF_Submission_Self_Care_SNF.xlsx
Level	Facility	Facility
Setting	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility
Numerator Statement	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.	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.
Numerator Details	The numerator includes all residents admitted from a hospital or another post-acute care setting that receive any PT or OT therapy for any reason in a SNF that have a completed CARE Tool self care subscale assessment at admission and discharge (see denominator definition below). The self care items used from the CARE	The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived self-care functional score from admission to discharge for each patient at the facility level, including items: Eating, Grooming,

	2613: CARE: Improvement in Self Care	2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities
	<p>tool are listed below and rated on a 1-6 scale (see Appendix for CARE Tool).</p> <p>The items included in the CARE Tool self care subscale include:</p> <ul style="list-style-type: none"> <li>• A1. Eating</li> <li>• A3. Oral Hygiene</li> <li>• A4. Toilet Hygiene</li> <li>• A5. Upper Body Dressing</li> <li>• A6. Lower Body Dressing</li> <li>• C1. Wash Upper Body</li> <li>• C2. Shower / Bathe</li> <li>• C6. Putting on / taking off footwear</li> </ul> <p>The numerator is facility's average risk adjusted change score on the self care subscale of the CARE tool. The risk adjusted average change score is calculated in several steps:</p> <p>Step 1: Each individual's admission and discharge self care subscale score is calculated. Items rated as S. Not attempted due to safety concerns, A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to one on a six point rating scale (e.g. dependent). For each individual, the ratings for all the self care items on the CARE tool at admission are summed and transformed to a 0-100 scale. The same is done for the discharge assessment.</p> <p>Step 2: Each individual's unadjusted change score is calculated by taking the admission score minus the discharge score.</p> <p>Step 3: The individual's unadjusted change score is risk adjusted (see S.14)</p> <p>Step 4: The facility's risk adjusted change score is the sum of all the individual's risk adjusted change scores divided by the denominator.</p>	<p>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 (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) / total number of patients).</p>
Denominator Statement	<p>The denominator includes all residents admitted to a SNF from a hospital or another post-acute 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).</p> <p>The items included in the CARE Tool self care subscale include:</p>	<p>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</p>

	2613: CARE: Improvement in Self Care	2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities
	<ul style="list-style-type: none"> <li>• A1. Eating</li> <li>• A3. Oral Hygiene</li> <li>• A4. Toilet Hygiene</li> <li>• A5. Upper Body Dressing</li> <li>• A6. Lower Body Dressing</li> <li>• C1. Wash Upper Body</li> <li>• C2. Shower / Bathe</li> <li>• C6. Putting on / taking off footwear</li> </ul>	
Denominator Details	<p>The denominator includes all residents admitted to a SNF who are receiving any PT or OT therapy for any reason. The denominator is based on admission from any hospital or post-acute care setting and is determined using information from MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital (LTCH)", regardless of payor status. They must receive either PT or OT therapy during their stay. A resident's stay is defined as an episode of care from admissions to discharge from the facility or discharge from therapy services (defined as completing a discharge CARE Tool assessment).</p>	<p>The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum of 8 items ((Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected Self-Care functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).</p>
Exclusions	<p>Individual patients are excluded for two broad reasons:</p> <ol style="list-style-type: none"> <li>1. if they have conditions where improvement in self-care is very unlikely,</li> </ol> <p>OR</p> <ol style="list-style-type: none"> <li>2. have missing data necessary to calculate the measure</li> </ol> <p>Additionally, facilities with denominator size of fewer than 30 patients during a 12 month period are excluded from reporting of their data.</p>	<p>Excluded in the measure are patients who died in the SNF or patients less than 18 years old.</p>
Exclusion Details	<p>Individuals with conditions where improvement in self care (as determined by a panel of expert therapists) is very unlikely were excluded based on information from the admission MDS 3.0 assessment. Individuals with one of the following MDS 3.0 items marked as yes were excluded:</p> <ul style="list-style-type: none"> <li>• Ventilator (O0100F1 =1 or O0100F2 =1)</li> <li>• Coma (B0100 =1)</li> </ul>	<p>Living at discharge and age at admission are collected through the MDS.</p>

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	<ul style="list-style-type: none"> <li>• Quadriplegic (I5100=1)</li> <li>• Hospice (O0100K1 = 1)</li> </ul> <p>In addition, we also excluded individuals whose age is less than 18 years.</p> <p>Overall, these exclusions resulted in 1.1% of all admissions being excluded.</p> <p>Missing data also resulted in individuals being excluded, details are as follows:</p> <ul style="list-style-type: none"> <li>• Missing a discharge CARE Tool assessment (this resulted when individuals died or were hospitalized during their SNF stay) resulted in patients being excluded since one could not calculate a change from admission. Nationally approximately 21.6% of admissions to a SNF will be hospitalized during their therapy stay and 4.5% will die (based on analysis of SNF part A claims from 2009-2011).</li> <li>• Missing data on individual items on either the admission or discharge CARE Tool assessment resulted in the individual being excluded from calculation. For self care items, this occurred 4.4% of the time. We did not impute any missing data for self care items.</li> </ul>	
Risk Adjustment	<p>Statistical risk model</p> <p>Each individual's change score was risk adjusted based on the following formula:  Risk Adjusted Score for individual = (National Average Change Score – Predicted Change Score) + Actual Change Score.</p> <p>The National Average Change Score was calculated as a population average change score for all patients in all SNFs who had a CARE Tool self care subscale assessment completed at admission and discharge. The change score is the difference in the aggregate of each individuals scale score from admission to discharge transformed to 0 to 100 scale.</p> <p>The Predicted Change Score is calculated based on logistic regression using the process outlined in 2b4.</p> <p>The Actual Change Score is the difference between the individual person's admission self care score transformed to 0 to 100 scale and their discharge self care score transformed to a 0 to 100 scale.</p> <p>Provided in response box S.15a</p>	<p>Stratification by risk category/subgroup</p> <p>This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average self-care functional change score. The denominator is meant to reflect the expected Self-Care functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).</p> <p>Available in attached Excel or csv file at S.2b</p>
Stratification	Not Applicable	See definition of the SNF-CMGs in the appendix.

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Type Score	Continuous variable, e.g. average better quality = higher score	Ratio better quality = higher score
Algorithm	<p>The facility-level self care improvement scores are calculated using the following 14 steps.</p> <p>Step 1. Choose the 12 month window for which we will select episodes. This is the four consecutive calendar quarters ending with the most recent calendar quarter for which both MDS data and CARE tool data are available for use in the measure.</p> <p>Step 2. Identify all MDS discharge assessments (in which we understand the CARE tool items will be embedded) with a discharge date that fell within the 12 month window identified in Step 1.</p> <p>Step 3. For each MDS tool discharge assessment identified in Step 2, identify the corresponding MDS admission assessment (in which we understand the CARE tool items will be embedded). An MDS assessment is identified as an admission assessment if A0310F == "01" (entry record). Note that the admission date may lie before the 12 month window defined in Step 1. The period of time from the admission date (corresponding with the MDS admission assessment) through to the discharge date (corresponding with the MDS discharge assessment) is called an "episode". If no MDS admission assessment was found, discard the discharge assessment from all subsequent steps.</p> <p>Step 4. Identify all MDS admission assessments that indicate the admission to the SNF was from the hospital, another SNF or IRF. An MDS admission assessment indicates that the SNF admission was from a hospital when MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital". The MDS item A1600 indicates the date of entry to the SNF.</p> <p>Step 5. For any admission or discharge CARE tool item (that enters the calculation of the self-care improvement scores) with letter code "S" (activity not attempted due to safety concerns), A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to "1" on a six point rating scale (indicating full functional dependence).</p> <p>Step 6. Apply the self care improvement measure's exclusions (see s.11), and exclude any episode that did not involve either physical or</p>	<ol style="list-style-type: none"> <li>1. Identify all short term rehabilitation patients during the assessment time frame (12 months).</li> <li>2. Exclude any patients who died in the SNF.</li> <li>3. Exclude any patients who are less than 18 at the time of admission to the SNF.</li> <li>3. Calculate the total self-care change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.)</li> <li>4. Transform the patient level functional change scores to the rasch derived value (as stated in attached excel file).</li> <li>5. Calculate the average rasch derived self-care change score at the facility level.</li> <li>6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average self-care change score for the time frame (12 months).</li> <li>7. Calculate the ratio outcome by taking the observed facility average self-care change score/facility's national expected self-care change score. No diagram provided</li> </ol>

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	<p>occupational therapy. The clinical measure exclusions are detailed in S.11 (Denominator exclusion details and codes). The exclusion of episodes not involving either occupational or physical therapy is as follows:</p> <p>We identify the patient as having received occupational therapy if on the MDS discharge assessment:</p> <p style="padding-left: 40px;">The total number of minutes of occupational therapy in the last 7 days (O0400B1) is greater than zero; or</p> <p style="padding-left: 40px;">The most recent occupational therapy regimen (starting on the date recorded in O0400B5, and ending on the date recorded in O0400B6) intersects the episode (beginning with the CARE admission assessment's date and ending with the CARE discharge assessment's date).</p> <p>We identify the patient as having received physical therapy if on the MDS discharge assessment:</p> <p style="padding-left: 40px;">The total number of minutes of physical therapy in the last 7 days (O0400C1) is greater than zero; or</p> <p style="padding-left: 40px;">The most recent physical therapy regimen (starting on the date recorded in O0400C5, and ending on the date recorded in O0400C6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).</p> <p>If the episode involves neither occupational nor physical therapy, as identified above, then exclude it from all subsequent steps in the calculation.</p> <p>Step 7. For each episode remaining after Step 6, calculate a preliminary admission score and a discharge score as the sum of the values for the following CARE tool self care items A1 (Eating), A3 (Oral Hygiene), A4 (Toilet Hygiene), A5 (Upper Body Dressing), A6 (Lower Body Dressing), C1 (Wash Upper Body), C2 (Shower/Bath Self), C6 (Putting on/Taking off Footwear).</p> <p>Each of those 8 CARE tool items takes an integer value of 1, 2, 3, 4, 5 or 6, and so the preliminary admission score will be an integer between 8 and 48, and the preliminary discharge score will be an integer between 8 and 48.</p>	

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	<p>Step 8. For each episode, linearly transform the preliminary admission score and preliminary discharge score so that it lies in the range 1-100 using the following equation:</p> <p>["transformed self-care admission score"] = 2.475 × ["preliminary self-care admission score"] - 18.8</p> <p>["transformed self-care discharge score"] = 2.475 × ["preliminary self-care discharge score"] - 18.8</p> <p>Step 9. For each episode, calculate the episode-level change score by subtracting the transformed discharge score from the transformed admission score. Each score will lie between -99 and 99.</p> <p>Step 10. Calculate the national average change score as the simple mean of all episode-level change scores calculated in Step 9.</p> <p>Step 11. For each episode, calculate the predicted change score using the risk adjustment methodology detailed in S.15a. That is, having prepared the risk adjustment variables in the way described in S.15a, apply the equation: [predicted change score] = 25.98 - 0.28 × [patient is 85 years or older] - 4.43 × [dialysis while a patient] - 3.83 × [entered from SNF] - 2.37 × [oxygen while a patient] - 1.06 × [catheterization/ostomy] - 2.87 × [unhealed pressure ulcers] - 7.12 × [mental status] - 3.33 × [resident mood] - 8.11 × [psychiatric conditions] - 4.05 × [feeding tube or IV feeding] - 5.43 × [suctioning or tracheotomy] - 2.76 × [infections of the foot].</p> <p>Step 12. For each episode, calculate the risk adjusted change score using the actual change score calculated in Step 9, the national average change score calculated in Step 10, and the predicted change score calculated in Step 11. The risk adjusted change score is:</p> <p>["risk adjusted change score"] = (["national average change score"] - ["predicted change score"]) + ["actual change score"]</p> <p>Step 13. Exclude any facility that has fewer than 30 episodes for which we could calculate a risk adjusted change score.</p> <p>Step 14. For each facility remaining after Step 13, calculate its self care improvement score as the simple mean of the risk adjusted change</p>	

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	scores calculated in Step 12. No diagram provided	
Submission items	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value: Not Applicable</p>	<p>5.1 Identified measures: 2613 : CARE: Improvement in Self Care</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: While the CARE items and the self-care measure the same construct of functional (in)dependence, there are some key differences key differences included in the measures, and in the measurement of the items. The self-care measure submitted by UDS includes the following items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. The CARE items included in the measure submitted by AHCA include: Eating, Oral hygiene, Toilet hygiene, Shower/bathe self, Upper body dressing, Lower body dressing, Putting on/taking off footwear. Once again there is great overlap in the items, particularly for feeding, grooming, and toileting. However, where the AHCA measure does not contain any cognitive items in their measure, our measure contains two cognitive items when determining a patient’s ability to care for one’s self especially for discharge planning, cognitive ability play a key role, thus we maintain our measure is best in class considering it is more robust, has greater sensitivity in measurement (our measure uses a seven level rating scale whereas the CARE measure uses a six level, thus our rating scale offers greater refinement in measurement). Finally, the UDSMS change in self-care measure is the exact same measure (same items, same rating scale, same adjustment) used in SNF, IRF and LTAC, offering consistency in measuring patient function across PAC venues, which has been an interest for PAC and is a current objective of the IMPACT ACT.</p> <p>5b.1 If competing, why superior or rationale for additive value: The functional items in our proposed measure have been collected in SNFs for over 20 years. This allows for a historical perspective of function in the SNFs that the CARE items do not allow. In addition, the functional items in our proposed measure have been used in inpatient rehabilitation facilities for over 30 years, and therefore, a comparison in functional gains between IRFs and SNFs can be</p>



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		easily made should this measure be utilized in both venues of care.

## Comparison of NQF #2612 and NQF #2774

	2612: CARE: Improvement in Mobility	2774: : Functional Change: Change in Mobility Score for Skilled Nursing Facilities
Steward	American Health Care Association	Uniform Data System for Medical Rehabilitation, a
Description	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.	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.
Type	Outcome	Outcome
Data Source	Electronic Clinical Data, Other Resident Assessment Instrument Minimum Data Set (MDS) version 3.0 Continuity Assessment and Record Evaluation (CARE) Tool; Mobility subscale Available in attached appendix at A.1 No data dictionary	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry Functional Change Form, as seen in the appendix. Available in attached appendix at A.1 Attachment NQF_Submission_Mobility-635749898391586121.xlsx
Level	Facility	Facility
Setting	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility
Numerator Statement	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.	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.
Numerator Details	The numerator includes all residents admitted from a hospital or another post acute care setting that receive any PT or OT therapy for any reason in a SNF that have a completed mobility CARE tool assessment at admission and discharge (see denominator definition below). The mobility items used from the CARE tool are	The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived mobility functional score from admission to discharge for each patient at the facility level, including items: Transfer Bed/Chair/Wheelchair, Transfer Toilet,

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	<p>listed below and rated on a 1-6 scale (see Appendix for copy of the CARE Tool assessment). The items included in the CARE Tool Mobility subscale include:</p> <ul style="list-style-type: none"> <li>• B1. Lying to Sitting on Side of Bed</li> <li>• B2. Sit to Stand</li> <li>• B3. Chair/Bed to Chair Transfer</li> <li>• B4. Toilet Transfer</li> <li>• B5a &amp; B5b. Walking or Wheelchair</li> </ul> <p>Mobility</p> <ul style="list-style-type: none"> <li>• C3. Roll left / right</li> <li>• C4. Sit to Lying</li> <li>• C5. Picking up object</li> <li>• C7a. One Step Curb</li> <li>• C7b. Walk 50 ft. with Two Turns</li> <li>• C7c. Walk 12 Steps.</li> <li>• C7d. Walk Four Steps</li> <li>• C7e. Walking 10 ft. on Uneven Surface</li> <li>• C7f. Car Transfer</li> </ul> <p>The numerator is a facility's average risk adjusted change score on the mobility component of the CARE tool. The risk adjusted average change score is calculated in several steps:</p> <p>Step 1: Each individual's admission and discharge mobility scale score is calculated. Items rated as S. Not attempted due to safety concerns, A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to one. For each individual, the ratings for all the mobility items on the CARE tool at admission are summed and transformed to a 0-100 scale. The same is done for the discharge assessment.</p> <p>Step 2: Each individual's unadjusted change score is calculated by taking the admission score minus the discharge score.</p> <p>Step 3: The individual's unadjusted change score is risk adjusted (see risk adjustment section)</p> <p>Step 4: The facilities risk adjusted change score is the sum of all the individual's risk adjusted change scores divided by the denominator.</p>	<p>Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).</p>
Denominator Statement	The denominator includes all residents admitted to a SNF from a hospital or another post-acute care setting who receive either PT or OT therapy for any reason during their stay regardless of payor status, have a completed mobility CARE	Facility adjusted adjusted expected change in rasch derived values, adjusted at the Skilled Nursing Facility Case Mix Group level.

	2612: CARE: Improvement in Mobility	2774: : Functional Change: Change in Mobility Score for Skilled Nursing Facilities
	<p>tool assessment at admission and discharge and do not meet any of the exclusion criteria. The mobility items used from the CARE tool are listed below and rated on a 1-6 scale (see Appendix for copy of the mobility CARE tool assessment).</p> <p>The items included in the CARE Tool Mobility subscale include:</p> <ul style="list-style-type: none"> <li>• B1. Lying to Sitting on Side of Bed</li> <li>• B2. Sit to Stand</li> <li>• B3. Chair/Bed to Chair Transfer</li> <li>• B4. Toilet Transfer</li> <li>• B5a &amp; B5b. Walking or Wheelchair Mobility</li> <li>• C3. Roll left / right</li> <li>• C4. Sit to Lying</li> <li>• C5. Picking up object</li> <li>• C7a. One Step Curb</li> <li>• C7b. Walk 50 ft. with Two Turns</li> <li>• C7c. Walk 12 Steps.</li> <li>• C7d. Walk Four Steps</li> <li>• C7e. Walking 10 ft. on Uneven Surface</li> <li>• C7f. Car Transfer</li> </ul>	
Denominator Details	<p>The denominator includes all residents admitted to a SNF who are receiving any PT or OT therapy for any reason.</p> <p>The denominator is based on admission from any hospital or post-acute care setting and is determined using information from MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital" regardless of payor status. They must receive either PT or OT therapy during their stay. A resident's stay is defined as an episode of care from admissions to discharge from the facility or discharge from therapy services (defined as completing a discharge CARE tool assessment). Overall, approximately 85% of all admissions from a hospital receive either PT or OT therapy based on SNF Part A claims (or MDS 3.0 data).</p>	<p>The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 4 items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected Mobility functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).</p>
Exclusions	Patients are excluded for two broad reasons:	Excluded in the measure are patients who died in the SNF or patients less than 18 years old.

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	<p>1. if they have conditions where improvement in mobility is very unlikely, OR</p> <p>2. have missing data necessary to calculate the measure</p> <p>Additionally, facilities with denominator size of fewer than 30 patients during a 12 month period are excluded from reporting their data.</p>	
Exclusion Details	<p>Individuals with conditions where improvement in mobility (as determined by a panel of expert therapists) is very unlikely were excluded based on information from the admission MDS 3.0 assessment. Individuals with one of the following MDS 3.0 items marked as yes were excluded:</p> <ul style="list-style-type: none"> <li>• Ventilator (O0100F1 =1 or O0100F2 =1)</li> <li>• Coma (B0100 =1)</li> <li>• Quadriplegic (I5100=1)</li> <li>• Hospice (O0100K1 = 1)</li> </ul> <p>In addition, we also excluded individuals whose age is less than 18 years.</p> <p>Overall, these exclusions resulted in 1.1% of all admissions being excluded.</p> <p>Missing data also resulted in individuals being excluded</p> <ul style="list-style-type: none"> <li>• Missing a discharge CARE Tool assessment (this resulted when individuals died or were hospitalized during their SNF stay) resulted in patients being excluded since one could not calculate a change from admission. Nationally approximately 21.6% of admissions to a SNF will be hospitalized during their therapy stay and 4.5% will die (based on analysis of SNF part A claims from 2009-2011).</li> <li>• Missing data on individual CARE Tool mobility assessment items on at least one item occurred 27.2% of the time. Approximately a third of all missing data related to just three items C7c walking 12 steps; C7d walking 4 steps and C7f car transfer but did not differ significantly between admission and discharge assessments. We did not impute any missing data for mobility items.</li> </ul>	<p>Living at discharge and age at admission are collected through the MDS.</p>
Risk Adjustment	<p>Statistical risk model</p> <p>Each individuals change score was risk adjusted based on the following formula:</p>	<p>Stratification by risk category/subgroup</p> <p>This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The</p>

	2612: CARE: Improvement in Mobility	2774: : Functional Change: Change in Mobility Score for Skilled Nursing Facilities
	<p>Risk Adjusted Score for individual = (National Average Change Score – Predicted Change Score) + Actual Change Score.</p> <p>The National Average Change Score was calculated as a population average change score for all patients in all SNFs who had a CARE Tool mobility subscale assessment completed at admission and discharge. The change score is the difference in the aggregate of each individuals scale score from admission to discharge transformed to 0 to 100 scale.</p> <p>The Predicted Change Score is calculated based on logistic regression using the process outlined in 2b4.</p> <p>The Actual Change Score is the difference between the individual person’s admission mobility score transformed to 0 to 100 scale and their discharge mobility score transformed to a 0 to 100 scale.</p> <p>Provided in response box S.15a</p>	<p>numerator is the facility’s average mobility functional change score. The denominator is meant to reflect the expected Mobility functional change score at the facility, if the facility had the same distribution of SNF-CMGs(impairment, functional status at admission, and age at admission).</p> <p>Available in attached Excel or csv file at S.2b</p>
Stratification	Not Applicable	See definition of the SNF-CMGs in the excel file provided.
Type Score	Continuous variable, e.g. average better quality = higher score	Ratio better quality = higher score
Algorithm	<p>The facility-level mobility improvement scores are calculated using the following 15 steps.</p> <p>Step 1. Choose the 12 month window for which we will select episodes. This is the four consecutive calendar quarters ending with the most recent calendar quarter for which both MDS data and CARE Tool data are available for use in the measure.</p> <p>Step 2. Identify all MDS discharge assessments (in which we understand the CARE Tool items will be embedded) with a discharge date that fell within the 12 month window identified in Step 1.</p> <p>Step 3. For each MDS tool discharge assessment identified in Step 2, identify the corresponding MDS admission assessment (in which we understand the CARE Tool items will be embedded). An MDS assessment is identified as an admission assessment if A0310F == “01” (entry record). Note that the admission date may lie before the 12 month window defined in Step 1. The period of time from the admission date (corresponding with the MDS admission assessment) through to the discharge date (corresponding with the MDS discharge assessment) is called an “episode”. If no MDS</p>	<ol style="list-style-type: none"> <li>1. Identify all short term rehabilitation patients during the assessment time frame (12 months).</li> <li>2. Exclude any patients who died in the SNF.</li> <li>3. Exclude any patients who are less than 18 at the time of admission to the SNF.</li> <li>3. Calculate the total mobility change score for each of the remaining patients (sum of change at the patient level for all items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)</li> <li>4. Transform the patient level functional change scores to the rasch derived value (as stated in the excel file).</li> <li>5. Calculate the average rasch derived mobility change score at the facility level.</li> <li>6. Using national data and previously described adjustment procedure, calculate the facility’s expected rasch derived average mobility change score for the time frame (12 months).</li> <li>7. Calculate the ratio outcome by taking the observed facility average mobility change score/facility’s national expected mobility change score.</li> </ol>

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	<p>admission assessment was found, discard the discharge assessment from all subsequent steps.</p> <p>Step 4. Identify all MDS admission assessments that indicate the admission to the SNF was from the hospital, another SNF or IRF. An MDS admission assessment indicates that the SNF admission was from a hospital when MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital". The MDS item A1600 indicates the date of entry to the SNF.</p> <p>Step 5. For any admission or discharge CARE Tool item (that enters the calculation of the mobility improvement scores) with letter code "S" (activity not attempted due to safety concerns), A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to "1" on a six point rating scale (indicating full functional dependence).</p> <p>Step 6. Apply the mobility improvement measure's exclusions (see s.11), and exclude any episode that did not involve either physical or occupational therapy. The clinical measure exclusions are detailed in S.11 (Denominator exclusion details and codes). The exclusion of episodes not involving either occupational or physical therapy is as follows:</p> <p>We identify the patient as having received occupational therapy if on the MDS discharge assessment:</p> <ul style="list-style-type: none"> <li>The total number of minutes of occupational therapy in the last 7 days (O0400B1) is greater than zero; or</li> <li>The most recent occupational therapy regimen (starting on the date recorded in O0400B5, and ending on the date recorded in O0400B6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).</li> </ul> <p>We identify the patient as having received physical therapy if on the MDS discharge assessment:</p> <ul style="list-style-type: none"> <li>The total number of minutes of physical therapy in the last 7 days (O0400C1) is greater than zero; or</li> <li>The most recent physical therapy regimen (starting on the date recorded in O0400C5, and ending on the date recorded in</li> </ul>	

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	<p>O0400C6) intersects the episode (beginning with the CARE admission assessment’s admission date and ending with the CARE discharge assessment’s discharge date).</p> <p>If the episode involves neither occupational nor physical therapy, as identified above, then exclude it from all subsequent steps in the calculation.</p> <p>Step 7. Map the CARE Tool B5a (walking) and B5b (wheeling) items to obtain a harmonious 1-6 score for all assessments, and recode walking items C7b, C7c, C7d and C7e to 1=dependent if resident cannot walk. First, consolidate the four sub-items B5a1, B5a2, B5a3 and B5a4 corresponding to different distances the resident can walk (if the patient can walk); and the four sub-items B5b1, B5b2, B5b3 and B5b4 corresponding to different distances the resident can wheel (if the patient cannot walk). To do this, use the crosswalk presented in Figure A1 in the Appendix. Call the resulting two items B5a and B5b.</p> <p>Second, consolidate the B5a and B5b items into a harmonious summary item called B5. To do this use the crosswalk presented in Figure A1 in the Appendix. This is the item used in the calculation of mobility outcome scores in the subsequent steps.</p> <p>Finally, if the patient is unable to walk (i.e., no values for the B5a and C7 items), recode each item C7a, C7b, C7d and C7e to 1 = dependent.</p> <p>Step 8. For each episode remaining after Step 6, using the CARE Tool items as transformed in Step 7, calculate a preliminary admission score and a discharge score as the sum of the values for the following CARE tool mobility items B1 (Lying to sitting on side of bed), B2 (Sit to stand), B3 (Chair/bed-to-chair transfer), B4 (Toilet transfer), B5 (Walking/wheeling), C3 (Roll left and right), C4 (Sit to lying), C7a (One step (curb)), C7b (Walking 50 feet with two turns), C7c (Walking 12 steps), C7d (Walking four steps), C7e (Walking 10 feet on uneven surfaces).</p> <p>Each of those 12 CARE Tool items takes an integer value of 1, 2, 3, 4, 5 or 6, and so the preliminary admission score will be an integer between 12 and 72, and the preliminary discharge score will be an integer between 12 and 72.</p>	



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	<p>Step 9. For each episode, linearly transform the preliminary admission score and preliminary discharge score so that it lies in the range 1-100 using the following equation:</p> <p>["transformed mobility admission score"] = 1.65 × ["preliminary mobility admission score"] - 18.8</p> <p>["transformed mobility discharge score"] = 1.65 × ["preliminary mobility discharge score"] - 18.8</p> <p>Step 10. For each episode, calculate the episode-level change score by subtracting the transformed discharge score from the transformed admission score. Each score will lie between -99 and 99.</p> <p>Step 11. Calculate the national average change score as the simple mean of all episode-level change scores calculated in Step 10.</p> <p>Step 12. For each episode, calculate the predicted change score using the risk adjustment methodology detailed in S.15a. That is, having prepared the risk adjustment variables in the way described in S.15a, apply the equation: [predicted change score] = 33.61 - 1.56 × [patient is 85 years or older] - 9.11 × [dialysis while a resident] - 5.08 × [entered from SNF] - 2.81 × [oxygen while a patient] - 4.23 × [unhealed pressure ulcers] - 8.85 × [mental status] - 4.75 × [resident mood] - 9.30 × [psychiatric conditions] - 6.91 × [feeding tube or IV feeding] - 4.10 × [suctioning or tracheotomy] - 3.98 × [infections of the foot].</p> <p>Step 13. For each episode, calculate the risk adjusted change score using the actual change score calculated in Step 10, the national average change score calculated in Step 11, and the predicted change score calculated in Step 12. The risk adjusted change score is: [risk adjusted change score] = ([national average change score] - [predicted change score]) + [actual change score].</p> <p>Step 14. Exclude any facility that has fewer than 30 episodes for which we could calculate a risk adjusted change score.</p> <p>Step 15. For each facility remaining after Step 14, calculate its mobility improvement score as the simple mean of the risk adjusted change scores calculated in Step 13. No diagram provided</p>	

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Submission items	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: Not Applicable</p> <p>5b.1 If competing, why superior or rationale for additive value: Not Applicable</p>	<p>5.1 Identified measures: 2612 : CARE: Improvement in Mobility</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: While the CARE items and the change in mobility items measure the same construct of functional (in)dependence, there are some key differences included in the measures, and in the measurement of the items. The mobility measure, submitted by UDS includes the following items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. The CARE items included in the measure submitted by AHCA include: : Roll left and right, Sit to lying, Lying to sitting on side of bed, Sit to stand, Chair/bed-to-chair transfer, Toilet transfer, Car transfer, Walk 10 feet, Walk 50 feet with 2 turns, Walk 150 feet, Walking 10 feet on uneven surfaces, 1 step, 4 steps, 12 steps, Pick up object. Once again there is great overlap in the items, There is great overlap between the items in the two measures, particularly in the transfer items, locomotion, and stairs. However while our measure contains only four items, the CMS measure contains 14 items. While our measure has the one locomotion item, for instance, the ACHA measure has four. Similarly, our measure contains one item for stairs, while the CMS measure contains three. This becomes burdensome on the provider to have to collect an additional 10 items and it hasn't been proven that there is additional value or specificity in the measure. Rasch analysis shows us that more items do not always mean better measurement. Finally, the UDSMS change in mobility measure is the exact same measure (same items, same rating scale, same adjustment) used in SNF, IRF and LTAC, offering consistency in measuring patient function across PAC venues, which has been an interest for PAC and is a current objective of the IMPACT ACT.</p> <p>5b.1 If competing, why superior or rationale for additive value: The functional items have been collected in SNFs for over 20 years. This allows for a historical perspective of function in the SNFs that the CARE items do not allow. In addition, the these items have been used in inpatient rehabilitation</p>

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		facilities for over 30 years, and therefore, a comparison in functional gains between IRFs and SNFs can be easily made should this measure be utilized in both venues of care.

## Comparison of NQF #2612 and NQF #2775

	2612: CARE: Improvement in Mobility	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
Steward	American Health Care Association	Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc. and its successor in interest, UDSMR, LLC.
Description	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.	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.
Type	Outcome	Outcome
Data Source	Electronic Clinical Data, Other Resident Assessment Instrument Minimum Data Set (MDS) version 3.0 Continuity Assessment and Record Evaluation (CARE) Tool; Mobility subscale Available in attached appendix at A.1 No data dictionary	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records Functional Change Form, as seen in the appendix. Available in attached appendix at A.1 Attachment NQF_Submission-635749892715380581.xlsx
Level	Facility	Facility
Setting	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility
Numerator Statement	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.	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.
Numerator Details	The numerator includes all residents admitted from a hospital or another post acute care setting that receive any PT or OT therapy for any reason in a SNF that have a completed mobility CARE tool assessment at admission and discharge (see denominator definition below). The mobility items used from the CARE tool are listed below and rated on a 1-6 scale (see Appendix for copy of the CARE Tool assessment).	The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived motor functional score from admission to discharge for each patient at the facility level, including items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel,

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	<p>The items included in the CARE Tool Mobility subscale include:</p> <ul style="list-style-type: none"> <li>• B1. Lying to Sitting on Side of Bed</li> <li>• B2. Sit to Stand</li> <li>• B3. Chair/Bed to Chair Transfer</li> <li>• B4. Toilet Transfer</li> <li>• B5a &amp; B5b. Walking or Wheelchair Mobility</li> <li>• C3. Roll left / right</li> <li>• C4. Sit to Lying</li> <li>• C5. Picking up object</li> <li>• C7a. One Step Curb</li> <li>• C7b. Walk 50 ft. with Two Turns</li> <li>• C7c. Walk 12 Steps.</li> <li>• C7d. Walk Four Steps</li> <li>• C7e. Walking 10 ft. on Uneven Surface</li> <li>• C7f. Car Transfer</li> </ul> <p>The numerator is a facility's average risk adjusted change score on the mobility component of the CARE tool. The risk adjusted average change score is calculated in several steps:</p> <p>Step 1: Each individual's admission and discharge mobility scale score is calculated. Items rated as S. Not attempted due to safety concerns, A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to one. For each individual, the ratings for all the mobility items on the CARE tool at admission are summed and transformed to a 0-100 scale. The same is done for the discharge assessment.</p> <p>Step 2: Each individual's unadjusted change score is calculated by taking the admission score minus the discharge score.</p> <p>Step 3: The individual's unadjusted change score is risk adjusted (see risk adjustment section)</p> <p>Step 4: The facilities risk adjusted change score is the sum of all the individual's risk adjusted change scores divided by the denominator.</p>	<p>Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).</p>
Denominator Statement	<p>The denominator includes all residents admitted to a SNF from a hospital or another post-acute care setting who receive either PT or OT therapy for any reason during their stay regardless of payor status, have a completed mobility CARE tool assessment at admission and discharge and do not meet any of the exclusion criteria. The mobility items used from the CARE tool are listed</p>	<p>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.</p>

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	<p>below and rated on a 1-6 scale (see Appendix for copy of the mobility CARE tool assessment). The items included in the CARE Tool Mobility subscale include:</p> <ul style="list-style-type: none"> <li>• B1. Lying to Sitting on Side of Bed</li> <li>• B2. Sit to Stand</li> <li>• B3. Chair/Bed to Chair Transfer</li> <li>• B4. Toilet Transfer</li> <li>• B5a &amp; B5b. Walking or Wheelchair Mobility</li> <li>• C3. Roll left / right</li> <li>• C4. Sit to Lying</li> <li>• C5. Picking up object</li> <li>• C7a. One Step Curb</li> <li>• C7b. Walk 50 ft. with Two Turns</li> <li>• C7c. Walk 12 Steps.</li> <li>• C7d. Walk Four Steps</li> <li>• C7e. Walking 10 ft. on Uneven Surface</li> <li>• C7f. Car Transfer</li> </ul>	
Denominator Details	<p>The denominator includes all residents admitted to a SNF who are receiving any PT or OT therapy for any reason.</p> <p>The denominator is based on admission from any hospital or post-acute care setting and is determined using information from MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital" regardless of payor status. They must receive either PT or OT therapy during their stay. A resident's stay is defined as an episode of care from admissions to discharge from the facility or discharge from therapy services (defined as completing a discharge CARE tool assessment). Overall, approximately 85% of all admissions from a hospital receive either PT or OT therapy based on SNF Part A claims (or MDS 3.0 data).</p>	<p>The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 12 items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).</p>
Exclusions	<p>Patients are excluded for two broad reasons:</p> <ol style="list-style-type: none"> <li>1. if they have conditions where improvement in mobility is very unlikely,</li> </ol> <p>OR</p> <ol style="list-style-type: none"> <li>2. have missing data necessary to calculate the measure</li> </ol>	<p>Patients age at admission less than 18 years old Patients who died in the SNF.</p>

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	Additionally, facilities with denominator size of fewer than 30 patients during a 12 month period are excluded from reporting their data.	
Exclusion Details	<p>Individuals with conditions where improvement in mobility (as determined by a panel of expert therapists) is very unlikely were excluded based on information from the admission MDS 3.0 assessment. Individuals with one of the following MDS 3.0 items marked as yes were excluded:</p> <ul style="list-style-type: none"> <li>• Ventilator (O0100F1 =1 or O0100F2 =1)</li> <li>• Coma (B0100 =1)</li> <li>• Quadriplegic (I5100=1)</li> <li>• Hospice (O0100K1 = 1)</li> </ul> <p>In addition, we also excluded individuals whose age is less than 18 years.</p> <p>Overall, these exclusions resulted in 1.1% of all admissions being excluded.</p> <p>Missing data also resulted in individuals being excluded</p> <ul style="list-style-type: none"> <li>• Missing a discharge CARE Tool assessment (this resulted when individuals died or were hospitalized during their SNF stay) resulted in patients being excluded since one could not calculate a change from admission. Nationally approximately 21.6% of admissions to a SNF will be hospitalized during their therapy stay and 4.5% will die (based on analysis of SNF part A claims from 2009-2011).</li> <li>• Missing data on individual CARE Tool mobility assessment items on at least one item occurred 27.2% of the time. Approximately a third of all missing data related to just three items C7c walking 12 steps; C7d walking 4 steps and C7f car transfer but did not differ significantly between admission and discharge assessments. We did not impute any missing data for mobility items.</li> </ul>	Living at discharge and age at admission are collected through the MDS.
Risk Adjustment	<p>Statistical risk model</p> <p>Each individuals change score was risk adjusted based on the following formula:</p> <p>Risk Adjusted Score for individual = (National Average Change Score – Predicted Change Score) + Actual Change Score.</p> <p>The National Average Change Score was calculated as a population average change score for all patients in all SNFs who had a CARE Tool mobility subscale assessment completed at admission and discharge. The change score is the</p>	<p>Stratification by risk category/subgroup</p> <p>This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average motor functional change score. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).</p>

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	<p>difference in the aggregate of each individuals scale score from admission to discharge transformed to 0 to 100 scale.</p> <p>The Predicted Change Score is calculated based on logistic regression using the process outlined in 2b4.</p> <p>The Actual Change Score is the difference between the individual person’s admission mobility score transformed to 0 to 100 scale and their discharge mobility score transformed to a 0 to 100 scale.</p> <p>Provided in response box S.15a</p>	Available in attached Excel or csv file at S.2b
Stratification	Not Applicable	See definition of the SNF-CMGs in the excel file provided.
Type Score	Continuous variable, e.g. average better quality = higher score	Ratio better quality = higher score
Algorithm	<p>The facility-level mobility improvement scores are calculated using the following 15 steps.</p> <p>Step 1. Choose the 12 month window for which we will select episodes. This is the four consecutive calendar quarters ending with the most recent calendar quarter for which both MDS data and CARE Tool data are available for use in the measure.</p> <p>Step 2. Identify all MDS discharge assessments (in which we understand the CARE Tool items will be embedded) with a discharge date that fell within the 12 month window identified in Step 1.</p> <p>Step 3. For each MDS tool discharge assessment identified in Step 2, identify the corresponding MDS admission assessment (in which we understand the CARE Tool items will be embedded). An MDS assessment is identified as an admission assessment if A0310F == “01” (entry record). Note that the admission date may lie before the 12 month window defined in Step 1. The period of time from the admission date (corresponding with the MDS admission assessment) through to the discharge date (corresponding with the MDS discharge assessment) is called an “episode”. If no MDS admission assessment was found, discard the discharge assessment from all subsequent steps.</p> <p>Step 4. Identify all MDS admission assessments that indicate the admission to the SNF was from the hospital, another SNF or IRF. An MDS admission assessment indicates that the SNF admission was from a hospital when MDS item “A1800 Entered From” coded as “03 Acute Care</p>	<ol style="list-style-type: none"> <li>1. Identify all short term rehabilitation patients during the assessment time frame (12 months).</li> <li>2. Exclude any patients who died in the SNF.</li> <li>3. Exclude any patients who are less than 18 at the time of admission to the SNF.</li> <li>3. Calculate the total motor change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)</li> <li>4. Transform the patient level functional change scores to the rasch derived value (as stated in the attached excel file).</li> <li>5. Calculate the average rasch derived motor change score at the facility level.</li> <li>6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average motor change score for the time frame (12 months).</li> <li>7. Calculate the ratio outcome by taking the observed facility average motor change score/facility's national expected motor change score. Available in attached appendix at A.1</li> </ol>



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	<p>Hospital” or “02 Another nursing home or swing bed” or “05 inpatient rehabilitation facility” or “09 Long Term Care Hospital”. The MDS item A1600 indicates the date of entry to the SNF.</p> <p>Step 5. For any admission or discharge CARE Tool item (that enters the calculation of the mobility improvement scores) with letter code “S” (activity not attempted due to safety concerns), A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to “1” on a six point rating scale (indicating full functional dependence).</p> <p>Step 6. Apply the mobility improvement measure’s exclusions (see s.11), and exclude any episode that did not involve either physical or occupational therapy. The clinical measure exclusions are detailed in S.11 (Denominator exclusion details and codes). The exclusion of episodes not involving either occupational or physical therapy is as follows:</p> <p>We identify the patient as having received occupational therapy if on the MDS discharge assessment:</p> <ul style="list-style-type: none"> <li>The total number of minutes of occupational therapy in the last 7 days (O0400B1) is greater than zero; or</li> <li>The most recent occupational therapy regimen (starting on the date recorded in O0400B5, and ending on the date recorded in O0400B6) intersects the episode (beginning with the CARE admission assessment’s admission date and ending with the CARE discharge assessment’s discharge date).</li> </ul> <p>We identify the patient as having received physical therapy if on the MDS discharge assessment:</p> <ul style="list-style-type: none"> <li>The total number of minutes of physical therapy in the last 7 days (O0400C1) is greater than zero; or</li> <li>The most recent physical therapy regimen (starting on the date recorded in O0400C5, and ending on the date recorded in O0400C6) intersects the episode (beginning with the CARE admission assessment’s admission date and ending with the CARE discharge assessment’s discharge date).</li> </ul> <p>If the episode involves neither occupational nor physical therapy, as identified above, then exclude it from all subsequent steps in the calculation.</p>	

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	<p>Step 7. Map the CARE Tool B5a (walking) and B5b (wheeling) items to obtain a harmonious 1-6 score for all assessments, and recode walking items C7b, C7c, C7d and C7e to 1=dependent if resident cannot walk. First, consolidate the four sub-items B5a1, B5a2, B5a3 and B5a4 corresponding to different distances the resident can walk (if the patient can walk); and the four sub-items B5b1, B5b2, B5b3 and B5b4 corresponding to different distances the resident can wheel (if the patient cannot walk). To do this, use the crosswalk presented in Figure A1 in the Appendix. Call the resulting two items B5a and B5b.</p> <p>Second, consolidate the B5a and B5b items into a harmonious summary item called B5. To do this use the crosswalk presented in Figure A1 in the Appendix. This is the item used in the calculation of mobility outcome scores in the subsequent steps.</p> <p>Finally, if the patient is unable to walk (i.e., no values for the B5a and C7 items), recode each item C7a, C7b, C7d and C7e to 1 = dependent.</p> <p>Step 8. For each episode remaining after Step 6, using the CARE Tool items as transformed in Step 7, calculate a preliminary admission score and a discharge score as the sum of the values for the following CARE tool mobility items B1 (Lying to sitting on side of bed), B2 (Sit to stand), B3 (Chair/bed-to-chair transfer), B4 (Toilet transfer), B5 (Walking/wheeling), C3 (Roll left and right), C4 (Sit to lying), C7a (One step (curb)), C7b (Walking 50 feet with two turns), C7c (Walking 12 steps), C7d (Walking four steps), C7e (Walking 10 feet on uneven surfaces).</p> <p>Each of those 12 CARE Tool items takes an integer value of 1, 2, 3, 4, 5 or 6, and so the preliminary admission score will be an integer between 12 and 72, and the preliminary discharge score will be an integer between 12 and 72.</p> <p>Step 9. For each episode, linearly transform the preliminary admission score and preliminary discharge score so that it lies in the range 1-100 using the following equation:</p> <p>["transformed mobility admission score"] = 1.65 × ["preliminary mobility admission score"] - 18.8</p>	

	2612: CARE: Improvement in Mobility	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
	<p>["transformed mobility discharge score"] = 1.65 × ["preliminary mobility discharge score"] - 18.8</p> <p>Step 10. For each episode, calculate the episode-level change score by subtracting the transformed discharge score from the transformed admission score. Each score will lie between -99 and 99.</p> <p>Step 11. Calculate the national average change score as the simple mean of all episode-level change scores calculated in Step 10.</p> <p>Step 12. For each episode, calculate the predicted change score using the risk adjustment methodology detailed in S.15a. That is, having prepared the risk adjustment variables in the way described in S.15a, apply the equation:  [predicted change score] = 33.61 - 1.56 × [patient is 85 years or older] - 9.11 × [dialysis while a resident] - 5.08 × [entered from SNF] - 2.81 × [oxygen while a patient] - 4.23 × [unhealed pressure ulcers] - 8.85 × [mental status] - 4.75 × [resident mood] - 9.30 × [psychiatric conditions] - 6.91 × [feeding tube or IV feeding] - 4.10 × [suctioning or tracheotomy] - 3.98 × [infections of the foot].</p> <p>Step 13. For each episode, calculate the risk adjusted change score using the actual change score calculated in Step 10, the national average change score calculated in Step 11, and the predicted change score calculated in Step 12. The risk adjusted change score is: [risk adjusted change score] = ([national average change score] - [predicted change score]) + [actual change score].</p> <p>Step 14. Exclude any facility that has fewer than 30 episodes for which we could calculate a risk adjusted change score.</p> <p>Step 15. For each facility remaining after Step 14, calculate its mobility improvement score as the simple mean of the risk adjusted change scores calculated in Step 13. No diagram provided</p>	
Submission items	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized? No</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact: Not Applicable</p> <p>5b.1 If competing, why superior or rationale for additive value: Not Applicable</p>	<p>5.1 Identified measures:</p> <p>5a.1 Are specs completely harmonized?</p> <p>5a.2 If not completely harmonized, identify difference, rationale, impact:</p> <p>5b.1 If competing, why superior or rationale for additive value:</p>

## Comparison of NQF #2613 and NQF #2775

	2613: CARE: Improvement in Self Care	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
Steward	American Health Care Association	Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc. and its successor in interest, UDSMR, LLC.
Description	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.	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.
Type	Outcome	Outcome
Data Source	Electronic Clinical Data, Other Resident Assessment Instrument Minimum Data Set (MDS) version 3.0 Continuity Assessment and Record Evaluation (CARE) tool; Self Care subscale Available in attached appendix at A.1 No data dictionary	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records Functional Change Form, as seen in the appendix. Available in attached appendix at A.1 Attachment NQF_Submission-635749892715380581.xlsx
Level	Facility	Facility
Setting	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility
Numerator Statement	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.	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.
Numerator Details	The numerator includes all residents admitted from a hospital or another post-acute care setting that receive any PT or OT therapy for any reason in a SNF that have a completed CARE Tool self care subscale assessment at admission and discharge (see denominator definition below). 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 target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived motor functional score from admission to discharge for each patient at the facility level, including items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel,

	2613: CARE: Improvement in Self Care	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
	<p>The items included in the CARE Tool self care subscale include:</p> <ul style="list-style-type: none"> <li>• A1. Eating</li> <li>• A3. Oral Hygiene</li> <li>• A4. Toilet Hygiene</li> <li>• A5. Upper Body Dressing</li> <li>• A6. Lower Body Dressing</li> <li>• C1. Wash Upper Body</li> <li>• C2. Shower / Bathe</li> <li>• C6. Putting on / taking off footwear</li> </ul> <p>The numerator is facility's average risk adjusted change score on the self care subscale of the CARE tool. The risk adjusted average change score is calculated in several steps:</p> <p>Step 1: Each individual's admission and discharge self care subscale score is calculated. Items rated as S. Not attempted due to safety concerns, A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to one on a six point rating scale (e.g. dependent). For each individual, the ratings for all the self care items on the CARE tool at admission are summed and transformed to a 0-100 scale. The same is done for the discharge assessment.</p> <p>Step 2: Each individual's unadjusted change score is calculated by taking the admission score minus the discharge score.</p> <p>Step 3: The individual's unadjusted change score is risk adjusted (see S.14)</p> <p>Step 4: The facility's risk adjusted change score is the sum of all the individual's risk adjusted change scores divided by the denominator.</p>	<p>Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).</p>
Denominator Statement	<p>The denominator includes all residents admitted to a SNF from a hospital or another post-acute 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).</p> <p>The items included in the CARE Tool self care subscale include:</p> <ul style="list-style-type: none"> <li>• A1. Eating</li> <li>• A3. Oral Hygiene</li> </ul>	<p>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.</p>

	2613: CARE: Improvement in Self Care	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
	<ul style="list-style-type: none"> <li>A4. Toilet Hygiene</li> <li>A5. Upper Body Dressing</li> <li>A6. Lower Body Dressing</li> <li>C1. Wash Upper Body</li> <li>C2. Shower / Bathe</li> <li>C6. Putting on / taking off footwear</li> </ul>	
Denominator Details	<p>The denominator includes all residents admitted to a SNF who are receiving any PT or OT therapy for any reason. The denominator is based on admission from any hospital or post-acute care setting and is determined using information from MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital (LTCH)", regardless of payor status. They must receive either PT or OT therapy during their stay. A resident's stay is defined as an episode of care from admissions to discharge from the facility or discharge from therapy services (defined as completing a discharge CARE Tool assessment).</p>	<p>The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 12 items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).</p>
Exclusions	<p>Individual patients are excluded for two broad reasons:</p> <ol style="list-style-type: none"> <li>if they have conditions where improvement in self-care is very unlikely,</li> </ol> <p>OR</p> <ol style="list-style-type: none"> <li>have missing data necessary to calculate the measure</li> </ol> <p>Additionally, facilities with denominator size of fewer than 30 patients during a 12 month period are excluded from reporting of their data.</p>	<p>Patients age at admission less than 18 years old Patients who died in the SNF.</p>
Exclusion Details	<p>Individuals with conditions where improvement in self care (as determined by a panel of expert therapists) is very unlikely were excluded based on information from the admission MDS 3.0 assessment. Individuals with one of the following MDS 3.0 items marked as yes were excluded:</p> <ul style="list-style-type: none"> <li>Ventilator (O0100F1 =1 or O0100F2 =1)</li> <li>Coma (B0100 =1)</li> <li>Quadriplegic (I5100=1)</li> </ul>	<p>Living at discharge and age at admission are collected through the MDS.</p>

	2613: CARE: Improvement in Self Care	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
	<ul style="list-style-type: none"> <li>Hospice (O0100K1 = 1)</li> </ul> <p>In addition, we also excluded individuals whose age is less than 18 years.</p> <p>Overall, these exclusions resulted in 1.1% of all admissions being excluded.</p> <p>Missing data also resulted in individuals being excluded, details are as follows:</p> <ul style="list-style-type: none"> <li>Missing a discharge CARE Tool assessment (this resulted when individuals died or were hospitalized during their SNF stay) resulted in patients being excluded since one could not calculate a change from admission. Nationally approximately 21.6% of admissions to a SNF will be hospitalized during their therapy stay and 4.5% will die (based on analysis of SNF part A claims from 2009-2011).</li> <li>Missing data on individual items on either the admission or discharge CARE Tool assessment resulted in the individual being excluded from calculation. For self care items, this occurred 4.4% of the time. We did not impute any missing data for self care items.</li> </ul>	
Risk Adjustment	<p>Statistical risk model</p> <p>Each individual's change score was risk adjusted based on the following formula:</p> <p>Risk Adjusted Score for individual = (National Average Change Score – Predicted Change Score) + Actual Change Score.</p> <p>The National Average Change Score was calculated as a population average change score for all patients in all SNFs who had a CARE Tool self care subscale assessment completed at admission and discharge. The change score is the difference in the aggregate of each individuals scale score from admission to discharge transformed to 0 to 100 scale.</p> <p>The Predicted Change Score is calculated based on logistic regression using the process outlined in 2b4.</p> <p>The Actual Change Score is the difference between the individual person's admission self care score transformed to 0 to 100 scale and their discharge self care score transformed to a 0 to 100 scale.</p> <p>Provided in response box S.15a</p>	<p>Stratification by risk category/subgroup</p> <p>This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average motor functional change score. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).</p> <p>Available in attached Excel or csv file at S.2b</p>
Stratification	Not Applicable	See definition of the SNF-CMGs in the excel file provided.

	2613: CARE: Improvement in Self Care	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
Type Score	Continuous variable, e.g. average better quality = higher score	Ratio better quality = higher score
Algorithm	<p>The facility-level self care improvement scores are calculated using the following 14 steps.</p> <p>Step 1. Choose the 12 month window for which we will select episodes. This is the four consecutive calendar quarters ending with the most recent calendar quarter for which both MDS data and CARE tool data are available for use in the measure.</p> <p>Step 2. Identify all MDS discharge assessments (in which we understand the CARE tool items will be embedded) with a discharge date that fell within the 12 month window identified in Step 1.</p> <p>Step 3. For each MDS tool discharge assessment identified in Step 2, identify the corresponding MDS admission assessment (in which we understand the CARE tool items will be embedded). An MDS assessment is identified as an admission assessment if A0310F == "01" (entry record). Note that the admission date may lie before the 12 month window defined in Step 1. The period of time from the admission date (corresponding with the MDS admission assessment) through to the discharge date (corresponding with the MDS discharge assessment) is called an "episode". If no MDS admission assessment was found, discard the discharge assessment from all subsequent steps.</p> <p>Step 4. Identify all MDS admission assessments that indicate the admission to the SNF was from the hospital, another SNF or IRF. An MDS admission assessment indicates that the SNF admission was from a hospital when MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital". The MDS item A1600 indicates the date of entry to the SNF.</p> <p>Step 5. For any admission or discharge CARE tool item (that enters the calculation of the self-care improvement scores) with letter code "S" (activity not attempted due to safety concerns), A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to "1" on a six point rating scale (indicating full functional dependence).</p> <p>Step 6. Apply the self care improvement measure's exclusions (see s.11), and exclude any episode that did not involve either physical or</p>	<ol style="list-style-type: none"> <li>1. Identify all short term rehabilitation patients during the assessment time frame (12 months).</li> <li>2. Exclude any patients who died in the SNF.</li> <li>3. Exclude any patients who are less than 18 at the time of admission to the SNF.</li> <li>3. Calculate the total motor change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)</li> <li>4. Transform the patient level functional change scores to the rasch derived value (as stated in the attached excel file).</li> <li>5. Calculate the average rasch derived motor change score at the facility level.</li> <li>6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average motor change score for the time frame (12 months).</li> <li>7. Calculate the ratio outcome by taking the observed facility average motor change score/facility's national expected motor change score. Available in attached appendix at A.1</li> </ol>



	2613: CARE: Improvement in Self Care	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
	<p>occupational therapy. The clinical measure exclusions are detailed in S.11 (Denominator exclusion details and codes). The exclusion of episodes not involving either occupational or physical therapy is as follows:</p> <p>We identify the patient as having received occupational therapy if on the MDS discharge assessment:</p> <p style="padding-left: 40px;">The total number of minutes of occupational therapy in the last 7 days (O0400B1) is greater than zero; or</p> <p style="padding-left: 40px;">The most recent occupational therapy regimen (starting on the date recorded in O0400B5, and ending on the date recorded in O0400B6) intersects the episode (beginning with the CARE admission assessment's date and ending with the CARE discharge assessment's date).</p> <p>We identify the patient as having received physical therapy if on the MDS discharge assessment:</p> <p style="padding-left: 40px;">The total number of minutes of physical therapy in the last 7 days (O0400C1) is greater than zero; or</p> <p style="padding-left: 40px;">The most recent physical therapy regimen (starting on the date recorded in O0400C5, and ending on the date recorded in O0400C6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).</p> <p>If the episode involves neither occupational nor physical therapy, as identified above, then exclude it from all subsequent steps in the calculation.</p> <p>Step 7. For each episode remaining after Step 6, calculate a preliminary admission score and a discharge score as the sum of the values for the following CARE tool self care items A1 (Eating), A3 (Oral Hygiene), A4 (Toilet Hygiene), A5 (Upper Body Dressing), A6 (Lower Body Dressing), C1 (Wash Upper Body), C2 (Shower/Bath Self), C6 (Putting on/Taking off Footwear).</p> <p>Each of those 8 CARE tool items takes an integer value of 1, 2, 3, 4, 5 or 6, and so the preliminary admission score will be an integer between 8 and 48, and the preliminary discharge score will be an integer between 8 and 48.</p>	

	2613: CARE: Improvement in Self Care	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
	<p>Step 8. For each episode, linearly transform the preliminary admission score and preliminary discharge score so that it lies in the range 1-100 using the following equation:</p> <p>["transformed self-care admission score"] = 2.475 × ["preliminary self-care admission score"] - 18.8</p> <p>["transformed self-care discharge score"] = 2.475 × ["preliminary self-care discharge score"] - 18.8</p> <p>Step 9. For each episode, calculate the episode-level change score by subtracting the transformed discharge score from the transformed admission score. Each score will lie between -99 and 99.</p> <p>Step 10. Calculate the national average change score as the simple mean of all episode-level change scores calculated in Step 9.</p> <p>Step 11. For each episode, calculate the predicted change score using the risk adjustment methodology detailed in S.15a. That is, having prepared the risk adjustment variables in the way described in S.15a, apply the equation: [predicted change score] = 25.98 - 0.28 × [patient is 85 years or older] - 4.43 × [dialysis while a patient] - 3.83 × [entered from SNF] - 2.37 × [oxygen while a patient] - 1.06 × [catheterization/ostomy] - 2.87 × [unhealed pressure ulcers] - 7.12 × [mental status] - 3.33 × [resident mood] - 8.11 × [psychiatric conditions] - 4.05 × [feeding tube or IV feeding] - 5.43 × [suctioning or tracheotomy] - 2.76 × [infections of the foot].</p> <p>Step 12. For each episode, calculate the risk adjusted change score using the actual change score calculated in Step 9, the national average change score calculated in Step 10, and the predicted change score calculated in Step 11. The risk adjusted change score is:</p> <p>["risk adjusted change score"] = (["national average change score"] - ["predicted change score"]) + ["actual change score"]</p> <p>Step 13. Exclude any facility that has fewer than 30 episodes for which we could calculate a risk adjusted change score.</p> <p>Step 14. For each facility remaining after Step 13, calculate its self care improvement score as the simple mean of the risk adjusted change</p>	

	2613: CARE: Improvement in Self Care	2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities
	scores calculated in Step 12. No diagram provided	
Submission items	5.1 Identified measures: 5a.1 Are specs completely harmonized? 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value: Not Applicable	5.1 Identified measures: 5a.1 Are specs completely harmonized? 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value:

## Appendix F2: Related and Competing Measures (narrative format)

### Comparison of NQF #2613 and NQF #2769

2613: CARE: Improvement in Self Care

2769: Functional Change: Change in Self Care Score for Skilled Nursing 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, a division of UB Foundation Activities, Inc. and its successor in interest, UDSMR, LLC.

#### *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.

#### *Type*

##### **2613: CARE: Improvement in Self Care**

Outcome

##### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

Outcome

#### *Data Source*

##### **2613: CARE: Improvement in Self Care**

Electronic Clinical Data, Other Resident Assessment Instrument Minimum Data Set (MDS) version 3.0

Continuity Assessment and Record Evaluation (CARE) tool; Self Care subscale

Available in attached appendix at A.1 No data dictionary

**2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission\_Self\_Care\_SNF.xlsx

*Level*

**2613: CARE: Improvement in Self Care**

Facility

**2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

Facility

*Setting*

**2613: CARE: Improvement in Self Care**

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

**2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

*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.

*Numerator Details*

**2613: CARE: Improvement in Self Care**

The numerator includes all residents admitted from a hospital or another post-acute care setting that receive any PT or OT therapy for any reason in a SNF that have a completed CARE Tool self care subscale assessment at admission and discharge (see denominator definition below). 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

The numerator is facility's average risk adjusted change score on the self care subscale of the CARE tool. The risk adjusted average change score is calculated in several steps:

Step 1: Each individual's admission and discharge self care subscale score is calculated. Items rated as S. Not attempted due to safety concerns, A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to one on a six point rating scale (e.g. dependent). For each individual, the ratings for all the self care items on the CARE tool at admission are summed and transformed to a 0-100 scale. The same is done for the discharge assessment.

Step 2: Each individual's unadjusted change score is calculated by taking the admission score minus the discharge score.

Step 3: The individual's unadjusted change score is risk adjusted (see S.14)

Step 4: The facility's risk adjusted change score is the sum of all the individual's risk adjusted change scores divided by the denominator.

### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived self-care functional score from admission to discharge for each patient at the facility level, including items: Eating, 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 (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) / total number of patients).

#### *Denominator Statement*

### **2613: CARE: Improvement in Self Care**

The denominator includes all residents admitted to a SNF from a hospital or another post-acute 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

#### *Denominator Details*

### **2613: CARE: Improvement in Self Care**

The denominator includes all residents admitted to a SNF who are receiving any PT or OT therapy for any reason. The denominator is based on admission from any hospital or post-acute care setting and is determined using information from MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital (LTCH)", regardless of payor status. They must receive either PT or OT therapy during their stay. A resident's stay is defined as an episode of care from admissions to discharge from the facility or discharge from therapy services (defined as completing a discharge CARE Tool assessment).

### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum of 8 items ((Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected Self-Care functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

#### *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.

#### *Exclusion Details*

### **2613: CARE: Improvement in Self Care**

Individuals with conditions where improvement in self care (as determined by a panel of expert therapists) is very unlikely were excluded based on information from the admission

MDS 3.0 assessment. Individuals with one of the following MDS 3.0 items marked as yes were excluded:

- Ventilator (O0100F1 =1 or O0100F2 =1)
- Coma (B0100 =1)
- Quadriplegic (I5100=1)
- Hospice (O0100K1 = 1)

In addition, we also excluded individuals whose age is less than 18 years.

Overall, these exclusions resulted in 1.1% of all admissions being excluded.

Missing data also resulted in individuals being excluded, details are as follows:

- Missing a discharge CARE Tool assessment (this resulted when individuals died or were hospitalized during their SNF stay) resulted in patients being excluded since one could not calculate a change from admission. Nationally approximately 21.6% of admissions to a SNF will be hospitalized during their therapy stay and 4.5% will die (based on analysis of SNF part A claims from 2009-2011).
- Missing data on individual items on either the admission or discharge CARE Tool assessment resulted in the individual being excluded from calculation. For self care items, this occurred 4.4% of the time. We did not impute any missing data for self care items.

#### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

Living at discharge and age at admission are collected through the MDS.

#### *Risk Adjustment*

##### **2613: CARE: Improvement in Self Care**

Statistical risk model

Each individual's change score was risk adjusted based on the following formula:

Risk Adjusted Score for individual = (National Average Change Score – Predicted Change Score) + Actual Change Score.

The National Average Change Score was calculated as a population average change score for all patients in all SNFs who had a CARE Tool self care subscale assessment completed at admission and discharge. The change score is the difference in the aggregate of each individual's scale score from admission to discharge transformed to 0 to 100 scale.

The Predicted Change Score is calculated based on logistic regression using the process outlined in 2b4.

The Actual Change Score is the difference between the individual person's admission self care score transformed to 0 to 100 scale and their discharge self care score transformed to a 0 to 100 scale.

Provided in response box S.15a

##### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average self-care functional change score. The denominator is meant to reflect the expected Self-Care functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).



Available in attached Excel or csv file at S.2b

### *Stratification*

#### **2613: CARE: Improvement in Self Care**

Not Applicable

#### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

See definition of the SNF-CMGs in the appendix.

### *Type Score*

#### **2613: CARE: Improvement in Self Care**

Continuous variable, e.g. average better quality = higher score

#### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

Ratio better quality = higher score

### *Algorithm*

#### **2613: CARE: Improvement in Self Care**

The facility-level self care improvement scores are calculated using the following 14 steps.

Step 1. Choose the 12 month window for which we will select episodes. This is the four consecutive calendar quarters ending with the most recent calendar quarter for which both MDS data and CARE tool data are available for use in the measure.

Step 2. Identify all MDS discharge assessments (in which we understand the CARE tool items will be embedded) with a discharge date that fell within the 12 month window identified in Step 1.

Step 3. For each MDS tool discharge assessment identified in Step 2, identify the corresponding MDS admission assessment (in which we understand the CARE tool items will be embedded). An MDS assessment is identified as an admission assessment if A0310F == "01" (entry record). Note that the admission date may lie before the 12 month window defined in Step 1. The period of time from the admission date (corresponding with the MDS admission assessment) through to the discharge date (corresponding with the MDS discharge assessment) is called an "episode". If no MDS admission assessment was found, discard the discharge assessment from all subsequent steps.

Step 4. Identify all MDS admission assessments that indicate the admission to the SNF was from the hospital, another SNF or IRF. An MDS admission assessment indicates that the SNF admission was from a hospital when MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital". The MDS item A1600 indicates the date of entry to the SNF.

Step 5. For any admission or discharge CARE tool item (that enters the calculation of the self-care improvement scores) with letter code "S" (activity not attempted due to safety concerns), A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to "1" on a six point rating scale (indicating full functional dependence).

Step 6. Apply the self care improvement measure's exclusions (see s.11), and exclude any episode that did not involve either physical or occupational therapy. The clinical measure

exclusions are detailed in S.11 (Denominator exclusion details and codes). The exclusion of episodes not involving either occupational or physical therapy is as follows:

We identify the patient as having received occupational therapy if on the MDS discharge assessment:

The total number of minutes of occupational therapy in the last 7 days (O0400B1) is greater than zero; or

The most recent occupational therapy regimen (starting on the date recorded in O0400B5, and ending on the date recorded in O0400B6) intersects the episode (beginning with the CARE admission assessment's date and ending with the CARE discharge assessment's date).

We identify the patient as having received physical therapy if on the MDS discharge assessment:

The total number of minutes of physical therapy in the last 7 days (O0400C1) is greater than zero; or

The most recent physical therapy regimen (starting on the date recorded in O0400C5, and ending on the date recorded in O0400C6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).

If the episode involves neither occupational nor physical therapy, as identified above, then exclude it from all subsequent steps in the calculation.

Step 7. For each episode remaining after Step 6, calculate a preliminary admission score and a discharge score as the sum of the values for the following CARE tool self care items A1 (Eating), A3 (Oral Hygiene), A4 (Toilet Hygiene), A5 (Upper Body Dressing), A6 (Lower Body Dressing), C1 (Wash Upper Body), C2 (Shower/Bath Self), C6 (Putting on/Taking off Footwear).

Each of those 8 CARE tool items takes an integer value of 1, 2, 3, 4, 5 or 6, and so the preliminary admission score will be an integer between 8 and 48, and the preliminary discharge score will be an integer between 8 and 48.

Step 8. For each episode, linearly transform the preliminary admission score and preliminary discharge score so that it lies in the range 1-100 using the following equation:

["transformed self-care admission score"] =  $2.475 \times$  ["preliminary self-care admission score"] - 18.8

["transformed self-care discharge score"] =  $2.475 \times$  ["preliminary self-care discharge score"] - 18.8

Step 9. For each episode, calculate the episode-level change score by subtracting the transformed discharge score from the transformed admission score. Each score will lie between -99 and 99.

Step 10. Calculate the national average change score as the simple mean of all episode-level change scores calculated in Step 9.

Step 11. For each episode, calculate the predicted change score using the risk adjustment methodology detailed in S.15a. That is, having prepared the risk adjustment variables in the way described in S.15a, apply the equation: [predicted change score] =  $25.98 - 0.28 \times$  [patient is 85 years or older] -  $4.43 \times$  [dialysis while a patient] -  $3.83 \times$  [entered from SNF] -  $2.37 \times$  [oxygen while a patient] -  $1.06 \times$  [catheterization/ostomy] -  $2.87 \times$  [unhealed pressure

ulcers] -7.12×[mental status] -3.33×[resident mood] -8.11×[psychiatric conditions] -4.05×[feeding tube or IV feeding] -5.43×[suctioning or tracheotomy] -2.76×[infections of the foot].

Step 12. For each episode, calculate the risk adjusted change score using the actual change score calculated in Step 9, the national average change score calculated in Step 10, and the predicted change score calculated in Step 11. The risk adjusted change score is:

["risk adjusted change score" ]=(["national average change score" ]-["predicted change score" ])+["actual change score" ]

Step 13. Exclude any facility that has fewer than 30 episodes for which we could calculate a risk adjusted change score.

Step 14. For each facility remaining after Step 13, calculate its self care improvement score as the simple mean of the risk adjusted change scores calculated in Step 12. No diagram provided

### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

1. Identify all short term rehabilitation patients during the assessment time frame (12 months).
2. Exclude any patients who died in the SNF.
3. Exclude any patients who are less than 18 at the time of admission to the SNF.
3. Calculate the total self-care change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in attached excel file).
5. Calculate the average rasch derived self-care change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average self-care change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average self-care change score/facility's national expected self-care change score. No diagram provided

### *Submission items*

#### **2613: CARE: Improvement in Self Care**

- 5.1 Identified measures:
  - 5a.1 Are specs completely harmonized?
  - 5a.2 If not completely harmonized, identify difference, rationale, impact:
  - 5b.1 If competing, why superior or rationale for additive value: Not Applicable

#### **2769: Functional Change: Change in Self Care Score for Skilled Nursing Facilities**

- 5.1 Identified measures: 2613 : CARE: Improvement in Self Care
  - 5a.1 Are specs completely harmonized? No
  - 5a.2 If not completely harmonized, identify difference, rationale, impact: While the CARE items and the self-care measure the same construct of functional (in)dependence, there are some key differences key differences included in the measures, and in the measurement of the items. The self-care measure submitted by UDS includes the following

items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. The CARE items included in the measure submitted by AHCA include: Eating, Oral hygiene, Toilet hygiene, Shower/bathe self, Upper body dressing, Lower body dressing, Putting on/taking off footwear. Once again there is great overlap in the items, particularly for feeding, grooming, and toileting. However, where the AHCA measure does not contain any cognitive items in their measure, our measure contains two cognitive items when determining a patient's ability to care for one's self especially for discharge planning, cognitive ability play a key role, thus we maintain our measure is best in class considering it is more robust, has greater sensitivity in measurement (our measure uses a seven level rating scale whereas the CARE measure uses a six level, thus our rating scale offers greater refinement in measurement). Finally, the UDSMS change in self-care measure is the exact same measure (same items, same rating scale, same adjustment) used in SNF, IRF and LTAC, offering consistency in measuring patient function across PAC venues, which has been an interest for PAC and is a current objective of the IMPACT ACT.

5b.1 If competing, why superior or rationale for additive value: The functional items in our proposed measure have been collected in SNFs for over 20 years. This allows for a historical perspective of function in the SNFs that the CARE items do not allow. In addition, the functional items in our proposed measure have been used in inpatient rehabilitation facilities for over 30 years, and therefore, a comparison in functional gains between IRFs and SNFs can be easily made should this measure be utilized in both venues of care.

## Comparison of NQF #2612 and NQF #2774

2612: CARE: Improvement in Mobility

2774: : Functional Change: Change in Mobility Score for Skilled Nursing Facilities

### *Steward*

#### **2612: CARE: Improvement in Mobility**

American Health Care Association

#### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

Uniform Data System for Medical Rehabilitation, a

### *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.

#### **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.

### *Type*

#### **2612: CARE: Improvement in Mobility**

Outcome

#### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

Outcome

### *Data Source*

#### **2612: CARE: Improvement in Mobility**

Electronic Clinical Data, Other Resident Assessment Instrument Minimum Data Set (MDS) version 3.0

Continuity Assessment and Record Evaluation (CARE) Tool; Mobility subscale

Available in attached appendix at A.1 No data dictionary

#### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission\_Mobility-635749898391586121.xlsx

### *Level*

#### **2612: CARE: Improvement in Mobility**

Facility

#### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

Facility

### *Setting*

#### **2612: CARE: Improvement in Mobility**

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

#### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

### *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.

#### **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.

### *Numerator Details*

#### **2612: CARE: Improvement in Mobility**

The numerator includes all residents admitted from a hospital or another post acute care setting that receive any PT or OT therapy for any reason in a SNF that have a completed mobility CARE tool assessment at admission and discharge (see denominator definition below). The mobility items used from the CARE tool are listed below and rated on a 1-6 scale (see Appendix for copy of the CARE Tool assessment).

The items included in the CARE Tool Mobility subscale include:

- B1. Lying to Sitting on Side of Bed
- B2. Sit to Stand
- B3. Chair/Bed to Chair Transfer
- B4. Toilet Transfer
- B5a & B5b. Walking or Wheelchair Mobility
- C3. Roll left / right
- C4. Sit to Lying

- C5. Picking up object
- C7a. One Step Curb
- C7b. Walk 50 ft. with Two Turns
- C7c. Walk 12 Steps.
- C7d. Walk Four Steps
- C7e. Walking 10 ft. on Uneven Surface
- C7f. Car Transfer

The numerator is a facility's average risk adjusted change score on the mobility component of the CARE tool. The risk adjusted average change score is calculated in several steps:

Step 1: Each individual's admission and discharge mobility scale score is calculated. Items rated as S. Not attempted due to safety concerns, A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to one. For each individual, the ratings for all the mobility items on the CARE tool at admission are summed and transformed to a 0-100 scale. The same is done for the discharge assessment.

Step 2: Each individual's unadjusted change score is calculated by taking the admission score minus the discharge score.

Step 3: The individual's unadjusted change score is risk adjusted (see risk adjustment section)

Step 4: The facilities risk adjusted change score is the sum of all the individual's risk adjusted change scores divided by the denominator.

#### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in

the SNF. The numerator is the average change in rasch derived mobility functional score from admission to discharge for each

patient at the facility level, including items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).

#### *Denominator Statement*

#### **2612: CARE: Improvement in Mobility**

The denominator includes all residents admitted to a SNF from a hospital or another post-acute care setting who receive either PT or OT therapy for any reason during their stay regardless of payor status, have a completed mobility CARE tool assessment at admission and discharge and do not meet any of the exclusion criteria. The mobility items used from the CARE tool are listed below and rated on a 1-6 scale (see Appendix for copy of the mobility CARE tool assessment).

The items included in the CARE Tool Mobility subscale include:

- B1. Lying to Sitting on Side of Bed
- B2. Sit to Stand
- B3. Chair/Bed to Chair Transfer
- B4. Toilet Transfer

- B5a & B5b. Walking or Wheelchair Mobility
- C3. Roll left / right
- C4. Sit to Lying
- C5. Picking up object
- C7a. One Step Curb
- C7b. Walk 50 ft. with Two Turns
- C7c. Walk 12 Steps.
- C7d. Walk Four Steps
- C7e. Walking 10 ft. on Uneven Surface
- C7f. Car Transfer

#### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

Facility adjusted adjusted expected change in rasch derived values, adjusted at the Skilled Nursing Facility Case Mix Group level.

#### *Denominator Details*

##### **2612: CARE: Improvement in Mobility**

The denominator includes all residents admitted to a SNF who are receiving any PT or OT therapy for any reason.

The denominator is based on admission from any hospital or post-acute care setting and is determined using information from MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital" regardless of payor status. They must receive either PT or OT therapy during their stay. A resident's stay is defined as an episode of care from admissions to discharge from the facility or discharge from therapy services (defined as completing a discharge CARE tool assessment). Overall, approximately 85% of all admissions from a hospital receive either PT or OT therapy based on SNF Part A claims (or MDS 3.0 data).

##### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in

the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint

replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 4 items (Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age

of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected Mobility functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).



## Exclusions

### 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.

### 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.

## Exclusion Details

### 2612: CARE: Improvement in Mobility

Individuals with conditions where improvement in mobility (as determined by a panel of expert therapists) is very unlikely were excluded based on information from the admission MDS 3.0 assessment. Individuals with one of the following MDS 3.0 items marked as yes were excluded:

- Ventilator (O0100F1 =1 or O0100F2 =1)
- Coma (B0100 =1)
- Quadriplegic (I5100=1)
- Hospice (O0100K1 = 1)

In addition, we also excluded individuals whose age is less than 18 years.

Overall, these exclusions resulted in 1.1% of all admissions being excluded.

Missing data also resulted in individuals being excluded

- Missing a discharge CARE Tool assessment (this resulted when individuals died or were hospitalized during their SNF stay) resulted in patients being excluded since one could not calculate a change from admission. Nationally approximately 21.6% of admissions to a SNF will be hospitalized during their therapy stay and 4.5% will die (based on analysis of SNF part A claims from 2009-2011).
- Missing data on individual CARE Tool mobility assessment items on at least one item occurred 27.2% of the time. Approximately a third of all missing data related to just three items C7c walking 12 steps; C7d walking 4 steps and C7f car transfer but did not differ significantly between admission and discharge assessments. We did not impute any missing data for mobility items.

### 2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities

Living at discharge and age at admission are collected through the MDS.

## Risk Adjustment

### 2612: CARE: Improvement in Mobility

Statistical risk model

Each individuals change score was risk adjusted based on the following formula:

Risk Adjusted Score for individual = (National Average Change Score – Predicted Change Score) + Actual Change Score.

The National Average Change Score was calculated as a population average change score for all patients in all SNFs who had a CARE Tool mobility subscale assessment completed at admission and discharge. The change score is the difference in the aggregate of each individual's scale score from admission to discharge transformed to 0 to 100 scale.

The Predicted Change Score is calculated based on logistic regression using the process outlined in 2b4.

The Actual Change Score is the difference between the individual person's admission mobility score transformed to 0 to 100 scale and their discharge mobility score transformed to a 0 to 100 scale.

Provided in response box S.15a

#### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The

numerator is the facility's average mobility functional change score. The denominator is meant to reflect the expected Mobility functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

#### *Stratification*

##### **2612: CARE: Improvement in Mobility**

Not Applicable

##### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

See definition of the SNF-CMGs in the excel file provided.

#### *Type Score*

##### **2612: CARE: Improvement in Mobility**

Continuous variable, e.g. average better quality = higher score

##### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

Ratio better quality = higher score

#### *Algorithm*

##### **2612: CARE: Improvement in Mobility**

The facility-level mobility improvement scores are calculated using the following 15 steps.

Step 1. Choose the 12 month window for which we will select episodes. This is the four consecutive calendar quarters ending with the most recent calendar quarter for which both MDS data and CARE Tool data are available for use in the measure.

Step 2. Identify all MDS discharge assessments (in which we understand the CARE Tool items will be embedded) with a discharge date that fell within the 12 month window identified in Step 1.

Step 3. For each MDS tool discharge assessment identified in Step 2, identify the corresponding MDS admission assessment (in which we understand the CARE Tool items will be embedded). An MDS assessment is identified as an admission assessment if A0310F == "01" (entry record). Note that the admission date may lie before the 12 month window defined in Step 1. The period of time from the admission date (corresponding with the MDS admission assessment) through to the discharge date (corresponding with the MDS discharge assessment) is called an "episode". If no MDS admission assessment was found, discard the discharge assessment from all subsequent steps.

Step 4. Identify all MDS admission assessments that indicate the admission to the SNF was from the hospital, another SNF or IRF. An MDS admission assessment indicates that the SNF admission was from a hospital when MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital". The MDS item A1600 indicates the date of entry to the SNF.

Step 5. For any admission or discharge CARE Tool item (that enters the calculation of the mobility improvement scores) with letter code "S" (activity not attempted due to safety concerns), A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to "1" on a six point rating scale (indicating full functional dependence).

Step 6. Apply the mobility improvement measure's exclusions (see s.11), and exclude any episode that did not involve either physical or occupational therapy. The clinical measure exclusions are detailed in S.11 (Denominator exclusion details and codes). The exclusion of episodes not involving either occupational or physical therapy is as follows:

We identify the patient as having received occupational therapy if on the MDS discharge assessment:

The total number of minutes of occupational therapy in the last 7 days (O0400B1) is greater than zero; or

The most recent occupational therapy regimen (starting on the date recorded in O0400B5, and ending on the date recorded in O0400B6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).

We identify the patient as having received physical therapy if on the MDS discharge assessment:

The total number of minutes of physical therapy in the last 7 days (O0400C1) is greater than zero; or

The most recent physical therapy regimen (starting on the date recorded in O0400C5, and ending on the date recorded in O0400C6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).

If the episode involves neither occupational nor physical therapy, as identified above, then exclude it from all subsequent steps in the calculation.

Step 7. Map the CARE Tool B5a (walking) and B5b (wheeling) items to obtain a harmonious 1-6 score for all assessments, and recode walking items C7b, C7c, C7d and C7e to 1=dependent if resident cannot walk. First, consolidate the four sub-items B5a1, B5a2, B5a3 and B5a4 corresponding to different distances the resident can walk (if the patient can walk); and the four sub-items B5b1, B5b2, B5b3 and B5b4 corresponding to different

distances the resident can wheel (if the patient cannot walk). To do this, use the crosswalk presented in Figure A1 in the Appendix. Call the resulting two items B5a and B5b.

Second, consolidate the B5a and B5b items into a harmonious summary item called B5. To do this use the crosswalk presented in Figure A1 in the Appendix. This is the item used in the calculation of mobility outcome scores in the subsequent steps.

Finally, if the patient is unable to walk (i.e., no values for the B5a and C7 items), recode each item C7a, C7b, C7d and C7e to 1 = dependent.

Step 8. For each episode remaining after Step 6, using the CARE Tool items as transformed in Step 7, calculate a preliminary admission score and a discharge score as the sum of the values for the following CARE tool mobility items B1 (Lying to sitting on side of bed), B2 (Sit to stand), B3 (Chair/bed-to-chair transfer), B4 (Toilet transfer), B5 (Walking/wheeling), C3 (Roll left and right), C4 (Sit to lying), C7a (One step (curb)), C7b (Walking 50 feet with two turns), C7c (Walking 12 steps), C7d (Walking four steps), C7e (Walking 10 feet on uneven surfaces).

Each of those 12 CARE Tool items takes an integer value of 1, 2, 3, 4, 5 or 6, and so the preliminary admission score will be an integer between 12 and 72, and the preliminary discharge score will be an integer between 12 and 72.

Step 9. For each episode, linearly transform the preliminary admission score and preliminary discharge score so that it lies in the range 1-100 using the following equation:

["transformed mobility admission score"] =  $1.65 \times$  ["preliminary mobility admission score"] - 18.8

["transformed mobility discharge score"] =  $1.65 \times$  ["preliminary mobility discharge score"] - 18.8

Step 10. For each episode, calculate the episode-level change score by subtracting the transformed discharge score from the transformed admission score. Each score will lie between -99 and 99.

Step 11. Calculate the national average change score as the simple mean of all episode-level change scores calculated in Step 10.

Step 12. For each episode, calculate the predicted change score using the risk adjustment methodology detailed in S.15a. That is, having prepared the risk adjustment variables in the way described in S.15a, apply the equation: [predicted change score] =  $33.61 - 1.56 \times$  [patient is 85 years or older] -  $9.11 \times$  [dialysis while a resident] -  $5.08 \times$  [entered from SNF] -  $2.81 \times$  [oxygen while a patient] -  $4.23 \times$  [unhealed pressure ulcers] -  $8.85 \times$  [mental status] -  $4.75 \times$  [resident mood] -  $9.30 \times$  [psychiatric conditions] -  $6.91 \times$  [feeding tube or IV feeding] -  $4.10 \times$  [suctioning or tracheotomy] -  $3.98 \times$  [infections of the foot].

Step 13. For each episode, calculate the risk adjusted change score using the actual change score calculated in Step 10, the national average change score calculated in Step 11, and the predicted change score calculated in Step 12. The risk adjusted change score is: [risk adjusted change score] = ([national average change score] - [predicted change score]) + [actual change score].

Step 14. Exclude any facility that has fewer than 30 episodes for which we could calculate a risk adjusted change score.

Step 15. For each facility remaining after Step 14, calculate its mobility improvement score as the simple mean of the risk adjusted change scores calculated in Step 13. No diagram provided

### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

1. Identify all short term rehabilitation patients during the assessment time frame (12 months).
2. Exclude any patients who died in the SNF.
3. Exclude any patients who are less than 18 at the time of admission to the SNF.
3. Calculate the total mobility change score for each of the remaining patients (sum of change at the patient level for all items  
(Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in the excel file).
5. Calculate the average rasch derived mobility change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average mobility change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average mobility change score/facility's national expected mobility change score.

#### *Submission items*

### **2612: CARE: Improvement in Mobility**

- 5.1 Identified measures:
  - 5a.1 Are specs completely harmonized? No
  - 5a.2 If not completely harmonized, identify difference, rationale, impact: Not Applicable
  - 5b.1 If competing, why superior or rationale for additive value: Not Applicable

### **2774: Functional Change: Change in Mobility Score for Skilled Nursing Facilities**

- 5.1 Identified measures: 2612 : CARE: Improvement in Mobility
  - 5a.1 Are specs completely harmonized? No
  - 5a.2 If not completely harmonized, identify difference, rationale, impact: While the CARE items and the change in mobility items measure the same construct of functional (in)dependence, there are some key differences included in the measures, and in the measurement of the items. The mobility measure, submitted by UDS includes the following items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. The CARE items included in the measure submitted by AHCA include: Roll left and right, Sit to lying, Lying to sitting on side of bed, Sit to stand, Chair/bed-to-chair transfer, Toilet transfer, Car transfer, Walk 10 feet, Walk 50 feet with 2 turns, Walk 150 feet, Walking 10 feet on uneven surfaces, 1 step, 4 steps, 12 steps, Pick up object. Once again there is great overlap in the items, There is great overlap between the items in the two measures, particularly in the transfer items, locomotion, and stairs. However while our measure contains only four items, the CMS measure contains 14 items. While our measure has the one locomotion item, for instance, the ACHA measure has four. Similarly, our measure contains one item for stairs, while the CMS measure contains three. This becomes burdensome on the provider to have to collect an additional 10 items and it hasn't been proven that there is additional value or specificity in the measure. Rasch analysis shows us that more items do

not always mean better measurement. Finally, the UDSMS change in mobility measure is the exact same measure (same items, same rating scale, same adjustment) used in SNF, IRF and LTAC, offering consistency in measuring patient function across PAC venues, which has been an interest for PAC and is a current objective of the IMPACT ACT.

5b.1 If competing, why superior or rationale for additive value: The functional items have been collected in SNFs for over 20 years. This allows for a historical perspective of function in the SNFs that the CARE items do not allow. In addition, the these items have been used in inpatient rehabilitation

facilities for over 30 years, and therefore, a comparison in functional gains between IRFs and SNFs can be easily made should this

measure be utilized in both venues of care.

## Comparison of NQF #2612 and NQF #2775

2612: CARE: Improvement in Mobility

2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities

### *Steward*

#### **2612: CARE: Improvement in Mobility**

American Health Care Association

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

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

### *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.

#### **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.

### *Type*

#### **2612: CARE: Improvement in Mobility**

Outcome

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Outcome

### *Data Source*

#### **2612: CARE: Improvement in Mobility**

Electronic Clinical Data, Other Resident Assessment Instrument Minimum Data Set (MDS) version 3.0

Continuity Assessment and Record Evaluation (CARE) Tool; Mobility subscale

Available in attached appendix at A.1 No data dictionary

**2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission-635749892715380581.xlsx

*Level*

**2612: CARE: Improvement in Mobility**

Facility

**2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Facility

*Setting*

**2612: CARE: Improvement in Mobility**

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

**2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

*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.

**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.

*Numerator Details*

**2612: CARE: Improvement in Mobility**

The numerator includes all residents admitted from a hospital or another post acute care setting that receive any PT or OT therapy for any reason in a SNF that have a completed mobility CARE tool assessment at admission and discharge (see denominator definition below). The mobility items used from the CARE tool are listed below and rated on a 1-6 scale (see Appendix for copy of the CARE Tool assessment).

The items included in the CARE Tool Mobility subscale include:

- B1. Lying to Sitting on Side of Bed
- B2. Sit to Stand
- B3. Chair/Bed to Chair Transfer
- B4. Toilet Transfer
- B5a & B5b. Walking or Wheelchair Mobility



- C3. Roll left / right
- C4. Sit to Lying
- C5. Picking up object
- C7a. One Step Curb
- C7b. Walk 50 ft. with Two Turns
- C7c. Walk 12 Steps.
- C7d. Walk Four Steps
- C7e. Walking 10 ft. on Uneven Surface
- C7f. Car Transfer

The numerator is a facility's average risk adjusted change score on the mobility component of the CARE tool. The risk adjusted average change score is calculated in several steps:

Step 1: Each individual's admission and discharge mobility scale score is calculated. Items rated as S. Not attempted due to safety concerns, A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to one. For each individual, the ratings for all the mobility items on the CARE tool at admission are summed and transformed to a 0-100 scale. The same is done for the discharge assessment.

Step 2: Each individual's unadjusted change score is calculated by taking the admission score minus the discharge score.

Step 3: The individual's unadjusted change score is risk adjusted (see risk adjustment section)

Step 4: The facilities risk adjusted change score is the sum of all the individual's risk adjusted change scores divided by the denominator.

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived motor functional score from admission to discharge for each patient at the facility level, including items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel,

Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).

#### *Denominator Statement*

#### **2612: CARE: Improvement in Mobility**

The denominator includes all residents admitted to a SNF from a hospital or another post-acute care setting who receive either PT or OT therapy for any reason during their stay regardless of payor status, have a completed mobility CARE tool assessment at admission and discharge and do not meet any of the exclusion criteria. The mobility items used from the CARE tool are listed below and rated on a 1-6 scale (see Appendix for copy of the mobility CARE tool assessment).

The items included in the CARE Tool Mobility subscale include:

- B1. Lying to Sitting on Side of Bed
- B2. Sit to Stand
- B3. Chair/Bed to Chair Transfer
- B4. Toilet Transfer
- B5a & B5b. Walking or Wheelchair Mobility
- C3. Roll left / right
- C4. Sit to Lying
- C5. Picking up object
- C7a. One Step Curb
- C7b. Walk 50 ft. with Two Turns
- C7c. Walk 12 Steps.
- C7d. Walk Four Steps
- C7e. Walking 10 ft. on Uneven Surface
- C7f. Car Transfer

#### **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.

#### *Denominator Details*

##### **2612: CARE: Improvement in Mobility**

The denominator includes all residents admitted to a SNF who are receiving any PT or OT therapy for any reason.

The denominator is based on admission from any hospital or post-acute care setting and is determined using information from MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital" regardless of payor status. They must receive either PT or OT therapy during their stay. A resident's stay is defined as an episode of care from admissions to discharge from the facility or discharge from therapy services (defined as completing a discharge CARE tool assessment). Overall, approximately 85% of all admissions from a hospital receive either PT or OT therapy based on SNF Part A claims (or MDS 3.0 data).

##### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 12 items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This

adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

### *Exclusions*

#### **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.

#### **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.

### *Exclusion Details*

#### **2612: CARE: Improvement in Mobility**

Individuals with conditions where improvement in mobility (as determined by a panel of expert therapists) is very unlikely were excluded based on information from the admission MDS 3.0 assessment. Individuals with one of the following MDS 3.0 items marked as yes were excluded:

- Ventilator (O0100F1 =1 or O0100F2 =1)
- Coma (B0100 =1)
- Quadriplegic (I5100=1)
- Hospice (O0100K1 = 1)

In addition, we also excluded individuals whose age is less than 18 years.

Overall, these exclusions resulted in 1.1% of all admissions being excluded.

Missing data also resulted in individuals being excluded

- Missing a discharge CARE Tool assessment (this resulted when individuals died or were hospitalized during their SNF stay) resulted in patients being excluded since one could not calculate a change from admission. Nationally approximately 21.6% of admissions to a SNF will be hospitalized during their therapy stay and 4.5% will die (based on analysis of SNF part A claims from 2009-2011).
- Missing data on individual CARE Tool mobility assessment items on at least one item occurred 27.2% of the time. Approximately a third of all missing data related to just three items C7c walking 12 steps; C7d walking 4 steps and C7f car transfer but did not differ significantly between admission and discharge assessments. We did not impute any missing data for mobility items.

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Living at discharge and age at admission are collected through the MDS.

## *Risk Adjustment*

### **2612: CARE: Improvement in Mobility**

Statistical risk model

Each individual's change score was risk adjusted based on the following formula:

Risk Adjusted Score for individual = (National Average Change Score – Predicted Change Score) + Actual Change Score.

The National Average Change Score was calculated as a population average change score for all patients in all SNFs who had a CARE Tool mobility subscale assessment completed at admission and discharge. The change score is the difference in the aggregate of each individual's scale score from admission to discharge transformed to 0 to 100 scale.

The Predicted Change Score is calculated based on logistic regression using the process outlined in 2b4.

The Actual Change Score is the difference between the individual person's admission mobility score transformed to 0 to 100 scale and their discharge mobility score transformed to a 0 to 100 scale.

Provided in response box S.15a

### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average motor functional change score. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

## *Stratification*

### **2612: CARE: Improvement in Mobility**

Not Applicable

### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

See definition of the SNF-CMGs in the excel file provided.

## *Type Score*

### **2612: CARE: Improvement in Mobility**

Continuous variable, e.g. average better quality = higher score

### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Ratio better quality = higher score

## *Algorithm*

### **2612: CARE: Improvement in Mobility**

The facility-level mobility improvement scores are calculated using the following 15 steps.

Step 1. Choose the 12 month window for which we will select episodes. This is the four consecutive calendar quarters ending with the most recent calendar quarter for which both MDS data and CARE Tool data are available for use in the measure.

Step 2. Identify all MDS discharge assessments (in which we understand the CARE Tool items will be embedded) with a discharge date that fell within the 12 month window identified in Step 1.

Step 3. For each MDS tool discharge assessment identified in Step 2, identify the corresponding MDS admission assessment (in which we understand the CARE Tool items will be embedded). An MDS assessment is identified as an admission assessment if A0310F == "01" (entry record). Note that the admission date may lie before the 12 month window defined in Step 1. The period of time from the admission date (corresponding with the MDS admission assessment) through to the discharge date (corresponding with the MDS discharge assessment) is called an "episode". If no MDS admission assessment was found, discard the discharge assessment from all subsequent steps.

Step 4. Identify all MDS admission assessments that indicate the admission to the SNF was from the hospital, another SNF or IRF. An MDS admission assessment indicates that the SNF admission was from a hospital when MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital". The MDS item A1600 indicates the date of entry to the SNF.

Step 5. For any admission or discharge CARE Tool item (that enters the calculation of the mobility improvement scores) with letter code "S" (activity not attempted due to safety concerns), A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to "1" on a six point rating scale (indicating full functional dependence).

Step 6. Apply the mobility improvement measure's exclusions (see s.11), and exclude any episode that did not involve either physical or occupational therapy. The clinical measure exclusions are detailed in S.11 (Denominator exclusion details and codes). The exclusion of episodes not involving either occupational or physical therapy is as follows:

We identify the patient as having received occupational therapy if on the MDS discharge assessment:

The total number of minutes of occupational therapy in the last 7 days (O0400B1) is greater than zero; or

The most recent occupational therapy regimen (starting on the date recorded in O0400B5, and ending on the date recorded in O0400B6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).

We identify the patient as having received physical therapy if on the MDS discharge assessment:

The total number of minutes of physical therapy in the last 7 days (O0400C1) is greater than zero; or

The most recent physical therapy regimen (starting on the date recorded in O0400C5, and ending on the date recorded in O0400C6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).

If the episode involves neither occupational nor physical therapy, as identified above, then exclude it from all subsequent steps in the calculation.

Step 7. Map the CARE Tool B5a (walking) and B5b (wheeling) items to obtain a harmonious 1-6 score for all assessments, and recode walking items C7b, C7c, C7d and C7e to 1=dependent if resident cannot walk. First, consolidate the four sub-items B5a1, B5a2, B5a3 and B5a4 corresponding to different distances the resident can walk (if the patient can walk); and the four sub-items B5b1, B5b2, B5b3 and B5b4 corresponding to different distances the resident can wheel (if the patient cannot walk). To do this, use the crosswalk presented in Figure A1 in the Appendix. Call the resulting two items B5a and B5b.

Second, consolidate the B5a and B5b items into a harmonious summary item called B5. To do this use the crosswalk presented in Figure A1 in the Appendix. This is the item used in the calculation of mobility outcome scores in the subsequent steps.

Finally, if the patient is unable to walk (i.e., no values for the B5a and C7 items), recode each item C7a, C7b, C7d and C7e to 1 = dependent.

Step 8. For each episode remaining after Step 6, using the CARE Tool items as transformed in Step 7, calculate a preliminary admission score and a discharge score as the sum of the values for the following CARE tool mobility items B1 (Lying to sitting on side of bed), B2 (Sit to stand), B3 (Chair/bed-to-chair transfer), B4 (Toilet transfer), B5 (Walking/wheeling), C3 (Roll left and right), C4 (Sit to lying), C7a (One step (curb)), C7b (Walking 50 feet with two turns), C7c (Walking 12 steps), C7d (Walking four steps), C7e (Walking 10 feet on uneven surfaces).

Each of those 12 CARE Tool items takes an integer value of 1, 2, 3, 4, 5 or 6, and so the preliminary admission score will be an integer between 12 and 72, and the preliminary discharge score will be an integer between 12 and 72.

Step 9. For each episode, linearly transform the preliminary admission score and preliminary discharge score so that it lies in the range 1-100 using the following equation:

["transformed mobility admission score" ]=1.65×["preliminary mobility admission score" ]-18.8

["transformed mobility discharge score" ]=1.65×["preliminary mobility discharge score" ]-18.8

Step 10. For each episode, calculate the episode-level change score by subtracting the transformed discharge score from the transformed admission score. Each score will lie between -99 and 99.

Step 11. Calculate the national average change score as the simple mean of all episode-level change scores calculated in Step 10.

Step 12. For each episode, calculate the predicted change score using the risk adjustment methodology detailed in S.15a. That is, having prepared the risk adjustment variables in the way described in S.15a, apply the equation: [predicted change score] = 33.61 - 1.56×[patient is 85 years or older] -9.11×[dialysis while a resident] -5.08×[entered from SNF] -2.81×[oxygen while a patient] -4.23×[unhealed pressure ulcers] -8.85×[mental status] -4.75×[resident mood] -9.30×[psychiatric conditions] -6.91×[feeding tube or IV feeding] -4.10×[suctioning or tracheotomy] -3.98×[infections of the foot].

Step 13. For each episode, calculate the risk adjusted change score using the actual change score calculated in Step 10, the national average change score calculated in Step 11, and the predicted change score calculated in Step 12. The risk adjusted change score is: [risk

adjusted change score] = ([national average change score] - [predicted change score]) + [actual change score].

Step 14. Exclude any facility that has fewer than 30 episodes for which we could calculate a risk adjusted change score.

Step 15. For each facility remaining after Step 14, calculate its mobility improvement score as the simple mean of the risk adjusted change scores calculated in Step 13. No diagram provided

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

1. Identify all short term rehabilitation patients during the assessment time frame (12 months).
2. Exclude any patients who died in the SNF.
3. Exclude any patients who are less than 18 at the time of admission to the SNF.
3. Calculate the total motor change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in the attached excel file).
5. Calculate the average rasch derived motor change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average motor change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average motor change score/facility's national expected motor change score. Available in attached appendix at A.1

#### *Submission items*

#### **2612: CARE: Improvement in Mobility**

- 5.1 Identified measures:
  - 5a.1 Are specs completely harmonized? No
  - 5a.2 If not completely harmonized, identify difference, rationale, impact: Not Applicable
  - 5b.1 If competing, why superior or rationale for additive value: Not Applicable

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

- 5.1 Identified measures:
  - 5a.1 Are specs completely harmonized?
  - 5a.2 If not completely harmonized, identify difference, rationale, impact:
  - 5b.1 If competing, why superior or rationale for additive value:

## Comparison of NQF #2613 and NQF #2775

2613: CARE: Improvement in Self Care

2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities

### *Steward*

#### **2613: CARE: Improvement in Self Care**

American Health Care Association

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

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

### *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.

#### **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.

### *Type*

#### **2613: CARE: Improvement in Self Care**

Outcome

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Outcome

### *Data Source*

#### **2613: CARE: Improvement in Self Care**

Electronic Clinical Data, Other Resident Assessment Instrument Minimum Data Set (MDS) version 3.0

Continuity Assessment and Record Evaluation (CARE) tool; Self Care subscale

Available in attached appendix at A.1 No data dictionary



**2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records Functional Change Form, as seen in the appendix.

Available in attached appendix at A.1 Attachment NQF\_Submission-635749892715380581.xlsx

*Level*

**2613: CARE: Improvement in Self Care**

Facility

**2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Facility

*Setting*

**2613: CARE: Improvement in Self Care**

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

**2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

*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.

**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.

*Numerator Details*

**2613: CARE: Improvement in Self Care**

The numerator includes all residents admitted from a hospital or another post-acute care setting that receive any PT or OT therapy for any reason in a SNF that have a completed CARE Tool self care subscale assessment at admission and discharge (see denominator definition below). 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

The numerator is facility's average risk adjusted change score on the self care subscale of the CARE tool. The risk adjusted average change score is calculated in several steps:

Step 1: Each individual's admission and discharge self care subscale score is calculated. Items rated as S. Not attempted due to safety concerns, A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to one on a six point rating scale (e.g. dependent). For each individual, the ratings for all the self care items on the CARE tool at admission are summed and transformed to a 0-100 scale. The same is done for the discharge assessment.

Step 2: Each individual's unadjusted change score is calculated by taking the admission score minus the discharge score.

Step 3: The individual's unadjusted change score is risk adjusted (see S.14)

Step 4: The facility's risk adjusted change score is the sum of all the individual's risk adjusted change scores divided by the denominator.

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. The numerator is the average change in rasch derived motor functional score from admission to discharge for each patient at the facility level, including items: Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel,

Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as: (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) / total number of patients).

#### *Denominator Statement*

#### **2613: CARE: Improvement in Self Care**

The denominator includes all residents admitted to a SNF from a hospital or another post-acute 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

**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.

*Denominator Details*

**2613: CARE: Improvement in Self Care**

The denominator includes all residents admitted to a SNF who are receiving any PT or OT therapy for any reason. The denominator is based on admission from any hospital or post-acute care setting and is determined using information from MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital (LTCH)", regardless of payor status. They must receive either PT or OT therapy during their stay. A resident's stay is defined as an episode of care from admissions to discharge from the facility or discharge from therapy services (defined as completing a discharge CARE Tool assessment).

**2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

The target population is all short term rehabilitation patients at the skilled nursing facility, at least 18 years old, who did not die in the SNF. Impairment type is defined as the primary medical reason for the SNF short term rehabilitation stay (such as stroke, joint replacement, brain injury, etc.). Admission functional status is the expected value of the average of the sum 12 items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs) at the facility level. Age is the age of the patient at the time of admission to the SNF. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (based on impairment type, functional status at admission, and age at admission). This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average).

*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.

**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.

## Exclusion Details

### 2613: CARE: Improvement in Self Care

Individuals with conditions where improvement in self care (as determined by a panel of expert therapists) is very unlikely were excluded based on information from the admission MDS 3.0 assessment. Individuals with one of the following MDS 3.0 items marked as yes were excluded:

- Ventilator (O0100F1 =1 or O0100F2 =1)
- Coma (B0100 =1)
- Quadriplegic (I5100=1)
- Hospice (O0100K1 = 1)

In addition, we also excluded individuals whose age is less than 18 years.

Overall, these exclusions resulted in 1.1% of all admissions being excluded.

Missing data also resulted in individuals being excluded, details are as follows:

- Missing a discharge CARE Tool assessment (this resulted when individuals died or were hospitalized during their SNF stay) resulted in patients being excluded since one could not calculate a change from admission. Nationally approximately 21.6% of admissions to a SNF will be hospitalized during their therapy stay and 4.5% will die (based on analysis of SNF part A claims from 2009-2011).
- Missing data on individual items on either the admission or discharge CARE Tool assessment resulted in the individual being excluded from calculation. For self care items, this occurred 4.4% of the time. We did not impute any missing data for self care items.

### 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities

Living at discharge and age at admission are collected through the MDS.

## Risk Adjustment

### 2613: CARE: Improvement in Self Care

Statistical risk model

Each individual's change score was risk adjusted based on the following formula:

Risk Adjusted Score for individual = (National Average Change Score – Predicted Change Score) + Actual Change Score.

The National Average Change Score was calculated as a population average change score for all patients in all SNFs who had a CARE Tool self care subscale assessment completed at admission and discharge. The change score is the difference in the aggregate of each individual's scale score from admission to discharge transformed to 0 to 100 scale.

The Predicted Change Score is calculated based on logistic regression using the process outlined in 2b4.

The Actual Change Score is the difference between the individual person's admission self care score transformed to 0 to 100 scale and their discharge self care score transformed to a 0 to 100 scale.

Provided in response box S.15a

### 2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities

Stratification by risk category/subgroup

This adjustment procedure is an indirect standardization procedure (observed facility average/expected facility average). The numerator is the facility's average motor functional change score. The denominator is meant to reflect the expected motor functional change score at the facility, if the facility had the same distribution of SNF-CMGs (impairment, functional status at admission, and age at admission).

Available in attached Excel or csv file at S.2b

### *Stratification*

#### **2613: CARE: Improvement in Self Care**

Not Applicable

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

See definition of the SNF-CMGs in the excel file provided.

### *Type Score*

#### **2613: CARE: Improvement in Self Care**

Continuous variable, e.g. average better quality = higher score

#### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

Ratio better quality = higher score

### *Algorithm*

#### **2613: CARE: Improvement in Self Care**

The facility-level self care improvement scores are calculated using the following 14 steps.

Step 1. Choose the 12 month window for which we will select episodes. This is the four consecutive calendar quarters ending with the most recent calendar quarter for which both MDS data and CARE tool data are available for use in the measure.

Step 2. Identify all MDS discharge assessments (in which we understand the CARE tool items will be embedded) with a discharge date that fell within the 12 month window identified in Step 1.

Step 3. For each MDS tool discharge assessment identified in Step 2, identify the corresponding MDS admission assessment (in which we understand the CARE tool items will be embedded). An MDS assessment is identified as an admission assessment if A0310F == "01" (entry record). Note that the admission date may lie before the 12 month window defined in Step 1. The period of time from the admission date (corresponding with the MDS admission assessment) through to the discharge date (corresponding with the MDS discharge assessment) is called an "episode". If no MDS admission assessment was found, discard the discharge assessment from all subsequent steps.

Step 4. Identify all MDS admission assessments that indicate the admission to the SNF was from the hospital, another SNF or IRF. An MDS admission assessment indicates that the SNF admission was from a hospital when MDS item "A1800 Entered From" coded as "03 Acute Care Hospital" or "02 Another nursing home or swing bed" or "05 inpatient rehabilitation facility" or "09 Long Term Care Hospital". The MDS item A1600 indicates the date of entry to the SNF.

Step 5. For any admission or discharge CARE tool item (that enters the calculation of the self-care improvement scores) with letter code "S" (activity not attempted due to safety

concerns), A. Task attempted but not completed, N. Not applicable and P. Patient Refused were recoded to "1" on a six point rating scale (indicating full functional dependence).

Step 6. Apply the self care improvement measure's exclusions (see s.11), and exclude any episode that did not involve either physical or occupational therapy. The clinical measure exclusions are detailed in S.11 (Denominator exclusion details and codes). The exclusion of episodes not involving either occupational or physical therapy is as follows:

We identify the patient as having received occupational therapy if on the MDS discharge assessment:

The total number of minutes of occupational therapy in the last 7 days (O0400B1) is greater than zero; or

The most recent occupational therapy regimen (starting on the date recorded in O0400B5, and ending on the date recorded in O0400B6) intersects the episode (beginning with the CARE admission assessment's date and ending with the CARE discharge assessment's date).

We identify the patient as having received physical therapy if on the MDS discharge assessment:

The total number of minutes of physical therapy in the last 7 days (O0400C1) is greater than zero; or

The most recent physical therapy regimen (starting on the date recorded in O0400C5, and ending on the date recorded in O0400C6) intersects the episode (beginning with the CARE admission assessment's admission date and ending with the CARE discharge assessment's discharge date).

If the episode involves neither occupational nor physical therapy, as identified above, then exclude it from all subsequent steps in the calculation.

Step 7. For each episode remaining after Step 6, calculate a preliminary admission score and a discharge score as the sum of the values for the following CARE tool self care items A1 (Eating), A3 (Oral Hygiene), A4 (Toilet Hygiene), A5 (Upper Body Dressing), A6 (Lower Body Dressing), C1 (Wash Upper Body), C2 (Shower/Bath Self), C6 (Putting on/Taking off Footwear).

Each of those 8 CARE tool items takes an integer value of 1, 2, 3, 4, 5 or 6, and so the preliminary admission score will be an integer between 8 and 48, and the preliminary discharge score will be an integer between 8 and 48.

Step 8. For each episode, linearly transform the preliminary admission score and preliminary discharge score so that it lies in the range 1-100 using the following equation:

["transformed self-care admission score"] =  $2.475 \times$  ["preliminary self-care admission score"] - 18.8

["transformed self-care discharge score"] =  $2.475 \times$  ["preliminary self-care discharge score"] - 18.8

Step 9. For each episode, calculate the episode-level change score by subtracting the transformed discharge score from the transformed admission score. Each score will lie between -99 and 99.

Step 10. Calculate the national average change score as the simple mean of all episode-level change scores calculated in Step 9.

Step 11. For each episode, calculate the predicted change score using the risk adjustment methodology detailed in S.15a. That is, having prepared the risk adjustment variables in the way described in S.15a, apply the equation: [predicted change score] = 25.98 - 0.28×[patient is 85 years or older] -4.43×[dialysis while a patient] -3.83×[entered from SNF] -2.37×[oxygen while a patient] -1.06×[catheterization/ostomy] -2.87×[unhealed pressure ulcers] -7.12×[mental status] -3.33×[resident mood] -8.11×[psychiatric conditions] -4.05×[feeding tube or IV feeding] -5.43×[suctioning or tracheotomy] -2.76×[infections of the foot].

Step 12. For each episode, calculate the risk adjusted change score using the actual change score calculated in Step 9, the national average change score calculated in Step 10, and the predicted change score calculated in Step 11. The risk adjusted change score is:

[ "risk adjusted change score" ] = ([ "national average change score" ] - [ "predicted change score" ]) + [ "actual change score" ]

Step 13. Exclude any facility that has fewer than 30 episodes for which we could calculate a risk adjusted change score.

Step 14. For each facility remaining after Step 13, calculate its self care improvement score as the simple mean of the risk adjusted change scores calculated in Step 12. No diagram provided

### **2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

1. Identify all short term rehabilitation patients during the assessment time frame (12 months).
2. Exclude any patients who died in the SNF.
3. Exclude any patients who are less than 18 at the time of admission to the SNF.
3. Calculate the total motor change score for each of the remaining patients (sum of change at the patient level for all items (Eating, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.)
4. Transform the patient level functional change scores to the rasch derived value (as stated in the attached excel file).
5. Calculate the average rasch derived motor change score at the facility level.
6. Using national data and previously described adjustment procedure, calculate the facility's expected rasch derived average motor change score for the time frame (12 months).
7. Calculate the ratio outcome by taking the observed facility average motor change score/facility's national expected motor change score. Available in attached appendix at A.1

#### *Submission items*

### **2613: CARE: Improvement in Self Care**

- 5.1 Identified measures:
  - 5a.1 Are specs completely harmonized?
  - 5a.2 If not completely harmonized, identify difference, rationale, impact:
  - 5b.1 If competing, why superior or rationale for additive value: Not Applicable

**2775: Functional Change: Change in Motor Score for Skilled Nursing Facilities**

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:



## Appendix G: Pre-Evaluation Comments

Comments received as of May 10, 2016.

### 2967: CAHPS® Home and Community Based Services (HCBS) Measures

#### **Submitted by Megan Burke, MSW, The SCAN Foundation**

Identifying person- and family-centered (PFCC) quality measures for home and community-based services (HCBS) is important, especially in developing accountability for the person-centered care requirements in the Centers for Medicare & Medicaid Services HCBS regulations. PFCC quality measures for HCBS are also becoming increasingly important as health care and long-term services and supports become integrated. The HCBS Experience of Care measures collect information from the perspective of the individual, and as such have a person-centered focus. After reviewing the survey questions to be included for the HCBS measure, The SCAN Foundation (Foundation) recommends adjusting or removing the following questions.

#### Staff listen and communicate well

Survey items 29 and 42 identified as part of the outcome measure for staff listening and communicating well is phrased, “How often are the explanations [personal assistance/behavioral health staff] or [homemaker] gives you hard to understand because of an accent or the way he or she speaks English?” While it is important to identify whether communication between the personal assistance/behavioral health staff/homemaker and the individual receiving services is clearly understood, the way this question is phrased does not effectively address cultural competencies and potential language barriers as it assumes the person receiving care is a native English speaker. The Foundation suggests reframing or removing survey items 29 and 42 to capture whether someone is generally able to understand the provider, spoken to in a language they understand, and can effectively communicate instructions, wishes, and concerns with staff. We acknowledge that survey item 31, “How often do [personal assistance/behavioral health staff] explain things in a way that is easy to understand?” may already address the communication concern effectively.

#### Physical safety measure

The Foundation applauds the inclusion of measures addressing physical safety. However, the proposed measure, “Do any staff that you have now hit you or hurt you?” included in isolation raises concerns. The survey question does not clearly identify new accounts of abuse as opposed to reports that have been addressed and does not appear to include follow up questions for to help with addressing any current concerns. If this measure is to be included, we recommend including additional questions to better understand the current situation in the event of an affirmative response and a clear protocol outlining how to the surveyor should respond to ensure the individual’s safety.

## 2962: Shared Decision Making Process

### **Submitted by Ms. Suzanne Pope, American Urological Association**

The SCAN Foundation acknowledges the importance of shared decision-making as part of person and family-centered care (PFCC). The proposed measures capture the time a doctor spent discussing pros and cons of a procedure, and the individual's choices. However, PFCC quality measures should also assess whether the provider elicited information from the individual about his/her goals, and discussed how treatments do or do not align with the stated goals.

## 0420: Pain Assessment and Follow-Up

### **Submitted by Ms. Suzanne Pope, American Urological Association**

We support the pain assessment measure but it is not obvious if any specification for what a "standard" measure of this is—e.g. is a pain scale (what is your pain on a scale from 1-10) sufficient? Also, it is interesting to think about how this gets operationalized in the context of other efforts to try to mitigate overprescribing of opioids. We agree with the need for assessment of pain and a follow-up plan where pain is present, but it is not clear what is acceptable as a follow-up plan—just a prescription and a plan to reevaluate? Referral to pain specialist, PT, etc.?

## 2962: Shared Decision Making Process

### **Submitted by Ms. Suzanne Pope, American Urological Association**

For consideration: should this measure also include patients who have radiation therapy for prostate cancer (i.e., why is SDM critical only for radical prostatectomy among the treatment options? What about active surveillance? It would seem that a more inclusive measure would be to measure SDM agnostic to what option was chosen.)

## General Draft

### **Submitted by Megan Burke, MSW, The SCAN Foundation**

The measures identified for Person and Family-Centered Care (PFCC) capture important information that help shape the health care delivery system to be more person-centered. The SCAN Foundation (Foundation) is pleased to see measures included that consider maintenance of or improvement in function as this is important to document. The next step in moving toward PFCC would be to capture how information about an individual's functional abilities informs his/her care plan and services received.

Additionally, the Foundation is pleased to see HCBS measures included. In order for care to be person and family-centered, it's important to examine quality along the continuum of care from health care services to home- and community-based services (HCBS). The Centers for Medicare & Medicaid Services included person-centered care as a HCBS requirement in 2015. It is imperative to develop a set of measures that accurately assess the quality of PFCC to develop accountability and accurately report what is important to the individuals receiving services.

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ISBN 978-1-68248-035-9  
©2017 National Quality Forum