NQF-Endorsed Measures for Person- and Family-Centered Care Phase 2

FINAL REPORT

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NATIONAL QUALITY FORUM

Contents

NQF-Endorsed Measures for Person- and Family-Centered Care Phase 2

Executive Summary

This is the second in a series of reports describing NQF measure evaluation projects for person- and family-centered care (PFCC) measures. Ensuring that all persons and their families are engaged as partners in care is one of the six priorities of the National Quality Strategy.[a] Person- and family-centered care encompasses patient and family engagement in care. This includes shared decisionmaking and preparation and activation for self-care management, and the outcomes of interest to patients receiving healthcare services, including health-related quality of life, functional status, symptoms and symptom burden, and experience with care.

In this second phase of work, the Committee reviewed 28 measures of functional status and outcomes, both clinician and patient-assessed. The functional status measures utilize data from various tools and resources including clinical assessments (medical record), electronic instruments, electronic registries, and patient information. This phase of work included process, outcome, and patient-reported outcome measures.

Although all 28 measures received endorsement, 4 measures specified for use in Inpatient Rehabilitation Facilities (IRFs) were identified as competing and required additional consideration at the Consensus Standards Approval Committee (CSAC) and NQF Board of Directors (Board) levels. These 4 measures (noted with ** in the list below) received considerable discussion and public comment, including review and deliberations by the Standing Committee, the CSAC, and the Board of Directors. Comments were made by proponents of the UDSMR measures (based on the FIM® tool) and by proponents of the CMS measures (based on the Continuity Assessment Record and Evaluation [CARE] tool).

The 28 functional status measures endorsed in phase 2 are listed below:

- 0167 Improvement in Ambulation/Locomotion, CMS
- 0174 Improvement in Bathing, CMS
- 0175 Improvement in Bed Transferring, CMS
- 0176 Improvement in Management Of Oral Medications, CMS
- 0177 Improvement in Pain Interfering With Activity, CMS
- 0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay), CMS
- 2612 CARE: Improvement in Mobility, American Health Care Association (new)
- 2613 CARE: Improvement in Self Care, American Health Care Association (new)
- 2287 Functional Change: Change in Motor Score, Uniform Data System for Medical Rehabilitation (new)
- 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support, CMS (new)

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[a] Agency for Healthcare Research and Quality (AHRQ). Working for quality website. http://www.ahrq.gov/workingforquality/about.htm. Last accessed January 2016.

- 0701 Functional Capacity in COPD Patients Before and After Pulmonary Rehabilitation, American Association of Cardiovascular and Pulmonary Rehabilitation
- 2624 Functional Outcome Assessment, CMS (new)
- 2653 Average Change in Functional Status Following Total Knee Replacement Surgery, MN Community Measurement (new)
- 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.
- 2643 Average Change In Functional Status Following Lumbar Spine Fusion Surgery, MN Community Measurement (new)
- **2286 Functional Change: Change in Self Care Score, Uniform Data System for Medical Rehabilitation (new)
- **2321 Functional Change: Change in Mobility Score, Uniform Data System for Medical Rehabilitation (new)
- 2631 Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function, CMS (new)
- **2633 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients, CMS (new)
- **2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients, CMS (new)
- 2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients, CMS (new)
- 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients, CMS (new)

Brief summaries of the measures reviewed are included in the body of this report; detailed summaries of the Committee's discussion and ratings of the criteria are included in Appendix A.

Introduction

Ensuring that every patient and family member is engaged as a partner in care is one of the core priorities of the National Quality Strategy (NQS). Ongoing efforts to shift the healthcare paradigm from one in which patients passively receive care to one in which they actively participate in their own care, however, still have a long way to go. A recent NQF definition of person- and family-centered care emphasizes the inclusivity of recipients of healthcare services and their families and caregivers:

> Person- and family-centered care is an approach to the planning and delivery of care across settings and time that is centered on 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.

Examples of person- and family-centered care include patient and family engagement in care, care based on patient needs and preferences, shared decisionmaking, and activation for self-care management. Assessments and treatment should acknowledge and address medical, behavioral, and social needs and should reflect the ability or willingness of the care recipient to participate actively in making decisions and self-advocacy. The process of goal setting should be a collaborative one driven by the patient in collaboration with a primary care provider and other team members.

Due to the large number of person- and family-centered care measures, maintenance review of endorsed measures and consideration of new measures is taking place over several phases in 2014 to 2016. The phase 1 report focused on reviewing experience with care based measures. NQF endorsed 1 new measure and 10 measures undergoing maintenance review. The second phase of the project, detailed in this report, focused on reviewing functional status measures.

The concept of functional status refers to the behaviors necessary to maintain independence in daily life and encompasses physical, cognitive, and social functioning.[1] Impaired functional status results neither from the number of illnesses a patient has nor from the effect of illness on physiologic parameters, but rather represents the overall impact of illness on the whole person. Functional status measures, including basic activities of daily living (BADLs)[2] and instrumental activities of daily living (IADLs),[3] are often used to describe degree of disability and to predict need for services, such as home healthcare and nursing home placement. Importantly, previous research in older persons has demonstrated that functional status is a potent predictor of hospital outcomes and mortality.[4] For example, functional status is a stronger predictor of hospital outcomes such as functional decline, length of stay, institutionalization, and death than admitting diagnoses, diagnosis-related groups, and other illness measures.[5] Furthermore, a measure of physical functioning has been shown to predict hospital mortality in older persons better than acute physiologic measures.[6]

On September 18, 2014, Congress passed the Improving Medicare Post-Acute Care Transformation Act of 2014 (the IMPACT Act). The Act requires the submission of standardized data by Long-Term Care Hospitals (LTCHs), Skilled Nursing Facilities (SNFs), Home Health Agencies (HHAs), and Inpatient Rehabilitation Facilities (IRFs). Among other things, the IMPACT Act requires the reporting of standardized patient assessment data with regard to quality measures, resource use, and other measures. It further specifies that the data [elements] "… be standardized and interoperable so as to allow for the exchange of such data among such post-acute care providers and other providers and the use by such providers of such data that has been so exchanged, including by using common standards

and definitions in order to provide access to longitudinal information for such providers to facilitate coordinated care and improved Medicare beneficiary outcomes…."

Understanding of the IMPACT Act and CMS efforts for alignment of functional status measures and assessment tools and implementation was important to the deliberations of the Standing Committee since many of the new measures reviewed during this phase were introduced to respond to the IMPACT Act.

This project illuminated concerns in the post-acute (PAC) and long-term care (LTC) industry regarding the development and implementation of functional assessment tools and the derivative performance measures. As an example, HealthSouth, the largest provider of inpatient rehabilitation services in the country, communicated to NQF that: *"Clinicians working in inpatient rehabilitation facilities (IRFs) spend a significant amount of time assessing and reassessing the functional ability of their patients. And as one of the most significant quality measures for our patients and clinicians, it is easy to understand the commitment our industry has to ensuring our functional measures provide consistent and credible information, and can be used for quality improvement and decision-making."* In an effort to ensure PAC/LTC industry concerns were understood, a meeting was convened with CMS and HealthSouth; at this meeting, participants acknowledged the challenges of scoring two functional measures (tools) simultaneously, as well as the intention to be careful with and sensitive to data quality challenges when proposing changes to quality reporting, payment systems, or releasing the data publicly. CMS stressed the importance of ongoing monitoring of the functional status assessment instruments and how that may eventually trigger adjustments to the derived performance measures. The conversation also identified opportunities for further clarification of implementation guides and educational forums with the clinicians responsible for assessment tool implementation.

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

NQF's portfolio (Appendix B) of person- and family-centered care measures includes measures in the following categories: experience with care, function/health-related quality of life (HRQoL), symptoms/symptom burden (pain), and other miscellaneous measures of language communication, culture, and staff surveys. The portfolio contains 11 process and 59 outcome measures (see table below). Twenty-eight were evaluated for endorsement and maintenance of endorsement by the Person- and Family-Centered Care Standing Committee during this phase of the project.

NQF Person- and Family-Centered Care Portfolio of Measures

	Process	Outcome	Composite
Experience with Care	0	20	0
Function/HRQoL	8	27	0
Symptom/Symptom Burden (Pain)	1	4	0
Miscellaneous (language, communication, culture, staff survey)	2	8	0
Total	**11**	**59**	**0**

Endorsement of measures by NQF is valued not only because the evaluation process itself is both rigorous and transparent, but also because evaluations are conducted by committees that represent

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

Use of Measures in the Portfolio

Many of the measures in the person- and family-centered care 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, and the Physician Quality Reporting System. In addition, some of these measures have been used as part of state, regional, and community measurement initiatives, such as Aligning Forces for Quality (AF4Q) community alliances. As indicated above, many of the measures under consideration by the Person- and Family-Centered Care Committee were submitted for consideration in response to the government charge in the IMPACT Act, thus, while these measures may not yet be implemented in a government program, they may be in the future. Several of the person- and family-centered care measures endorsed by NQF through the consensus development process have been included in the Measure Applications Partnership (MAP) Family of Measures. See Appendix C for details of federal program use for the measures in the portfolio reviewed during this phase of the project.

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

Committee Input on Addressing Parsimony and Multiple Measures for Different Care Settings

During both phases of the Person- and Family-Centered Care project, the Committee evaluated measures with similar intent and construct, yet for which endorsement is being sought for varying care settings. Examples include the various Consumer Assessment of Healthcare Providers and Systems (CAHPS) tools for specific settings (e.g., hospital, dialysis facilities, home health) and functional status assessment tools utilized in home health, long-term acute care, skilled nursing, etc. The second phase of this project includes a series of measures addressing the same concept—change in functional status, for individual body parts. The Committee considered the need for multiple measures versus parsimony in measurement. Highlights from that conversation follow:

- In order to promote measure alignment, specific measure sets should be used in multiple settings to the extent possible.
- Implementation of new measures and new assessment tools may introduce significant burden across care settings which can impact measure feasibility and usability. There is a need to assess costs associated with changing tools/measures, and the burden of conducting multiple assessments to meet demands for measures.
- There could be consideration of a common core of items that could be used across settings, while allowing providers the flexibility to include extra questions where appropriate (e.g., body part, condition, and setting).

Gaps in the Person- and Family-Centered Care Measure Portfolio

Although the Committee did not have a specific agenda item on measure gaps for this phase of work, other NQF committees have introduced concepts that would promote the identification of gaps and priorities in person- and family-centered care measurement.

The NQF-convened Person-Centered Care and Outcomes Committee (2014) identified a [conceptual framework](#) to define ideal person- and family-centered care (not constrained by current care delivery models) and provided short- and intermediate-term recommendations to measure performance and progress. The following core concepts were identified as important to guide performance measurement.

- Individualized care: I work with other members of my care team so that my needs, priorities, and goals for my physical, mental, spiritual, and social health guide my care.
- Family: My family is supported and involved in my care as I choose.
- Respect, dignity, and compassion are always present.
- Information sharing/communication: There is an open sharing of information with me, my family, and all other members of my care team(s).
- Shared decisionmaking: I am helped to understand my choices, and I make decisions with my care team, to the extent I want or am able.
- Self-management: I am prepared and supported to care for myself, to the extent I am able.
- Access to care/convenience: I can obtain care and information, and reach my care team when I need and how I prefer.

Another multistakeholder effort at NQF that aimed to promote person- and family-centered care was the MAP [Person- and Family-Centered Care Task Force](#) (2014). The Task Force was charged with identifying a family of measures—a set of aligned measures that include available measures and measure gaps spanning programs, care settings, and levels of analysis—to address the NQS priorities related to person- and family-centered care. Families of measures signal the highest priorities for measurement and best available measures within a particular topic, as well as critical measure gaps that must be filled to enable a more complete assessment of quality. To aid in the selection of measures, MAP identified priority areas for measuring person- and family-centered care, 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). Through the public comment process, the Person- and Family-Centered Care team received multiple comments identifying additional gaps in the measurement portfolio. These suggestions follow:

- Measures that determine how the provider improved the patient's life (mobility)
- Functional improvement outcomes measures for inpatient rehabilitation facilities
- Measures that apply to younger populations in hospital and ambulatory settings
- Measures that take a more inclusive view of functional status and pair condition-specific or body part-specific functional status measures with global measures such as the PROMIS-10, PHQ-9, or SF-12. The commenter suggested these tools can help provide a more comprehensive picture of an individual's functional status, the true outcome that matters.
- Measures that ensure the service system has captured personal goals: Individuals view success as the ability to live life at the highest functional level possible with the least intervention, whereas the system envisions success as providing a comprehensive range of services that meet total care needs

- Measures that demonstrate whether a provider has collaborated with the individual to develop goals that reflect their needs, values, and preferences for daily living
- Measures of function that measure against the individual's goals over time in relation to his/her environment as well as measuring preservation in function. Such measures document change and/or maintenance in the individual's function verses improvement allowing flexibility to align with his/her goals. Success could be defined as maintaining one's function.
- Measures that focus on meeting expected outcomes of the intervention, i.e., reducing further deterioration, rather than a focus on improvement, especially for populations in Home Health Agencies, Skilled Nursing Facilities, and Long-Term Care Facilities
- Patient-centered measures of maternity care

Person- and Family-Centered Care Measure Evaluation – Phase 2

On January 21-22, 2015, the Person- and Family-Centered Care Committee evaluated 14 new measures and 14 measures undergoing maintenance review against NQF's standard evaluation criteria. To facilitate the evaluation, NQF staff conducted a preliminary review of the measures against the evaluation subcriteria prior to consideration by the entire Standing Committee. This preliminary staff evaluation was new to the Committee and was meant to identify strengths and weakness of the submissions so that the Committee members could focus their reviews and discussions. The Committee's discussion and ratings of the criteria are included in Appendix A.

Person- and Family-Centered Care Phase 2 Summary

	Maintenance	New	Total
Measures under consideration	14	14	28
Measures endorsed	14	14	28
Measures pending final decision	0	0	0
Measures where consensus is not yet reached	0	0	0
Measures not recommended	0	0	0
Reasons for not recommending	N/A	N/A	

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 has begun soliciting 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 December 8-22, 2014, for all 28 measures under review. All submitted comments were provided to the Committee prior to the in-person meeting.

A total of 6 pre-evaluation comments were received (see Appendix E). All of the comments pertained to the endorsement of measures derived from use of the Continuity Assessment Record and Evaluation (CARE) item set. The CARE tool is a CMS effort to promote standardized patient information used to examine the consistency of payment incentives for Medicare populations treated in various settings. The demonstration testing use of the tool included Acute-Care Hospitals and 4 Post-Acute Care settings: Long-Term Care Hospitals (LTCHs), Inpatient Rehabilitation Facilities (IRFs), Skilled Nursing Facilities (SNFs), and Home Health Agencies (HHAs). The comments and the measures to which they refer are summarized below.

Measures 2612 and 2613: CARE: Improvement in Mobility and Self-Care

The overarching concerns related to the measure description and the use of terms suggesting that patients are admitted to post-acute settings for therapy only. The commenter indicated that it is more appropriate to describe post-acute care as medically necessary and in response to overall patient needs. This commenter also indicated that the CARE tool may have some limitations because the self-care components do not assess personal-hygiene/grooming and personal device care. Finally, the commenters indicated that the self-care measures should be assessed for inclusion of performance and cognitive elements of self-care such as sequencing, problem-solving, etc. The Committee reviewed and considered these pre-evaluation comments and in most instances requested more information from the developers that aided in their evaluation voting process.

Measures 2633, 2634, 2635 and 2636: Inpatient Rehabilitation Facility (IRF): Functional Outcome Measures – Self-Care and Mobility

One commenter submitted a series of concerns about the IRF suite of measures also derived from the CARE tool. The overarching themes from this commenter follow.

Validity of measures: The commenter asserted that the measures were developed via a cross-sectional study design from a demonstration project which lacked medical and functional data from post-acute and subsequent acute or post-acute care utilization. As such, the commenter asserted that the measures cannot predict outcomes of interest. During the meeting, the developer corrected this assertion and explained that it had conducted a prospective cohort study which included both admission and discharge data.

Risk adjustment methodology: The commenter indicated concern that the sample used to develop the risk-adjustment methodology used data from 1% of all IRF patients, and included only 3% of all IRFs; thus, they questioned the ability of the measure and adjustment parameters to be representative of the IRF population; they also suggested that this introduces reliability concerns. The developer noted during the meeting that they believe that they assessed risk-adjustment models and inclusion criteria quite rigorously with input from an expert panel, a public comment period, and testing of additional potential adjusters. They further clarified that the analysis conducted used a generalized linear model with general estimation equations.

Age of data: A concern was raised about the age of the data and the changing demographics of IRFs. Specifically, it was noted that the data is 4-5 years old and there have been changes in the populations admitted to IRFs in the past 2 years. The sample drawn was noted to be predominantly orthopedic conditions, where the current demographics tend toward neurologic conditions.

Burden and duplication of assessments: It was noted that many of the items collected via the CARE tool are very similar to or duplicative of items assessed and required through the IRF-PAI, and specifically the FIM® Instrument. The Committee and various developers discussed the burden and duplication issues at various points of the meeting, and those comments are found under each specific measure summary. At present, the CARE tool is not a mandated tool nor tied to payment, but the tool is being explored as an option to promote alignment and standardization of measures across care settings for the Medicare population.

Consensus Not Reached Status

There were 6 measures for which the Committee did not reach consensus on their recommendation for endorsement, and 8 measures that were not recommended for endorsement during the initial

evaluation at the Committee in-person meeting. NQF sought public comment on each of these measures during the public and member commenting period which took place from March 2-31 for further Committee consideration. The measure developers were provided with clear recommendations describing the additional information that the Committee was seeking to evaluate the measures further. Upon receipt of the information, the Committee reviewed, discussed, and then re-voted on each evaluation criterion to determine a final recommendation. The full list of recommended measures then was evaluated against the NQF related and competing measure criteria, and the Committee discussed harmonization or best-in-class status for any measures that were deemed related or competing. All 14 measures were subsequently endorsed.

Overarching Issues

Several overarching issues emerged during the Standing Committee's discussion of the measures. The Committee explored these issues in its deliberations and noted the importance of considering them in future work. These overarching issues are described below.

Level of Scientific Acceptability Testing Required

During phase 1 of the Person- and Family-Centered Care project, all measures considered by the Committee were PRO-PMs which required the Committee to evaluate both item-level and score-level testing. During phase 2, there was a mix of PRO-PMs, process measures, and outcome measures. Although NQF staff worked closely with developers prior to and even after the measure submission deadline, not all required information was available to the Committee. The Committee repeatedly raised concerns about measure testing and performance at a given level of analysis (e.g., SNF, IRF). For process and outcome measures, the NQF criteria allow testing at either the item (scale) level OR measure score level. PRO-PMs require both levels of testing. The Committee indicated some discomfort with trying to assess a measure for use by specific provider levels without having testing data at that level. In many cases, the developer plans to submit additional testing documentation.

Readiness of Measures

In phase 2 of this project, half of the measures submitted were new, and 7 of the measures undergoing maintenance review had significant changes that warranted the request of additional information for the Committee's consideration. There were varying levels of success in obtaining the necessary information. The Committee reviewed measures at different stages of implementation and with varying amounts of data to document current performance and testing. The Committee urged NQF staff to consider how to manage such submissions in the future. One suggestion was to separate the new or emerging measures on the agenda and to ensure that the Committee members know where the measure is in the overall development and implementation process. They indicated interest in providing early feedback to the developers, but felt the new measures may warrant a different level of review.

Incorporating Person-Centeredness in the Criteria

Under Importance, the criterion (1c.5) requires: "If a PRO-PM (e.g., HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), evidence should demonstrate that the target population values the measured PRO and finds it meaningful. (Describe how and from whom their input was obtained.)" The Committee encouraged NQF to require this criterion in the evaluation of any type of measure. With a national focus trending toward person- and family-centeredness, this criterion becomes extremely important. NQF may find opportunities not only to require the criterion for all measures, but also to focus education on the importance of the patient-centeredness concept.

Currently, many developers leave this section blank, indicate it does not apply, or identify peer-reviewed literature to support it.

Jimmo vs. Sebelius

Eleven measures considered in phase 2 assess improvement in functional status for patients. The Committee urged the developers to consider the implications of a recent settlement in Jimmo v. Sebelius.

In Jimmo v. Sebelius,[7] the Center for Medicare Advocacy (CMA) alleged that Medicare claims involving skilled care were being inappropriately denied by contractors 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.

Related and Competing Measures

NQF requires that committees consider whether measures are related (either the same measure focus or the same target population) or competing (both the same measure focus and the same target population) with other measures in the portfolio. NQF staff identified 7 sets of measures as related and 2 sets of measures as competing during their preliminary analysis. Following the Committee's final recommendations on the consensus not reached and not recommended measures, the Committee convened via web meeting on May 1, 2015, to discuss the related and competing measures. The Committee agreed that the 7 sets of measures identified by NQF are related but did not make recommendations for harmonization. In their discussions, the Committee indicated the related measures either addressed different populations or were varied enough in their focus area to support moving the measures forward through the endorsement process. The Committee members considered 2 pairs of measures as potentially competing and as such were asked to complete a voting survey after the call. The competing measures included:

- **2633: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients** and **2286: Functional Change: Change in Self Care Score; and**
- **2634: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients** and **2321: Functional Change: Change in Mobility Score.**

The Committee came to consensus that each set of measures was competing, but could not come to consensus on "best-in-class" in either set. Therefore, both pairs of measures moved forward for endorsement as competing but with consensus not reached on "best-in-class." Committee members provided the following rationale for not choosing a "best-in-class" in either set.

- Measures 2286 and 2321 have a long history of utilization nationally, and are utilized for all adult patients, not just the Medicare population. Significant costs (personnel re-training,

software systems for capturing data) would accompany a switch to another measure, without clear added benefit to the institutions involved in rehabilitation.

- One measure in each set is "tried and true," and the other is emerging with a good possibility of becoming superior over time.
- One measure in each set is based on the FIM® and has a long history; staff across the country are trained and familiar with it; and it would be a major upheaval not to endorse this measure. The other measure in each set is based on the CARE tool and was developed using more contemporary science, is designed to cut across settings of post-acute care, and has had significant investment by CMS in its development and refinement.
- It is hard to say whether one is superior at this time. By not selecting a superior measure at this time, CMS and other payers will be able to employ both measures and continue to experience how they work in practice, perhaps building an evidence base for future selection of one superior measure.

After review and recommendation by the Standing Committee, the measures moved forward through NQF member comment and vote, CSAC discussion and vote, and ultimately the NQF Board. The Board ratified the endorsement of all four measures.

Summary of Measure Evaluation

The following summaries of the measures and the evaluation highlight the major issues that the Committee considered. Details of the Committee's discussion and ratings of the criteria are included in Appendix A.

Home Health

Five previously NQF-endorsed measures addressing home health were reviewed. All were endorsed.

0167: Improvement in Ambulation/Locomotion (CMS): Endorsed

Description: Percentage of home health episodes of care during which the patient improved in ability to ambulate; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Home Health; **Data Source**: Electronic Clinical Data

The Committee reviewed and evaluated measures 0167, 0174, and 0175 as a suite of related measures addressing improvement in activities of daily living (ADL) for home health patients. These measures were initially endorsed in March 2009 and are already widely used and publicly reported in a variety of places, including Home Health Compare and CMS´s Home Health Quality Initiative. Overall, the Committee felt that each of the concepts covered in these measures (ambulation/locomotion, bathing, and bed transferring) is important to assess for improvement in patients' functional status in performing activities of daily living which would allow patients to remain in their home environment rather than moving to a facility. There was some concern, however, related to the focus on "improvement" in ADL because the Jimmo v. Sebelius settlement requires CMS not to require improvement in function as a condition of coverage in home health (as well as SNF and outpatient services). The Committee expressed concern that by endorsing a measure that evaluates improvement, home health agencies may be more likely to deny access to patients who require home health services to maintain or prevent further deterioration of function, but have no realistic potential to improve. The Committee recommended that these patients should be excluded from the denominator along with the other exclusions so as not to create a system with disincentives to treat the people who may not improve but still might need therapy in order to maintain or prevent deterioration of function. CMS noted that it agrees with the

Committee's concern and is moving to balance out the incentives to avoid disincentivizing care or obstructing the goals of the patient. The Committee voted on the measures as a group and recommended 0167, 0174, and 0175 for endorsement.

0174: Improvement in Bathing (CMS): Endorsed

Description: Percentage of home health episodes of care during which the patient got better at bathing self; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Home Health; **Data Source**: Electronic Clinical Data

The Committee reviewed and evaluated measures 0167, 0174, and 0175 as a suite of related measures addressing improvement in ADL for home health patients. The Committee's concerns and review are noted above under measure 0167.

0175: Improvement in Bed Transferring (CMS): Endorsed

Description: Percentage of home health episodes of care during which the patient improved in ability to get in and out of bed; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Home Health; **Data Source**: Electronic Clinical Data

The Committee reviewed and evaluated measures 0167, 0174, and 0175 as a suite of related measures addressing improvement in ADL for home health patients. The Committee's concerns and review are noted above under measure 0167.

0176: Improvement in Management of Oral Medications (CMS): Endorsed

Description: Percentage of home health episodes of care during which the patient improved in ability to take their medicines correctly, by mouth; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Home Health; **Data Source**: Electronic Clinical Data

While the Committee discussed and on voted on some measures within the set of home health measures together, they elected to pull some out for individual discussion, including the medication (0176) and pain (-177) measures. The Committee and the developer engaged in dialog on the usability of the 2 additional concepts (ability to take medicines correctly and frequency of pain) and although the Committee recommended the measures for endorsement, it suggested that the concepts might be better operationalized via patient-reported outcomes due to their subjectivity. After careful evaluation, the Committee recommended both 0176 and 0177 as suitable for endorsement.

0177: Improvement in Pain Interfering with Activity (CMS): Endorsed

Description: Percentage of home health episodes of care during which the frequency of the patient's pain when moving around improved; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Home Health; **Data Source**: Electronic Clinical Data

While the Committee discussed and on voted on some measures within the set of home health measures together, they elected to pull some out for individual discussion, including the medication (0176) and pain (0177) measures. The Committee specifically requested more information on the usability of the 2 additional concepts (ability to take medicines correctly and frequency of pain) and noted that these might be better operationalized via patient-reported outcomes due to their subjectivity. The Committee recommended both 0176 and 0177 as suitable for endorsement.

Long-Term Care/Nursing Home/Skilled Nursing Facility

One previously NQF-endorsed measure and 2 newly submitted measures addressing long-term care/nursing home/skilled nursing facility were reviewed. All were endorsed.

0688: Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased - long stay (CMS): Endorsed

Description: This measure, based on data from the Minimum Data Set (MDS) 3.0 assessment of long-stay nursing facility residents, estimates the percentage of long-stay residents in a nursing facility whose need for assistance with late-loss Activities of Daily Living (ADLs), as reported in the target assessment, increased when compared with a prior assessment. The four late-loss ADLs are: bed mobility, transfer, eating, and toilet use. This measure is calculated by comparing the change in each ADL item between the target assessment (OBRA, PPS, or discharge) and a prior assessment (OBRA, PPS, or discharge). Long-stay nursing facility residents are those with a nursing facility stay of 101 cumulative days or more; **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

This measure was initially endorsed in March 2011 and is currently used in public reporting on Nursing Home Compare and for quality improvement with benchmarking. The Committee agreed that the therapeutic goal to delay decline in the selected ADLs is very important for this population but raised concerns about the exclusions in the denominator. The Committee was particularly concerned about the 6-month expected survival exclusion, which could have potential risk for gaming and difficulty in establishing the reliability of identifying people with less than a 6-month expected survival. The measure developers explained their intentions with regard to this exclusion: if people are at end of life, they will be at much higher risk for ADL decline. While there was considerable discussion about the reliability and validity of the measure, it ultimately passed all criteria and was endorsed.

2612: CARE: Improvement in Mobility (American Health Care Association): Endorsed

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 an SNF from a hospital or another post-acute care setting for therapy (i.e., PT or OT) regardless of payer 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; **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

Measures 2612 (CARE: Improvement in Mobility) and 2613 (CARE: Improvement in Self Care) were discussed and voted on together. Both are new outcome measures based on the self-care and mobility items from the CARE tool positioned for use in Skilled Nursing Facilities. The Committee noted that attention should be paid to the Jimmo v. Sebelius settlement to determine if measuring improvements would open up this measure to gaming or conflict with the settlement. The Committee also asked for clarification on the lack of disparity data. It was noted that these measures include cognitive function as derived from the CARE tool in conjunction with data from the FIM®. Both measures were endorsed.

2613: CARE: Improvement in Self Care (American Health Care Association): Endorsed

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 an SNF from a hospital or another post-acute care setting for therapy (i.e., PT or OT) regardless of payer 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; **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

Measures 2612 and 2613 were discussed and voted on together; the summary of the discussion can be found under 2612 above. Both measures were endorsed.

Inpatient Rehabilitation

Seven newly submitted measures addressing inpatient rehabilitation were reviewed. All 7 were endorsed.

2286: Functional Change: Change in Self Care Score (Uniform Data System for Medical Rehabilitation): Endorsed, with conditions for updates

Description: Change in rasch derived values of self-care function from admission to discharge among adult patients treated at an inpatient rehabilitation facility who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 8 items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Home Health, Post-Acute/Long Term Care Facility, Inpatient Rehabilitation Facility, Post-Acute/Long Term Care Facility, Long Term Acute Care Hospital, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility; **Data Source**: Electronic Clinical Data, Electronic Health Record

Measures 2287 (Functional Change in Motor Score), 2321 (Functional Change: Change in Mobility Score), and 2286 (Functional Change in Self-Care Score) were all discussed as a group. While the tool that is used to calculate the measures has been in use for many years, these were new measure submissions derived from the FIM® tool. The FIM® is an 18-item instrument that measures patient function and burden of care and is presently embedded in the IRF-PAI, which is the instrument used in inpatient rehabilitation to assess the patient's level of functional status at admission and at discharge. Completion of the IRF-PAI is required by CMS as part of prospective payment for services provided to the patient. The developer explained to the Committee that these measures, if combined, would utilize the full 18-item set. This was important for consideration of the measures overall. A key note in the Committee discussion was the necessity of training of clinicians to calculate the FIM scores; the reliability of the measures is dependent on trained clinicians, and poor training would introduce variability. The Committee also requested additional information on disparities; the developer indicated ability to submit data on age, race, and payer source. As with other measures discussed in this phase, while these are outcome measures and the developer provided reliability and validity testing at the instrument/patient level, the Committee also is interested in seeing the facility-level scores. The Committee voted to recommend measures 2287, 2286 and 2321.

2287: Functional Change: Change in Motor Score (Uniform Data System for Medical Rehabilitation): Endorsed

Description: Change in rasch derived values of motor function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 12 FIM® 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**: Home Health, Post-Acute/Long Term Care Facility, Inpatient Rehabilitation Facility, Post-Acute/Long Term Care Facility, Long Term Acute Care Hospital, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility; **Data Source**: Administrative claims

Measures 2287 (Functional Change in Motor Score), 2321 (Functional Change: Change in Mobility Score), and 2286 (Functional Change in Self-Care Score) were all discussed as a group. The discussion is summarized under measure 2286. The Committee voted to recommend measures 2287, 2286 and 2321.

2321: Functional Change: Change in Mobility Score (Uniform Data System for Medical Rehabilitation): Endorsed, with conditions for updates

Description: Change in rasch derived values of mobility function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility FIM® 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, Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility, Long Term Acute Care Hospital, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility; **Data Source**: Electronic Clinical Data, Electronic Health Record

Measures 2287 (Functional Change in Motor Score), 2321 (Functional Change: Change in Mobility Score), and 2286 (Functional Change in Self-Care Score) were all discussed as a group. The discussion is summarized under measure 2286. The Committee voted to recommend measures 2287, 2286 and 2321.

2633: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients (CMS): Endorsed, with conditions for updates

Description: This measure estimates the risk-adjusted mean change in self-care score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare patients; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute/Long Term Care Facility, Inpatient Rehabilitation Facility; **Data Source**: Electronic Clinical Data

Measures 2633 (IRF Functional Outcome Measure: Change in Self-Care Score) and 2635 (IRF Functional Outcome Measure: Discharge Self-Care Score) were considered and voted on as a pair due to their similarities. Both are new measures derived from testing of the CARE Item Set [tool] and are focused on Self-Care. The overarching discussion of these measures was the same as described for measures 2634 and 2636. The measures are calculated from the selected function items from the CARE Item Set [tool], and the applicable data are aggregated and reported in two ways (per measure concept of self-care or mobility). The change in self-care (or mobility) measure is utilized for facility reporting and comparisons, while the percent of patients who meet or exceed and expected discharge self-care (or mobility) score was created to enhance consumer understanding of the measure. There was discussion on the need for

multiple measures utilizing the same data; the developer explained that it submitted as separate measures due to NQF measure submission form requirements. NQF staff acknowledged that streamlining the submission process could occur in the future.

The Committee also requested the rationale for multiple measures using the same function items from the CARE Item Set [tool], but across settings of care (IRF, LTCH). CMS explained that one of the many uses of these measures is to assess individual patients as they traverse the care continuum; thus the measures were created to promote standardization and promote links between care settings. The Committee expressed some discomfort with trying to assess a measure at the level of a specific provider entity without having data for that level of evaluation. Developers have provided substantial information on the scale/item testing level, but not at the measure level. The developer for 2633 and 2635 indicated that it would be able to provide additional data at the measure level which would allow the Committee to see how good the measure is at discriminating errors in the distribution of facilities. The Committee voted on measures 2633 and 2635 together and was not able to reach consensus for the reliability and validity criteria. In response to the Committee's request, the developers provided additional information, which was evaluated on the post-comment call. The Committee recommended the measures after a re-vote.

2634: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients (CMS): Endorsed, with conditions for updates

Description: This measure estimates the mean risk-adjusted mean change in mobility score between admission and discharge for Inpatient Rehabilitation Facility (IRF) Medicare patients; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute/Long Term Care Facility, Inpatient Rehabilitation Facility; **Data Source**: Electronic Clinical Data

Measures 2634 (IRF Functional Outcome Measure: Change in Mobility Score) and 2636 (IRF Functional Outcome Measure: Discharge Mobility Score) were considered and voted on as a pair due to their similarities. Both are new measures derived from testing of the CARE Item Set [tool] and are focused on Mobility. The overarching discussion of these measures was the same as described for measure 2635 and 2633. The Committee voted on measures 2634 and 2636 together and recommended both for endorsement.

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

Description: This measure estimates the percentage of IRF patients who meet or exceed an expected discharge self-care score; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute/Long Term Care Facility, Inpatient Rehabilitation Facility; **Data Source**: Electronic Clinical Data

Measures 2633 (IRF Functional Outcome Measure: Change in Self-Care Score) and 2635 (IRF Functional Outcome Measure: Discharge Self-Care Score) were considered and voted on as a pair due to their similarities. Both are new measures derived from implementation of the CARE tool and are focused on Self-Care. The full discussion notes are included above under measure 2633. The Committee voted on measures 2633 and 2635 together and was not able to reach consensus for the reliability and validity criterion. In response to the Committee's request, the developers provided additional information, which was evaluated on the post-comment call. The Committee recommended the measures after a re-vote.

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

Description: This measure estimates the percentage IRF patients who meet or exceed an expected discharge mobility score; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute/Long Term Care Facility, Inpatient Rehabilitation Facility; **Data Source**: Electronic Clinical Data

Measures 2634 (IRF Functional Outcome Measure: Change in Mobility Score) and 2636 (IRF Functional Outcome Measure: Discharge Mobility Score) were considered and voted on as a pair due to their similarities. Both are new measures derived from implementation of the CARE tool and are focused on Mobility. The overarching discussion of these measures was the same as described for measures 2635 and 2633. The Committee asked for clarification on the use of the measures in pay-for-performance programs, and CMS indicated that the measures are included in the Inpatient Rehabilitation Quality Report Program, as established by the Affordable Care Act; however it is a Penalty for Failure to Report program, as opposed to pay for performance. The Committee voted on measures 2634 and 2636 together and recommended both for endorsement.

Outpatient/Multiple Setting/Clinician

One previously NQF-endorsed measure and 3 newly submitted measures addressing outpatient/multiple setting/clinician were reviewed. All 3 measures were endorsed.

0701: Functional Capacity in COPD patients before and after Pulmonary Rehabilitation (American Association of Cardiovascular and Pulmonary Rehabilitation): Endorsed

Description: The percentage of patients with COPD who are found to increase their functional capacity by at least 25 meters (82 feet), as measured by a standardized 6 minute walk test (6MWT) after participating in pulmonary rehabilitation (PR); **Measure Type**: Outcome; **Level of Analysis**: Facility, Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Paragraph style: Normal by default; **Data Source**: Ambulatory Care, Outpatient Rehabilitation

This measure was initially endorsed in January 2011 and is currently in use for quality improvement (internal to the specific organization by which it is being used). The Committee noted that there is a clear link between exercise training and improvement in pulmonary function in COPD patients but expressed some concerns that data only exist at the patient level with no quality information at the program/facility level to compare differences or to identify how reliable or reproducible these scores are at the program/facility level. NQF stated that since this is an outcome measure, as opposed to a patient-reported outcome measure, it would meet the criteria by providing either the patient-level result or the measure-level result. The developer reiterated that the measurement is at the patient level, and is for programs to measure their changes in functional capacity, but their plan in the future would be to have programs compare to benchmarks. One Committee member recommended that the measure demonstrate a percent benefit in performance as opposed to a specific number, suggesting that is clinically reasonable to migrate from a 6-minute walk test to a 2-minute test or shorter performance tests. The developer responded that this would need a careful analysis of data from the pulmonary rehab database to establish these cut points and that this would change the evidence base currently used. The developer said that it would certainly consider this suggestion in the future. In response to the Committee's request, the developers provided additional information, which was evaluated on the post-comment call. The Committee recommended the measure after a re-vote.

2624: Functional Outcome Assessment (CMS): Endorsed

Description: Percentage of visits for patients aged 18 years and older with documentation of a current functional outcome assessment using a standardized functional outcome assessment tool on the date of the encounter AND documentation of a care plan based on identified functional outcome deficiencies on the date of the identified deficiencies; **Measure Type**: Process; **Level of Analysis**: Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic, Ambulatory Care: Outpatient Rehabilitation; **Data Source**: Administrative claims, Paper Medical Records

This process measure, currently used in PQRS, is designed to encourage and improve the documentation and reporting of standardized functional outcome assessments. The developer states that standardized outcome assessments are a vital part of evidence-based practice, and that musculoskeletal disorders account for 6.8% of total disability adjusted life years, and that one in two adults reports a musculoskeletal condition requiring medical attention.

The Committee and developer agreed that while there is an established link between the care itself and the outcome measure, the evidence linking a recording of the use of the tool (process measure) and improved outcomes is less strong. The developers noted that this process measure is intended to be an intermediate step to a future outcome measure. All agreed that assessing function and developing a plan of care are basic practices for PT, OT, and chiropractic providers. This measure passed the importance criteria.

This measure did not achieve consensus on reliability and validity. It therefore moved forward under the umbrella of consensus not reached. The Committee wanted more information on operationalizing the measure. Specifically, how can the measure ensure that a documented care plan would address the identified functional outcome deficiencies, and how would that be coded ? The developer explained that the care plan and identified deficiencies do not need to be linked but that both a functional status assessment and a care plan need to show up in the record. Committee members were also concerned that using claims data for this measure does not link the two pieces of the measure when it comes to actual provision of care. Committee members were concerned that this measure is very "game-able" as the documentation of a care plan would fulfill the measure, but would not ensure that the patient received the right care. The developers noted that linking the care plan and the collection of outcomes data would naturally be linked for providers. The Committee also raised concerns around feasibility, noting both that the measure is abstracted from administrative claims and paper medical records, and that only 3.6% of eligible providers reported on it despite its use in PQRS, possibility indicating feasibility issues.

In response to the Committee's request, the developers provided additional information, which was evaluated on the post-comment call. The Committee recommended the measure after a re-vote.

2643: Average Change in Functional Status Following Lumbar Spine Fusion Surgery (MN Community Measurement): Endorsed, with condition for final risk-adjustment methodology by annual update

Description: For patients age 18 and older undergoing lumbar spine fusion surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oswestry Disability Index (ODI version 2.1a) patient reported outcome tool; **Measure Type**: PRO; **Level of Analysis**: Clinician: Group/Practice; **Setting of Care**: Ambulatory Care, Clinician Office/Clinic; **Data Source**: Electronic Clinical Data, Electronic Health Record, Paper Medical Records, Patient Reported Data

The developer introduced this new measure as a patient-reported outcome measure, which evaluates the change between a patient's preoperative functional status and their postoperative functional status at 1 year. The Committee applauded the developers for tackling this controversial and important area in utilization of surgical procedures. However, the Committee stated that this measure could imply that there is a gap in quality of care but not in terms of variability in performance based on the pilot data. The developer explained that this measure has gone through 1 phase of pilot testing involving 4 practices and is in the statewide quality reporting and measurement system for Minnesota. The developer noted that it expects full implementation data to be available in May 2015. The Committee members raised additional concerns that the Oswestry (pain questionnaire) may not be the best tool to use, because this tool is primarily aimed at pain and therefore would not capture other neurological dysfunction and potential side effects of the surgery itself. Committee members recommended that the measure be improved by adding other questions or tools that might speak to neurological symptoms that would be presenting without pain. The Committee members commented that the specifications look very clear but the risk-adjustment specifications have not been modeled yet. Further, the Committee noted that there is no score-level reliability testing data presented nor is there data to demonstrate the intraclass correlations at the practice level. The developer confirmed that it will submit testing based on the Committee's recommendations, as it did for measure 2653, Average Change in Functional Status Following Total Knee Replacement Surgery. This measure (2643) did not pass reliability, so the Committee stopped voting and requested the aforementioned testing information from the developers to re-consider the measure after the public comment. In response to the Committee's request, the developers provided additional information, which was evaluated on the post-draft comment call. The Committee recommended the measure after a re-vote. NQF staff placed a condition of endorsement on the measure due to lack of final risk-adjustment strategy. The measure underwent an ad hoc review focused on the risk-adjustment methodology in late 2015-early 2016; the details of this review will be included in an addendum report to be published in July 2016.

2653: Average Change in Functional Status Following Total Knee Replacement Surgery (MN Community Measurement): Endorsed, with condition for final risk-adjustment methodology by annual update

Description: For patients age 18 and older undergoing total knee replacement surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oxford Knee Score (OKS) patient reported outcome tool; **Measure Type**: PRO; **Level of Analysis**: Clinician : Group/Practice; **Setting of Care**: Ambulatory Care, Clinician Office/Clinic; **Data Source**: Electronic Clinical Data, Electronic Health Record, Paper Medical Records, Patient Reported Data

Over 500,000 knee replacements are performed each year, and this number is projected to rise to almost 3.5 million per year by 2030. Improvements in functional status are a patient's main reason for undergoing total knee replacement (TKR). The Committee agreed that this measure is a high-priority area due to the number of surgeries performed each year and that patients could use information on what level of functional status they can expect after a TKR. However, Committee members were concerned this measure does not collect data on postoperative interventions, such as rehabilitation, that can affect outcomes separately from surgery. They did agree that this could possibly encourage more focus on long-term outcomes by positioning the surgeon as the head of a team taking care of a knee, and that this could encourage surgeons to work with their patients to encourage rehab, etc.

Consensus was not reached on the reliability and validity of this measure. Concerns raised by the Committee included the lack of risk adjustment and the potential differences in the average patient population in Minnesota versus the rest of the U.S. The developer stated that measurement science has not yet evolved to the point of determining the appropriate methodology of testing this kind of continuous measure, but the Committee suggested intraclass correlate testing. The Committee requested an estimate of the reliability at the physician level, and the developers agreed to follow up with that information during the comment period.

Since consensus was not reached, discussion on the measure continued. The measure passed feasibility; it requires a pre-operative OKS score which is collected with a simple tool. The tool is filled out postoperatively during an office visit, or via mail or a patient portal. The developer noted that orthopedic practices are new to measurement but are gradually improving at collecting the data. In response to a Committee request, the developer stated that it does not think that this measure is susceptible to gaming since data is collected on all patients, not just the ones who complete both assessments. The measure is not currently in use, but the developer plans to report it statewide in Minnesota in 2016.

The recommendation for endorsement did not reach consensus, so the Committee discussed it again after the comment period. This measure conflicts with 0422: Functional Status Change for Patients with Knee Impairments (FOTO). The competing measures discussion was tabled until after the comment period, pending the Committee's final recommendation on both measures.

The developers provided additional information, which was reviewed and discussed on the post-draft comment call. The Committee recommended the measure after a re-vote. NQF staff placed a condition of endorsement on the measure due to lack of final risk-adjustment strategy. The measure underwent an ad hoc review focused on the risk adjustment methodology in late 2015-early 2016; the details of this review will be included in an addendum report to be published in July 2016.

On a second post-comment call, the Committee discussed measures 0422 and 2653 to identify whether they are competing with each other. The Committee determined that the measures have different focus in terms of the target population, provider types, and clinical settings, as well as the clinical area. The developers indicated that the FOTO measure is broader and applicable to any kind of knee impairment as opposed to measure 2653 which only focuses on patients with knee replacement. Thus, the Committee agreed that the measures were related but not competing.

Long-Term Care/Hospital

Two newly submitted measures addressing long-term care/hospital were reviewed and endorsed.

2631: Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (CMS): Endorsed

Description: This quality measure reports the percentage of all Long-Term Care Hospital (LTCH) patients with an admission and discharge functional assessment and a care plan that addresses function;
Measure Type: Process; **Level of Analysis**: Facility; **Setting of Care**: Post-Acute/Long Term Care Facility, Long Term Acute Care Hospital; **Data Source**: Electronic Clinical Data

The Committee did not initially recommend the measure during the in-person meeting because it did not pass the importance criteria. However, the developer had provided additional information shortly before the meeting that the Committee had not had time to review, so the Committee conducted a re-

review of this measure on the post-meeting call at the developer's request. After consideration of the additional information, the Committee was unable to reach consensus on the importance criteria. With this status, the measure proceeded through the voting process and was considered again after the public comment period. During the in-person meeting discussion, the developer noted that this measure has two components: (1) the collection of standardized functional assessment data in the areas of self-care, mobility, cognition, and bladder management, and (2) the reporting, on admission, of a discharge goal (i.e., score) for one or more self-care or mobility items. The developer further noted that the goal has to be tied to one of the self-care or mobility items. The Committee expressed concern that the only data presented to support the performance gap was qualitative data collected from site visits to 28 facilities, and that there were no quantitative data and data for a care plan gap. The developer stated that qualitative data are sometimes adequate for a measure when it is first being proposed, especially for process measures supported by expert opinion in terms of validity and clinical practice guidelines. The Committee also had concerns that this might be a hard measure to achieve because there are three components to the numerator with which the long-term care facilities have to comply. The developer explained that all the items will be nested within the LTCH CARE data set and collected through a standardized assessment tool, which long-term care hospitals are required to use.

Additional questions were raised regarding setting a goal for the purpose of data collection versus holding the facility accountable for that goal. The developer explained that CMS is attempting to collect data to examine a change in independence on self-care and mobility and to identify if these items line up with a goal of care and then standardize data assessment across settings to follow persons as they traverse care settings. The Committee noted that there is a good evidence for reliability and validity of the CARE measure and the functional status component, but there is no data regarding the care plan piece of the measure, nor is there inter-rater reliability data on the degree to which an appropriate goal is set. The developer responded that the "appropriate" in this argument may not fit within this measure, because this measure only focuses on the items for self-care and mobility and whether one of those items was documented on the goal of care at discharge.

One Committee member raised concerns about the face validity of the measure if documentation of functional status and a related goal can be called a care plan. Another Committee member agreed that a goal is not equal to a care plan; however, she supported the idea of a measure that links current functional status and the goal for improvement, so she suggested changing the language for this measure. CMS will consider changing the name of the measure to address the Committee's concerns.

Lastly, one Committee member pointed out that there is no evidence of intraclass correlation coefficients that would suggest the signal-to-noise ratio which helps distinguish within-facility variation from between-facility variation. The Committee asked the developer if it has the data to provide that analysis. The developer explained that it does not have data to analyze facilities over time. As part of the post-acute payment reform demonstration, 28 LTCHs volunteered to use the standardized dataset to collect and enter data into an electronic system whereby they provided the reliability and validity data.

In response to the Committee's request, the developers provided additional information, which was evaluated on the post-comment call. The Committee recommended the measure after a re-vote.

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

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

Level of Analysis: Facility; **Setting of Care**: Post-Acute/Long Term Care Facility, Long Term Acute Care Hospital Facility; **Data Source**: Electronic Clinical Data

This is a new measure finalized for the Long-Term Care Quality Reporting Program in the fall of 2014; it is expected to be implemented in April 2016 and focuses on patients admitted to an LTCH on a ventilator. The Committee discussed the rationale for excluding patients with all progressive neurologic conditions and requested more information on those conditions where a patient's status may fluctuate, such as Parkinson's disease, MS, and ALS. The developer agreed with a Committee member that the main reason for these exclusions was variability in disease course. The exclusions were intended to exclude patients who would not be expected to show improvement based on their clinical condition. Lack of improvement for these patients would not reflect poor quality of care. The Committee also requested a reason for lack of performance gap information; it was explained there is not a lot of literature on LTCH patients and specifically on LTCH and ventilator patients. The Committee voted to recommend this measure for endorsement.

Ambulatory/Multiple Setting Rehabilitation

Seven previously NQF-endorsed measures addressing ambulatory/multiple setting rehabilitation were reviewed. Both the Committee and the developers agreed that the set of FOTO measures were quite similar and could be discussed as a batch. Because measure 0423, Functional Status Change for Patients with Hip Impairments, was first on the agenda, the Committee discussed the criteria for the set using that measure as a sample. They agreed that the votes for that measure applied to the entire measure set. An additional issue relating to measure 0428, Functional Status Change for Patients with General Orthopaedic Impairments, was pulled out and discussed separately, but otherwise the Committee agreed that the strengths and weaknesses of 0423 reflected those in the entire measure set.

During the Committee meeting, measure 0423 failed the must-pass criterion of performance gap (a subcriterion of importance) due to insufficient evidence provided, and the measures were not recommended. However, the Committee offered the developers a chance to revise their submissions and return with more information after the NQF member and public comment period. In light of this offer, the Committee agreed to discuss the remaining criteria to provide more information to the developers on the strengths and weaknesses of the measure, and to guide their revisions. The developers provided additional information, which was evaluated on the post-comment call. The Committee recommended the measures after a re-vote.

0422: Functional Status Change for Patients with Knee Impairments (Focus on Therapeutic Outcomes, Inc.): Endorsed

Description: A self-report measure of change in functional status for patients 18 year+ with knee impairments. The change in functional status assessed using FOTO's (knee) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality; **Measure Type**: Outcome; **Level of Analysis**: Facility, Clinician : Group/Practice, Clinician : Individual; **Setting of Care**: Ambulatory Care, Clinician Office/Clinic, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care, Outpatient Rehabilitation Hospital Outpatient; **Data Source**: Patient Reported Data

This measure was originally endorsed as a process measure, and the developers brought it back for review as an outcome measure, so there have been significant changes since its last endorsement.

Patients who enter rehabilitation have the primary goal of improved function, and patients with knee issues face significant activity limitations, including difficulty walking, standing, and stair climbing. Knee issues can be caused by many factors, but most common is osteoarthritis, which affects an estimated 26.9 million people. This measure is currently in use in quality improvement (QI) programs and is being piloted for use in payment programs. The previous version of this measure (process measure) is used in PQRS. The Committee batched their discussion of this measure with the other measures in the FOTO set; more details are under measure 0423.

0423: Functional Status Change for Patients with Hip Impairments (Focus on Therapeutic Outcomes, Inc.): Endorsed

Description: A self-report measure of change in functional status for patients 18 years+ with hip impairments. The change in functional status assessed using FOTO's (hip) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality; **Measure Type**: Outcome; **Level of Analysis**: Facility, Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care, Outpatient Rehabilitation Hospital Outpatient; **Data Source**: Patient Reported Data

The Committee used this measure to discuss all of the measures in the FOTO set. This summary of the Committee's discussion applies to all of the FOTO measures.

This measure was originally endorsed as a process measure, and the developers brought it back for review as an outcome measure, so there have been significant changes since its last endorsement. Patients who enter rehabilitation have the primary goal of improved function, and patients with hip issues face significant activity limitations, including difficulty walking, standing, and stair climbing. It is estimated that close to 20% of older adults report hip pain and that 14% of U.S. adults over 60 report hip pain on most days in the last 6 weeks. This measure is currently in use in QI programs and is being piloted for use in payment programs. The previous version of this measure (process measure) is used in PQRS.

During the Committee meeting, this measure did not pass subcriterion 1b, performance gap, and therefore failed at Importance. However, the Committee was interested in seeing additional information from the developers, so Committee members discussed the remaining criteria to provide additional information for the revisions that the developers plan to make to the submission during the comment period.

The Committee discussed the general question of whether functional status measures should include attributions to specific body parts. The advantage is that it can enhance the specificity of treatment, but it both limits changes in functional status to a particular body part, and it also limits the degree to which clinics can be compared across different types of injuries. The developer stated that wrist and hand conditions would affect functional status much differently than foot or ankle conditions; for example, and that is why different forms are needed. The developer also noted that clinicians wanted a more efficient tool that did not ask patients irrelevant items; the developer felt that these measures were responsive to patient and clinician needs.

The Committee also raised serious concerns about the reliability and validity of the measures. The Committee noted that it liked the types of functional issues that were addressed in this set of measures,

but it was concerned about the difficulty in risk adjusting away variability caused by different types of injuries/diseases; etiology of the hip impairment is not one of the factors that is adjusted for. There are thresholds for participation in this measure (of number of intake and discharge scores), but the Committee was concerned that since people who come in more often are more likely to be sampled, small numbers could impact the link between process and outcome. The Committee requested more information about the interclass correlation coefficients at the clinician and clinic levels, and the developer offered to follow up with that information. The Committee noted that this information would make sure that there is enough evidence that the measure is distinguishing clinicians from each other. The developer noted that they had submitted supplementary information on the validity of the provider classification method, which showed that in the high-performing clinics, a greater proportion of patients improved more than a minimally clinically important amount.

Raising the concern that the risk adjustment for gender and payer may actually mask disparities in care, the Committee requested more information and a justification for the risk-adjustment variables, especially gender and payer. It also requested evidence that the instrument, which was originally developed for ages 18 and over, has been tested for understandability and appropriateness for youth down to age 14, as included in the measure. The developer has agreed to provide this information during the comment period.

The Committee did not have concerns regarding the feasibility of this measure, in part due to the developer's information that the tool used has been well received by patients, providers, and patient managers.

The developers provided additional information, which was evaluated on the post-comment call. The Committee recommended the measures after a re-vote.

0424: Functional Status Change for Patients with Foot and Ankle Impairments (Focus on Therapeutic Outcomes, Inc.): Endorsed

Description: A self-report measure of change in functional status for patients 18 years+ with foot and ankle impairments. The change in functional status assessed using FOTO's (foot and ankle) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality; **Measure Type**: Outcome; **Level of Analysis**: Facility, Clinician: Group/Practice, Clinician : Individual; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic, Post-Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care: Outpatient Rehabilitation Hospital Outpatient; **Data Source**: Paper Medical Records

This measure was originally endorsed as a process measure, and the developers brought it back for review as an outcome measure, so there have been significant changes since its last endorsement. Patients who enter rehabilitation have the primary goal of improved function, and patients with foot and ankle issues face significant activity limitations, including difficulty with the activities of daily living and increased fall risk. Most patients are able to improve their foot/ankle functional status with physical therapy. This measure is currently in use in QI programs and is being piloted for use in payment programs. The previous version of this measure (process measure) is used in PQRS. The Committee batched their discussion of this measure with the other measures in the FOTO set; more details are under measure 0423.

0425: Functional Status Change for Patients with Lumbar Impairments (Focus on Therapeutic Outcomes, Inc.): Endorsed

Description: A self-report outcome measure of functional status for patients 18 years+ with lumbar impairments. The change in functional status assessed using FOTO (lumbar) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality; **Measure Type**: Outcome; **Level of Analysis**: Facility, Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Ambulatory Care, Clinician Office/Clinic, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care, Outpatient Rehabilitation Hospital Outpatient; **Data Source**: Patient Reported Data

This measure was originally endorsed as a process measure, and the developers brought it back for review as an outcome measure, so there have been significant changes since its last endorsement. Patients who enter rehabilitation have the primary goal of improved function, and patients with lumbar issues face significant activity limitations. Low back pain care is a high priority due to its high prevalence and high costs; an estimated 1 of every 17 physician visits are for low back pain and it is the most common condition managed in outpatient physical therapy. The U.S. costs for management of low back pain are estimated at over $86 billion dollars. This measure is currently in use in QI programs and is being piloted for use in payment programs. The previous version of this measure (process measure) is used in PQRS. The Committee batched their discussion of this measure with the other measures in the FOTO set; more details are under measure 0423.

0426: Functional Status Change for Patients with Shoulder Impairments (Focus on Therapeutic Outcomes, Inc.): Endorsed

Description: A self-report outcome measure of change in functional status for patients 18 years+ with shoulder impairments. The change in functional status assess using FOTO's (shoulder) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality; **Measure Type**: Outcome; **Level of Analysis**: Facility, Clinician: Group/Practice, Clinician : Individual; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic, Home Health, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation Hospital Outpatient; **Data Source**: Patient Reported Data

This measure was originally endorsed as a process measure, and the developers brought it back for review as an outcome measure, so there have been significant changes since its last endorsement. Patients who enter rehabilitation have the primary goal of improved function, and patients with shoulder issues face significant activity limitations, such as difficulty lifting, carrying, reaching overhead, dressing, and grooming. Shoulder pain is estimated to cause 13% of sick leaves. This measure is currently in use in QI programs and is being piloted for use in payment programs. The previous version of this measure (process measure) is used in PQRS. The Committee batched their discussion of this measure with the other measures in the FOTO set; more details are under measure 0423.

0427: Functional Status Change for Patients with Elbow, Wrist and Hand Impairments (Focus on Therapeutic Outcomes, Inc.): Endorsed

Description: A self-report outcome measure of functional status for patients 18 years+ with elbow, wrist, hand impairments. The change in functional status assessed using FOTO (elbow, wrist, and hand) PROM is adjusted to patient characteristics known to be associated with functional status outcomes

(risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality; **Measure Type**: Outcome; **Level of Analysis**: Facility, Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care, Outpatient Rehabilitation Hospital Outpatient; **Data Source**: Patient Reported Data

This measure was originally endorsed as a process measure, and the developers brought it back for review as an outcome measure, so there have been significant changes since its last endorsement. Patients who enter rehabilitation have the primary goal of improved function, and patients with elbow, wrist, and hand issues face significant activity limitations. There appears to be a strong link between occupational activities and distal upper limb problems. This measure is currently in use in QI programs and is being piloted for use in payment programs. The previous version of this measure (process measure) is used in PQRS. The Committee batched their discussion of this measure with the other measures in the FOTO set; more details are under measure 0423.

0428: Functional Status Change for Patients with General Orthopaedic Impairments (Focus on Therapeutic Outcomes, Inc.): Endorsed

Description: A self-report outcome measure of functional status for patients 18 years+ with general orthopaedic impairments. The change in functional status assessed using FOTO (general orthopedic) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality; **Measure Type**: Outcome; **Level of Analysis**: Facility, Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Ambulatory Care, Clinician Office/Clinic, Post-Acute/Long Term Care Facility, Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care, Outpatient Rehabilitation Hospital Outpatient; **Data Source**: Paper Medical Records

This measure was originally endorsed as a process measure, and the developers brought it back for review as an outcome measure, so there have been significant changes since its last endorsement. Patients who enter rehabilitation have the primary goal of improved function. Conditions included in this measure are those that affect the function of the neck, cranium, mandible, thoracic spine, ribs, or other general orthopedic impairment. It has been estimated that 50% to 70% of U.S. residents experience neck pain at least once in their lives. The developer noted that it is developing a measure that focuses specifically on the cervical vertebrae as that covers 70% of the data in this group, but at this time the cervical region is incorporated into this measure. This measure is currently in use in QI programs and is being piloted for use in payment programs. The previous version of this measure (process measure) is used in PQRS. The Committee batched their discussion of this measure with the other measures in the FOTO set; more details are under measure 0423.

References

[1] Bogardus Jr ST, Towle V, Williams CS, et al. What does the medical record reveal about functional status? *J Gen Intern Med*. 2001;16(11):728-736.

[2] Bogardus Jr ST, Towle V, Williams CS, et al. What does the medical record reveal about functional status? *J Gen Intern Med*. 2001;16(11):728-736.

[3] Bogardus Jr ST, Towle V, Williams CS, et al. What does the medical record reveal about functional status? *J Gen Intern Med*. 2001;16(11):728-736.

[4] Bogardus Jr ST, Towle V, Williams CS, et al. What does the medical record reveal about functional status? *J Gen Intern Med*. 2001;16(11):728-736.

[5] Bogardus Jr ST, Towle V, Williams CS, et al. What does the medical record reveal about functional status? *J Gen Intern Med*. 2001;16(11):728-736.

[6] Bogardus Jr ST, Towle V, Williams CS, et al. What does the medical record reveal about functional status? *J Gen Intern Med*. 2001;16(11):728-736.

[7] 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 January 2016.

Appendix A: Details of Measure Evaluation

Measures Recommended

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

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0167 Improvement in Ambulation/Locomotion

Submission **|** Specifications

Description: Percentage of home health episodes of care during which the patient improved in ability to ambulate.

Numerator Statement: Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in ambulation/locomotion at discharge than at start (or resumption) of care.

Denominator Statement: Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

Exclusions: All home health episodes where the value recorded for the OASIS-C item M1860 ("Ambulation/Locomotion") on the start (or resumption) of care assessment indicates minimal or no impairment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death at home, or the episode is covered by the generic exclusions.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Home Health

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-14; N-3**; 1b. Performance Gap: **H-3**; **M-13**; **L-1**; **I-0;** 1c. High Priority: **H-10**; **M-7**; **L-0**; **I-0**

<u>Rationale</u>:

- Overall the Committee felt that this is an important indicator to assess improvement in a patient's functional status in performing activities of daily living, which would allow patients to remain in their home environment rather than moving to a facility-based setting. However, the Committee had a major concern that this measure set focuses on "improvement" in mobility when the Jimmo v. Sebelius settlement requires CMS to not require improvement in function as a condition of coverage in home health (as well as SNF and outpatient services). The Committee expressed concern that by endorsing an ambulation measure that evaluates improvement, home health agencies may be more likely to deny access to patients who require home health services to maintain or prevent further deterioration of function, but have no realistic potential to improve. The Committee recommended these patients should be added to the denominator exclusions so not to create a system where there are disincentives to treat people who may not

improve but still might need that therapy in order to maintain or prevent deterioration of function.

- CMS noted they agree with the Committee's concern and indicated that they are moving in that direction where they are able to balance out the incentives so that they are not developing measures that are seen as potentially disincentivizing care or taking away from the actual goals of the resident or the patient.

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

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

2a. Reliability: **H-6**; **M-8**; **L-1**; **I-2** 2b. Validity: **H-5**; **M-7**; **L-2**; **I-3**

<u>Rationale</u>:

- Testing was conducted at both the patient level and the organizational level. Beta Binomial Reliability testing was conducted and considered above the range for reliability. Also, acceptable test-retest reliability was shown by the data, suggesting the test is repeatable and yields consistent results. Measure through OASIS achieved substantial inter-rater reliability.
- Both patient and organizational levels were tested and validated through a variety of approaches. Validity testing was comprehensive and included consensus validity by experts, convergent predictive validity, and validation by outcome enhancement. Data demonstrated statistically significant correlations between the measure and improvement in outcomes/quality. Data also demonstrated widespread implementation of this measure is appropriate

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4. Feasibility: H-9; M-7; L-1; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

<u>Rationale</u>:

- OASIS data collection and transmission is a requirement for the Medicare Home Health Conditions of Participation. Information on ambulation status used to calculate this measure is recorded in the relevant OASIS items embedded in the agency´s clinical assessment as part of normal clinical practice. OASIS data are collected by the home health agency during the care episode and transmitted electronically to the state and CMS national OASIS repository.

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

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

<u>Rationale</u>:

- This measure is already widely used and publicly reported in a variety of places, including Home Health Compare and CMS´s Home Health Quality Initiative "Outcome Quality Measure Report", which provides all Medicare-certified home health agencies with opportunities to use outcome measures for outcome-based quality improvement. The report allows agencies to benchmark their performance against other agencies across the state and nationally, as well as their own performance from prior time periods.

5. Related and Competing Measures

- The Committee considered measures 0167, 0174, and 0175 to be related to measure 2287 (Functional Change: Change in Motor Score), as they have the same focus area but were considered for different settings and populations. Measures 0167, 0174, and 0175 are intended for certified home health patients 18 and above and measure 2287 was submitted as an inpatient rehabilitation facility measure. The Committee agreed that there was a need for all of the aforementioned measures; they made no recommendations for harmonization. In alignment with the IMPACT Act provisions, the Committee emphasized the importance of using cross-setting measures in programs for future considerations.

Standing Committee Recommendation for Endorsement: **Y-17**; **N-0**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Measures 0167, 0174, and 0175 received two sets of comments suggesting that they be combined to be a composite that would "collectively address daily living activities." In addition, it was suggested that the measure specifications be revised to "measure patients upon meeting expected outcomes of interventions versus the achievement of patient goals."

- Three comments were received regarding the exclusions, one in favor, and two raising concerns: that these measures may discriminate against patients who require therapy to maintain abilities, but who may not improve due to their condition, and that not enough rare/unpredictable diseases could be included, therefore leading to potential unintended consequences.

Committee response:

- The Committee had discussed this issue during the in-person meeting, especially raising concerns around the Jimmo v. Sebelius settlement, but felt that the developer had adequately addressed it using the exclusion criteria. Additionally, the developer (CMS) noted that they are working to balance incentives to ensure patients who will not improve are still receiving high quality care and are not being discriminated against.

Developers response:

- Thank you for your comment. The current OASIS does not allow for the inclusion of patient goals in the calculation of a measure. In the context of implementing cross-setting measures, some items related to goals for patient functioning may be added to the assessment and could be the basis for additional quality measures. CMS is also exploring composite functional measures for future development.

- Thank you for your comment. We recognize that there are some home health patients for whom improvement in ambulation/locomotion is not a reasonable expectation. Risk adjustment, while not perfect, helps to mitigate the effect of the patient's clinical condition at admission and other patient characteristics on the home health agency's measure value. Notwithstanding recent changes in the types of patients accepted for home health care, it remains primarily a post-acute benefit. The measure steward will continue to explore options for refining the measure based on committee input and comments received, and will explore potential alternative measures that address ambulation/locomotion outcomes for patients with limited likelihood of improvement.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

0174 Improvement in Bathing

Submission **|** Specifications

Description: Percentage of home health episodes of care during which the patient got better at bathing self.

Numerator Statement: Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in bathing at discharge than at start (or resumption) of care.

Denominator Statement: Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

Exclusions: All home health episodes where at the start (or resumption) of care assessment the patient had minimal or no impairment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death at home, or was covered by the generic exclusions.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Home Health

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-14; N-3**; 1b. Performance Gap: **H-3**; **M-13**; **L-1**; **I-0;** 1c. High Priority: **H-10**; **M-7**; **L-0**; **I-0**

<u>Rationale</u>:

- The Committee questioned the gap between the measured outcome and the evidence to support those interventions that would support improvement, noting there are no practice guidelines around educating people on bathing. However, the Committee agreed that this is an important indicator because the goal is that home health patients to be independent and able to have the ability to bathe themselves.

- CMS indicated that this type of outcome measure was created so that CMS can benchmark, set thresholds, or publically report in that setting.
- The Committee's remarks on measure 0167 regarding the Jimmo v. Sebelius settlement, which requires CMS to not require improvement in function as a condition of coverage in home health (as well as SNF and outpatient services) would apply to all measures addressing improvement in ADLs.

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

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

2a. Reliability: **H-6**; **M-8**; **L-1**; **I-2** 2b. Validity: **H-5**; **M-7**; **L-2**; **I-3**

<u>Rationale</u>:
- The Committee commented that all reliability testing indicates measure reliability and inter-rater reliability was high for this measure and a large number of cases were sampled.
- The Committee also noted that the validity testing is also high for this measure and consistent with evidence based practice.

4. Feasibility: H-9; M-7; L-1; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

<u>Rationale</u>:
- The Committee commented that every patient that meets the eligibility criteria for performing the initial OASIS assessment is included and that the required data elements are all routinely generated and used during care delivery. The data collection strategy is already operationalized.

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

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

<u>Rationale</u>:
- The measure is already widely used and publicly reported in a variety of places, including Home Health Compare and CMS´s Home Health Quality Initiative "Outcome Quality Measure Report", which provides all Medicare-certified home health agencies with opportunities to use outcome measures for outcome-based quality improvement. The report allows agencies to benchmark their performance against other agencies across the state and nationally, as well as their own performance from prior time periods.

5. Related and Competing Measures

The Committee considered measures 0167, 0174, and 0175 to be related to measure 2287 (Functional Change: Change in Motor Score), as they have the same focus area but considered for different settings and populations. Measures 0167, 0174, and 0175 are intended for certified home health patients 18 and above and measure 2287 was submitted as an inpatient rehabilitation facility measure. The Committee agreed that there was a need for all of the aforementioned measures; they made no recommendations for harmonization. In alignment

with the IMPACT Act provisions, the Committee emphasized the importance of using cross-setting measures in programs for future considerations.

Standing Committee Recommendation for Endorsement: **Y-17**; **N-0**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Measures 0167, 0174, and 0175 received two sets of comments suggesting that they be combined to be a composite that would "collectively address daily living activities". In addition, it was suggested that the measure specifications be revised to "measure patients upon meeting expected outcomes of interventions versus the achievement of patient goals".

- Three comments were received regarding the exclusions, one in favor, and two raising concerns: that these measures may discriminate against patients who require therapy to maintain abilities, but who may not improve due to their condition, and that not enough rare/unpredictable diseases could be included, therefore leading to potential unintended consequences.

Committee response:

- The Committee had discussed this issue during the in-person meeting, especially raising concerns around the Jimmo v. Sebelius settlement, but felt that the developer had adequately addressed it using the exclusion criteria. Additionally, the developer (CMS) noted that they are working to balance incentives to ensure patients who will not improve are still receiving high quality care and are not being discriminated against.

Developers response:

- Thank you for your comment. The current OASIS does not allow for the inclusion of patient goals in the calculation of a measure. In the context of implementing cross-setting measures, some items related to goals for patient functioning may be added to the assessment and could be the basis for additional quality measures. CMS is also exploring composite functional measures for future development. Thank you for your comment. We recognize that there are some home health patients for whom improvement in ambulation/locomotion is not a reasonable expectation. Risk adjustment, while not perfect, helps to mitigate the effect of the patient's clinical condition at admission and other patient characteristics on the home health agency's measure value. Notwithstanding recent changes in the types of patients accepted for home health care, it remains primarily a post-acute benefit. The measure steward will continue to explore options for refining the measure based on committee input and comments received, and will explore potential alternative measures that address ambulation/locomotion outcomes for patients with limited likelihood of improvement.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

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8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

0175 Improvement in Bed Transferring

Submission **|** Specifications

Description: Percentage of home health episodes of care during which the patient improved in ability to get in and out of bed.

Numerator Statement: Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in bed transferring at discharge than at start (or resumption) of care.

Denominator Statement: Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

Exclusions: All home health episodes where at the start (or resumption) of care assessment the patient is able to transfer independently, or the patient is non-responsive. or the episode of care ended in transfer to inpatient facility or death at home, or the episode is covered by the generic exclusions.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Home Health

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

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

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

1a. Evidence: **Y-14; N-3**; 1b. Performance Gap: **H-3**; **M-13**; **L-1**; **I-0;** 1c. High Priority: **H-10**; **M-7**; **L-0**; **I-0**

Rationale:

- The Committee commented that the measure directly applies to the function that is being measured and there is a demonstrated and documented performance gap.
- The Committee's remarks on measure 0167 regarding the Jimmo v. Sebelius settlement which requires CMS to not require improvement in function as a condition of coverage in home health (as well as SNF and outpatient services) apply to all measures addressing improvement in ADLs.

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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-1**; **I-2** 2b. Validity: **H-5**; **M-7**; **L-2**; **I-3**

Rationale:

- The Committee commented that testing is consistent with target population of Medicare consumers, but not representative of other consumers needing Home Health Services.

4. Feasibility: H-9; M-7; L-1; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- OASIS data collection and transmission is a requirement for the Medicare Home Health Conditions of Participation. Information on bed transferring status used to calculate this measure is recorded in the relevant OASIS items embedded in the agency´s clinical assessment as part of normal clinical practice. OASIS data are collected by the home health agency during the care episode and transmitted electronically to the state and CMS national OASIS repository.

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

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- The measure is already widely used and publicly reported in a variety of places, including Home Health Compare and CMS´s Home Health Quality Initiative "Outcome Quality Measure Report", which provides all Medicare-certified home health agencies with opportunities to use outcome measures for outcome-based quality improvement. The report allows agencies to benchmark their performance against other agencies across the state and nationally, as well as their own performance from prior time periods.

5. Related and Competing Measures

- The Committee considered measures 0167, 0174, and 0175 to be related to 2287 (Functional Change: Change in Motor Score), as they have the same focus area but were considered for different settings and populations. Measures 0167, 0174, and 0175 are intended for certified home health patients 18 and above and measure 2287 was submitted as an inpatient rehabilitation facility measure. The Committee agreed that there was a need for all of the aforementioned measures; they made no recommendations for harmonization. In alignment with the IMPACT Act provision, the Committee emphasized the importance of using cross-setting measures in programs for future considerations.

Standing Committee Recommendation for Endorsement: **Y-17**; **N-0**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Measures 0167, 0174, and 0175 received two sets of comments suggesting that they be combined to be a composite that would "collectively address daily living activities". In addition, it was suggested that the measure specifications be revised to "measure patients upon meeting expected outcomes of interventions versus the achievement of patient goals".

- Three comments were received regarding the exclusions, one in favor, and two raising concerns: that these measures may discriminate against patients who require therapy to maintain abilities, but who may not improve due to their condition, and that not enough rare/unpredictable diseases could be included, therefore leading to potential unintended consequences.

Committee response:

- The Committee had discussed this issue during the in-person meeting, especially raising concerns around the Jimmo v. Sebelius settlement, but felt that the developer had adequately addressed it using the exclusion criteria. Additionally, the developer (CMS) noted that they are working to balance incentives to ensure patients who will not improve are still receiving high quality care and are not being discriminated against.

Developers response:

- Thank you for your comment. The current OASIS does not allow for the inclusion of patient goals in the calculation of a measure. In the context of implementing cross-setting measures, some items related to goals for patient functioning may be added to the assessment and could be the basis for additional quality measures. CMS is also exploring composite functional measures for future development.
- Thank you for your comment. We recognize that there are some home health patients for whom improvement in ambulation/locomotion is not a reasonable expectation. Risk adjustment, while not perfect, helps to mitigate the effect of the patient's clinical condition at admission and other patient characteristics on the home health agency's measure value. Notwithstanding recent changes in the types of patients accepted for home health care, it remains primarily a post-acute benefit. The measure steward will continue to explore options for refining the measure based on committee input and comments received, and will explore potential alternative measures that address ambulation/locomotion outcomes for patients with limited likelihood of improvement.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

0176 Improvement in Management of Oral Medications

Submission **|** Specifications

Description: Percentage of home health episodes of care during which the patient improved in ability to take their medicines correctly, by mouth.

Numerator Statement: Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in taking oral medications at discharge than at start (or resumption) of care.

Denominator Statement: Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

Exclusions: All home health episodes where at start (or resumption) of care the patient is not taking any oral medications or has minimal or no impairment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death, or the episode is covered by the generic exclusions.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Home Health

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-15**; **N-1**; 1b. Performance Gap: **H-5**; **M-10**; **L-1**; **I-0;** 1c. High Priority: **H-12**; **M-4**; **L-0**; **I-0**

<u>Rationale</u>:

- The Committee commented that this measure directly applies to the process being measured, population disparity has been demonstrated, and there is room for improvement.
- The Committee's remarks on measure 0167 regarding the Jimmo v. Sebelius settlement, which requires CMS to not require improvement in function as a condition of coverage in home health (as well as SNF and outpatient services), applies to all measures addressing improvement in ADLs.

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

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

2a. Reliability: **H-2**; **M-9**; **L-0**; **I-5** 2b. Validity: **H-1**; **M-9**; **L-1**; **I-5**

<u>Rationale</u>:

- The Committee commented that the measure is already used in wide-spread implementation by CMS as part of a set of measures for Home Health reporting and testing done at both levels with adequate scope and method.
- The Committee also noted that almost 50% of cases excluded from the measure, but may reflect the general fragility of the population. So the exclusions seem reasonable.

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4. Feasibility: H-6; M-9; L-1; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

<u>Rationale</u>:

- OASIS data collection and transmission is a requirement for the Medicare Home Health Conditions of Participation. Information on oral medication management status used to calculate this measure is recorded in the relevant OASIS items embedded in the agency´s clinical assessment as part of normal clinical practice. OASIS data are collected by the home health agency during the care episode and transmitted electronically to the state and CMS national OASIS repository.

3. Use and Usability: H-3; M-9; L-3; I-1

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- The measure is already widely used and publicly reported in a variety of places, including Home Health Compare and CMS´s Home Health Quality Initiative "Outcome Quality Measure Report", which provides all Medicare-certified home health agencies with opportunities to use outcome measures for outcome-based quality improvement. The report allows agencies to benchmark their performance against other agencies across the state and nationally, as well as their own performance from prior time periods.

5. Related and Competing Measures

- No related or competing measures noted.

Standing Committee Recommendation for Endorsement: **Y-16**; **N-0**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- These two measures (#0176 and #0177) received two comments indicating a lack of support. Commenters stated that the methodology used to show improvement is subjective and that the measure does not add value to the portfolio.
- Another commenter raised two concerns with this pair of measures, first the potential disincentives for maintenance therapy, and second, the related concern that the list of exclusions is not broad enough.

Committee response:

- During the in-person meeting, the Committee specifically requested more information on the usability of the two additional concepts (ability to take medicines correctly and frequency of pain) and noted these might be better operationalized via patient reported outcomes due to their subjectivity. However, the Committee voted to recommend these measures for endorsement.
- The issues of unintended consequences, "cherry-picking" patients for inclusion in measures, and assessing "improvement" for payment or penalty use in quality programs were discussed during the in-person meeting. The Committee continues to encourage measure developers and implementers to consider implications of measurement, including potential unintended consequences.

Developer response:

- Thank you for your comment. We recognize that there are some home health patients for whom improvement in management of oral medications is not a reasonable expectation. Risk adjustment, while not perfect, helps to mitigate the effect of the patient's clinical condition at admission and other patient characteristics on the home health agency's measure value. Notwithstanding recent changes in the types of patients accepted for home health care, it remains primarily a post-acute benefit. The measure steward will continue to explore options for refining the measure based on committee input and comments received, and will explore

potential alternative measures that address management of oral medications outcomes for patients with limited likelihood of improvement.

- Thank you for your comment. Centers for Medicare & Medicaid Services (CMS) will review your comment and address your concerns shortly.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

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8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

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9. Appeals

0177 Improvement in Pain Interfering with Activity

Submission **|** Specifications

Description: Percentage of home health episodes of care during which the frequency of the patient's pain when moving around improved.

Numerator Statement: Number of home health episodes of care where the value recorded on the discharge assessment indicates less frequent pain at discharge than at start (or resumption) of care.

Denominator Statement: Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

Exclusions: All home health episodes where there is no pain reported at the start (or resumption) of care assessment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death at home, or the episodes is covered by one of the generic exclusions.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Home Health

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

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

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

1a. Evidence: **Y-16**; **N-0**; 1b. Performance Gap: **H-5**; **M-10**; **L-0**; **I-1;** 1c. High Priority: **H-11**; **M-5**; **L-0**; **I-0**

Rationale:

- The Committee noted that pain management is a significant health issue related to functional outcomes and there is definitely a relationship between the measured outcome and a

healthcare action supported by the rationale. Pain is extremely important in patient outcomes and needs to be measured accurately.

- The Committee's remarks on measure 0167 regarding the Jimmo v. Sebelius settlement, which requires CMS to not require improvement in function as a condition of coverage in home health (as well as SNF and outpatient services), applies to all measures addressing improvement in ADLs.

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

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

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

<u>Rationale</u>:

- The Committee requested clarification as to whether this measure evaluates frequency of pain, levels of pain, or both. The developer stated that they are not using any scale but evaluating how often pain interferes with activities.
- The Committee stated that there is testing information regarding both data element and scores, and the results demonstrate sufficient reliability.

4. Feasibility: H-8; M-8; L-0; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

<u>Rationale</u>:

- OASIS data collection and transmission is a requirement for the Medicare Home Health Conditions of Participation. Information on pain interfering with activity used to calculate this measure is recorded in the relevant OASIS items embedded in the agency´s clinical assessment as part of normal clinical practice. OASIS data are collected by the home health agency during the care episode and transmitted electronically to the state and CMS national OASIS repository.

3. Use and Usability: H-5; M-11; L-0; I-0

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

<u>Rationale</u>:

- The measure is already widely used and publicly reported in a variety of places, including Home Health Compare and CMS´s Home Health Quality Initiative "Outcome Quality Measure Report", which provides all Medicare-certified home health agencies with opportunities to use outcome measures for outcome-based quality improvement. The report allows agencies to benchmark their performance against other agencies across the state and nationally, as well as their own performance from prior time periods.

5. Related and Competing Measures

- No related or competing measures noted.

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

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- These two measures (#0177 and #0176) received two comments indicating a lack of support. Commenters stated that the methodology used to show improvement is subjective and that the measure does not add value to the portfolio.

- Another commenter raised two concerns with this pair of measures, first the potential disincentives for maintenance therapy, and second, the related concern that the list of exclusions is not broad enough.

Committee response:

- During the in-person meeting, the Committee specifically requested more information on the usability of the two additional concepts (ability to take medicines correctly and frequency of pain) and noted these might be better operationalized via patient reported outcomes due to their subjectivity. However, the Committee voted to recommend these measures for endorsement.

- The issues of unintended consequences, "cherry-picking" patients for inclusion in measures, and assessing "improvement" for payment or penalty use in quality programs were discussed during the in-person meeting. The Committee continues to encourage measure developers and implementers to consider implications of measurement, including potential unintended consequences.

Developer response:

- Thank you for your comment. We recognize that there are some home health patients for whom improvement in management of oral medications is not a reasonable expectation. Risk adjustment, while not perfect, helps to mitigate the effect of the patient's clinical condition at admission and other patient characteristics on the home health agency's measure value. Notwithstanding recent changes in the types of patients accepted for home health care, it remains primarily a post-acute benefit. The measure steward will continue to explore options for refining the measure based on committee input and comments received, and will explore potential alternative measures that address management of oral medications outcomes for patients with limited likelihood of improvement.

- Thank you for your comment. Centers for Medicare & Medicaid Services (CMS) will review your comment and address your concerns shortly.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

Submission **|** Specifications

Description: This measure, based on data from the Minimum Data Set (MDS) 3.0 assessment of long-stay nursing facility residents, estimates the percentage of long-stay residents in a nursing facility whose need for assistance with late-loss Activities of Daily Living (ADLs), as reported in the target assessment, increased when compared with a prior assessment. The four late-loss ADLs are: bed mobility, transfer, eating, and toilet use. This measure is calculated by comparing the change in each ADL item between the target assessment (OBRA, PPS or discharge) and a prior assessment (OBRA, PPS or discharge). Long-stay nursing facility residents are those with a nursing facility stay of 101 cumulative days or more.

Numerator Statement: The numerator is the number of long-stay residents who have a selected target MDS assessment (OBRA, PPS, or discharge) reporting a defined amount of decline in ADL function when compared with a prior assessment (OBRA, PPS, or discharge). This decline in function is captured as an increase in the resident's need for assistance with late-loss ADLs, when compared with the resident's prior assessment, indicated by a higher score on the applicable MDS items on the more recent assessment (which are coded such that a higher score indicates the need for more assistance with an ADL task). Late-loss ADL items are bed mobility, transfer, eating, and toilet use. The threshold increase in need for assistance (suggesting decline in function) that results in a resident being counted in the numerator is met if the score for at least one late-loss ADL item increases by two or more points or if the score for two or more of the late-loss ADLs items increase by one point. The typical interval between the target and prior assessment dates is approximately 90 days.

Denominator Statement: The denominator includes all long-stay residents with a selected target MDS assessment (OBRA, PPS, or discharge) during the quarter and a prior assessment who did not meet the exclusion criteria. Long-stay residents are defined as residents who have stayed in the nursing home for 101 cumulative days or more.

Exclusions: There are six exclusions applied to the denominator: (1) self-performance total dependence on all four late-loss ADL items during the prior assessment (and therefore it is not possible for the resident to decline sufficiently to be counted in the numerator), (2) self-performance total dependence on three late-loss ADL items during the prior assessment and self-performance extensive assistance on the fourth late-loss ADL item (and therefore it is not possible for the resident to decline sufficiently to be counted in the numerator), (3) comatose status on the target assessment, (4) prognosis of life expectancy of less than six months on the target assessment, (5) receiving hospice care on the target assessment, or/and (6) the resident is not in the numerator and has missing values for any of the four ADL items on the target or prior assessment.

Nursing facilities are excluded from public reporting if their denominator size is less than 30 residents.

Adjustment/Stratification:

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

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-17**; **N-1**; 1b. Performance Gap: **H-8**; **M-8**; **L-0**; **I-2;** 1c. High Priority: **H-11**; **M-6**; **L-1**; **I-0**

<u>Rationale</u>:

- The Committee agreed that the therapeutic goal to delay decline in the selected ADLs is very important for this population, but raised concerns about the exclusions in the denominator. Of particular concern was the exclusion for people with less than six months expected survival, which could have potential risk for gaming, as well as the difficulty in reliably identifying people with less than six months expected survival.
- The measure developers explained that this exclusion has multiple intentions. One is that if people are at end of life, they are going to be at much higher risk for ADL decline. Second, there may be unintended consequences for patients in hospice care; facilities may not be willing to stop providing interventions intended to maintain function, despite a patient's end of life preferences.

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

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

2a. Reliability: **H-3**; **M-11**; **L-2**; **I-1** 2b. Validity: **H-0**; **M-12**; **L-5**; **I-1**

<u>Rationale</u>:

- In general, the Committee noted that reliability was good for this measure. One Committee member agreed that reliability at the patient level was well defined, but expressed concerns regarding both reliability and validity testing at the facility level.
- The developers noted that on Nursing Home Compare, they are looking at multiple averages of weighted data at a facility-level, across multiple calendar quarters, to provide the average for the entire country per state. Additionally, the developers stated that this measure only reports on basic outcomes, but in the future it could be revised or paired with other measures to demonstrate many more outcomes.

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

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

<u>Rationale</u>:

- The Committee noted that the data elements are discrete and electronically captured.

3. Use and Usability: H-10; M-7; L-0; I-1

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

<u>Rationale</u>:

- The Committee acknowledged that the measure is publicly reported on Nursing Home Compare and used in benchmarking.

5. Related and Competing Measures

- No related or competing measures noted.

Standing Committee Recommendation for Endorsement: **Y-15**; **N-3**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- This measure received two comments indicating a lack of support for endorsement. The rationale focused on the fact that many SNF patients are working on maintaining function, not improvement, and that improvement should be happening before patients are moved to SNFs.
- Another commenter did not specify support or lack of support, but raised two concerns with this measure, first, the potential disincentives for maintenance therapy, and second, the related concern that the list of exclusions is not broad enough.

Committee response:

- During the in-person meeting, the Committee raised similar concerns about this measure, but ultimately agreed that the therapeutic goal to delay decline in the selected ADLs is very important for this population. While the Committee raised concerns about the exclusions in the denominator, the discussion was mainly about the reliability of identifying people with less than six months expected survival. The measure developers explained that there are multiple intentions with regard to this exclusion. One is that if people are at end of life, they are going to be at much higher risk for ADL decline. On the other hand, if they are included in the measure there may be an unintended consequence where facilities may not be willing to set aside some interventions that they need to do in order to maintain function and thus not respecting preferences at end of life.

Developer response:

- NQF #0688 tracks potential decline in function by measuring "the percent of residents whose need for help with activities of daily living (ADL) has increased." Accordingly, the purpose of this measure is to assess decline in ADL function among long-stay nursing home residents. This change in ADL function is documented during the period of nursing home stay by comparing ADL function from one nursing home assessment to the next. We agree that the goal of many long-stay residents is to maintain their existing ADLs and may not be focused on ADL improvement; we believe that NQF #0688 is aligned with this perspective, as it is not focused on improvement. A higher score for this measure indicates lower quality. Patients maintaining their level of functional ability for the 4 late-loss ADLs would NOT be counted in the numerator for this measure and would be considered as experiencing good quality. We also believe that NQF #0688 is not at odds with other potential measures described by the commenter that would focus on improving ADLs in other settings prior to nursing home admission. However, the measure proposed by the commenter might be more appropriate for short-stay nursing home residents who are generally admitted for goals different from long-stay residents.
- NQF #0688 is an outcome measure defined as "the percent of residents whose need for help with activities of daily living (ADL) has increased." Accordingly, the purpose of this measure is to assess decline in ADL function among long-stay nursing home residents, rather than improvement. We agree that the goal for many long-stay residents is trying to maintain their level of activity, thus focusing on maintenance, not improvement. We believe that the focus of NQF #0688 is aligned with this perspective by quantifying the proportion of long-stay residents

who have experienced a loss in function. Residents are counted in the numerator of this measure if they experience an increase in need for assistance with late-loss ADLs in a given assessment period, as compared to a prior assessment. A higher score for this measure indicates lower quality. Thus patients maintaining functional ability for the 4 late-loss ADLs would NOT be counted in the numerator for this measure and would be considered as experiencing good quality.

- This measure (NQF #0688), the percent of residents whose need for help with activities of daily living (ADL) has increased (long stay), is designed to track decline in ADL function among long-stay nursing home residents from one assessment period to the next. CMS understands that improvement and recovery are not always feasible among long-stay nursing home resident populations, hence the appropriateness of using this measure to monitor increased needs for assistance (i.e., functional decline), rather than improvement for the long-stay nursing home resident population. The measure is designed so that each instance of a resident maintaining functional status is counted as an indicator of good facility quality. This comment references the Standing Committee recommendation to add exclusions to this measure, but these recommended exclusions noted in the Draft Report for Comment apply to measures of ADL improvement, whereas NQF #0688 measures ADL decline. As it stands, this measure has four exclusion groups: currently comatose, prognosis of life expectancy less than 6 months, receiving hospice care, or total dependence for all four ADL items on prior assessment. The Standing Committee suggested that there may be a potential for gaming, particularly with the six month prognosis item. We suggest that the item used to identify residents who have a prognosis of less than six months to live has relatively little risk for gaming because it is based on physician documentation in the medical record, rather than the clinical judgment of facility staff completing the assessment. In addition this exclusion applies to only a small number of residents, and the proportion of residents excluded from the measure for this reason has declined over time, which does not support the suggestion that it is an exclusion that is being gamed (1). While there is concern regarding physicians' ability to identify end of life prognosis, analyses of residents included in this measure (i.e., greater than six month prognosis) show that very few (3.3%) expired. In addition, item level reliabilities were very high when tested during the RAND development of the MDS 3.0 (gold standard to gold standard nurse kappa: 0.872; gold standard nurse to facility nurse kappa: 0.964) (2). Lastly, we reiterate that including end of life residents in the measure could not only put them at risk for reduced access, but also at risk for care at odds with end-of-life goals and patient preferences. With regard to the commenter's concerns that other high risk populations should be added to the exclusions, we will continue to analyze and monitor this measure for conditions that should be excluded.

(1) RTI analyses of MDS 3.0 data show that in Quarter 1 of 2011, 0.4% of long-stay residents were excluded due to less than six-month prognosis. This proportion declined to 0.08% in quarter 2 of 2012, rebounded slightly to 0.13% in Quarter 4 of 2012, and declined again to 0.11% in Quarter 2 of 2013 where it has held steady at 0.11% through Quarter 2 of 2014. (RTI programming reference: nh_22_10, all quarters through 13_14).

(2)Saliba D., Buchanan D., Development and Validation of a Revised Nursing Home Assessment Tool: MDS 3.0 Appendices. Prepared for the Centers for Medicare & Medicaid Services. April 2008. Available at: http://www.geronet.med.ucla.edu/centers/borun/Appendix_A-G.pdf

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

2612 CARE: Improvement in Mobility

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.

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.

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 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

Exclusions: 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.

Adjustment/Stratification:

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, Other

Measure Steward: American Health Care Association

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-15**; **N-1**; 1b. Performance Gap: **H-5**; **M-9**; **L-1**; **I-1;** 1c. High Priority: **H-10**; **M-5**; **L-1**; **I-0**

<u>Rationale</u>:

- The Committee agreed that the rationale supports a health outcome (change of mobility) in relation to the intervention of therapeutic services which are provided within the SNF. However, the Committee was unclear as to what a meaningful change in function would actually be for these patients, and how the measure as proposed relates to quality of care and patient outcomes related to returning home (i.e., basic mobility skills, ADLs and IADLs activities).
- The Committee expressed major concerns about the measure's focus on "improvement" in mobility when the Jimmo v. Sebelius settlement prevents requiring improvement in function as a condition of coverage in SNFs (as well as home health and outpatient services). Therefore, without appropriate risk adjustment, a SNF may be more likely to deny access to patients who require SNF services to maintain or prevent further deterioration of function.
- The Committee noted that there were significant variation and room for improvement in terms of performance gap.
- The Committee further noted that specific data on disparities was not included in this measure as specified by current NQF requirements. The Committee was interested in the inclusion of questions related to cognitive function. The developer stated that they risk-adjust for cognitive status using the MDS, however, if the CARE tool was inserted in the MDS, OASIS, and IRF-PAI they would be better able to collect patients' overall cognitive status.

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

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

2a. Reliability: **H-7**; **M-6**; **L-1**; **I-2** 2b. Validity: **H-5**; **M-10**; **L-0**; **I-1**

<u>Rationale</u>:

- The Committee determined that the measure specifications were precise, noting that the specifications were consistent with the evidence presented.
- Empiric reliability testing was performed at the patient level using data from the CARE tool. The Committee noted that reliability at the facility level was not provided and that it would be beneficial for the Committee to see the inter-classical correlation coefficients, a thumb print

that suggests that there is a reproductive score within facilities that can then be used to compare between facilities.

- Empiric validity testing was conducted comparing the mobility measure set to other SNF quality measures, including the 5 star rating, Nursing Home Compare, and some specific measures such as pressure ulcers and rehospitalization. There was no correlation between the mobility measure and the 5 star rating, but there were variable correlations between the mobility measure and Nursing Home Compare. The Committee was specifically interested in the 30 day SNF risk adjusted rehospitalization rates, where the developer's hypothesis (i.e., improved mobility leads to lower rehospitalization) did not come to fruition. Instead, validity testing showed that higher rehospitalization rates were positively correlated with a higher mobility score.
- The Committee supported the developer's decision to exclude specific patients (e.g., ventilator patients, persistent coma, quadriplegic, hospice, and children) from the measure, given certain concerns regarding failure to improve, as well as other unintended consequences associated with treating certain high-risk patients.

4. Feasibility: H-4; M-11; L-1; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- The Committee questioned the feasibility of collecting the data when only 1,016 SNFs currently use the CARE tool and there are about 15,326 SNFs across the country. The developer stated that the incorporation of the CARE tool into the MDS will make the data more feasible to collect.

3. Use and Usability: H-5; M-9; L-2; I-0

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

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

5. Related and Competing Measures

- The Committee considered this measure to be related to 2321: Functional Change: Change in Mobility Score and 2632: Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support. These measures have the same focus area (mobility) but are considered for different types of target populations. The Committee agreed that there was a need for all of the aforementioned measures; they made no recommendations for harmonization.

Standing Committee Recommendation for Endorsement: **Y-16**; **N-0**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- This measure received two comments in support for the measure, one of which mentioned the need for monitoring to ensure there would be no unintended consequences of the measure. An

additional comment did not support the measure and raised concerns regarding unintended consequences around patient profiling.

Committee response:

- The Committee reviewed and discussed the comments on the post-comment committee call.

Developer response:

- AHCA thanks America's Health Insurance Plans for their comment. Any effective patient outcome quality measure has the potential to be utilized for patient profiling and this risk is minimized through the use of risk adjustors and exclusions.
- AHCA thanks the Children's Hospital Association for their comment. We provided basic information on the measure inclusions within the measure specifications; however, we wanted to make sure that all of the detail information regarding the exclusions could be accessible for those interesting in replicating this measure. Therefore, we chose to place this more detailed information in the appendix.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-2; A-0

CSAC Decision: Approved for endorsement

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8. Board of Directors Review: Yes (July 22, 2015)

Board Decision: Ratified for endorsement

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9. Appeals

2613 CARE: Improvement in Self Care

Submission **|** Specifications

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.

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.

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 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

Exclusions: 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.

Adjustment/Stratification:

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, Other

Measure Steward: American Health Care Association

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-15**; **N-1**; 1b. Performance Gap: **H-5**; **M-9**; **L-1**; **I-1;** 1c. High Priority: **H-10**; **M-5**; **L-1**; **I-0**

<u>Rationale</u>:

- The Committee agreed that the rationale supports a health outcome (change of self-care) in relation to the intervention of therapeutic services which are provided within the SNF; however, the Committee was unclear as to what a meaningful change in function would actually be for these patients, and how the measure as proposed relates to the quality of care provided and patient outcomes such as returning home (i.e., basic mobility skills, ADLs and IADLs activities).
- As with measure 2612, the Committee expressed major concerns about the measure focus on "improvement" when the Jimmo v. Sebelius settlement ruled that improvement in function cannot be required as a condition of coverage in SNFs (as well as home health and outpatient services). Therefore, without appropriate risk adjustment, a SNF may be more likely to deny access to patients who require SNF services to maintain or prevent further deterioration of function.
- The Committee noted that there were significant variation and room for improvement in terms of performance gap.
- The Committee further noted that specific data on disparities was not included in this measure as specified by current NQF requirements. The developer stated that to capture ethnicity, they would need to stratify, not risk adjust, for ethnicity, which would result in excluding over three-quarters of the SNFs in the country from this measure.

- The Committee was interested in in the inclusion of questions related to cognitive function. The developer stated that they risk-adjust for cognitive status using the MDS, however, if the CARE tool was inserted in the MDS, OASIS, and IRF-PAI, they would be better able to collect patients overall cognitive status.

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

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

2a. Reliability: **H-7**; **M-6**; **L-1**; **I-2** 2b. Validity: **H-5**; **M-10**; **L-0**; **I-1**

Rationale:

- The Committee determined that the measure specifications were precise, noting that the specifications were consistent with the evidence presented.
- Empiric reliability testing was performed at the patient level using data from the CARE tool. The Committee noted that reliability at the facility level was not provided and would be beneficial for the Committee to see the inter-classical correlation coefficients, a thumb print that suggests that there is a reproducible score within facilities that can then be used to compare between facilities.
- Empiric validity testing was conducted comparing the mobility measure set to other SNF quality measures including the 5 star rating, the Nursing Home Compare, and some specific measures like pressure ulcers and rehospitalization. There was no correlation between the mobility measure and the 5 star rating, but there were variable correlations between the mobility measure and Nursing Home Compare. The Committee was specifically interested in the 30 day SNF risk adjusted rehospitalization rates, where the developer's hypothesis (i.e., improved mobility leads to lower rehospitalization), did not come to fruition. Instead, validity testing showed that higher rehospitalization rates were positively correlated with a higher mobility score.
- The Committee supported the developer's decision to exclude specific patients (e.g., ventilator patients, persistent coma, quadriplegic, hospice, and children) from the measure, given certain concerns regarding failure to improve, as well as other unintended consequences associated with treating certain high-risk patients.

4. Feasibility: H-4; M-11; L-1; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- The Committee questioned the feasibility of collecting the data when only 1,016 SNFs currently use the CARE tool and there are about 15,326 SNFs across the country. The developer stated that the incorporation of the CARE tool into the MDS will make the data more feasible to collect.

3. Use and Usability: H-5; M-9; L-2; I-0

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

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

5. Related and Competing Measures

- The Committee considered this measure to be related to 2286: Functional Change: Change in Self Care Score. These measures have the same focus area (self-care) but are considered for different types of target populations. The Committee agreed that there was a need for both measures; they made no recommendations for harmonization.

Standing Committee Recommendation for Endorsement: **Y-16**; **N-0**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- This measure received two comments in support and two critical comments that raised concerns, one which explicitly did not support the measure and one of which did not explicitly state whether or not the commenter supported the measure. The focus of the concerns centers around the risk of unintended consequences around patient profiling. In addition, one of the critical comments raised additional concerns with the measure:

  "We continue to be concerned that the Improvement in Self-Care measures appears to consider self-care related movement alone and does not consider performance and cognitive elements of self-care such as sequencing, problem solving, temporal appropriateness (e.g., whether to dress for day or bed), memory, and activity planning. Further, it is notable that the Improvement in Self-Care measure does not consider or measure performance of activities of daily living, including the broader instrumental activities of daily living (IADLs) which significantly impact a patient's ability to function and live independently in the community."

NQF response:

- NQF is not able to monitor for unintended consequences directly, but we do encourage people to submit information via the Quality Positioning System to us should this problem arise. In addition, this comment has been forwarded to the developer.

Developer response:

- AHCA thanks the Children's Hospital Association for their comment. We provided basic information on the measure inclusions within the measure specifications; however, we wanted to make sure that all of the detail information regarding the exclusions could be accessible for those interesting in replicating this measure. Therefore, we chose to place this more detailed information in the appendix.
- AHCA thanks America's Health Insurance Plans for their comment. Any effective patient outcome quality measure has the potential to be utilized for patient profiling and this risk is minimized through the use of risk adjusters and exclusions.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-2; A-0

CSAC Decision: Approved for endorsement

8. Board of Directors Review: Yes (July 22, 2015)

Board Decision: Ratified for endorsement

9. Appeals

2287 Functional Change: Change in Motor Score

Description: Change in rasch derived values of motor function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 12 FIM® 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. Average is calculated as (sum of change at the patient level/total number of patients). Cases aged less than 18 years at admission to the IRF or patients who died within the IRF are excluded.

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

Exclusions: National values used in the CMG-adjustment procedure will not include cases who died in the IRF (or other venue) or cases less than 18 years old. Cases who died during rehabilitation are not typical patients and are typically omitted in the literature when looking at rehabilitation outcomes. In addition, the FIM instrument is meant for an adult population (Ottenbacher et al. 1996).

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Home Health, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

Type of Measure: Outcome

Data Source: Administrative claims, Other

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

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

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

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

1a. Evidence: **Y-17**; **N-0**; 1b. Performance Gap: **H-4**; **M-8**; **L-0**; **I-5;** 1c. High Priority: **H-9**; **M-8**; **L-0**; **I-0**

Rationale:

- This is one of a suite of measures derived from the FIM; Measure 2286 calculates and reports a change in self-care score; measure 2321 reports a change in mobility score, and together they comprise this measure, 2287, which calculates a change in motor score. The developer indicated it was important that the committee understand this and why they are proposing three measures: different aspects of the measure (self-care indicators vs. mobility indicators) could differ in importance based on the setting and the patient's prognosis or condition.
- The Committee inquired about the lack of information on disparities in measure performance; the developer indicated the data is available, however, due to the wealth of information they have, they had been unsure how much and what data to submit. They agreed to provide additional information, specifically on age, race and payer source, during the public comment period.

- The Committee requested clarification on the measure timing requirements of one year; the developer responded that the assessments occur at admission and discharge, regardless of the length of stay. That the one-year period was a mechanism to assess facility performance for patients who have both the admission and discharge scores and then compare against benchmarks.
- The developer also explained that the FIM allows assessment of both function and burden of care. Burden of care refers to how much time a patient would require from a helper, another person, or one-on-one if living within a community setting.
- The measure is not restricted to Medicare-only but can include patients starting at 18 years of age.
- There was discussion about the appropriate setting of care for measure implementation, and while the developers indicated it can be used across various settings, the data provided was only for IRF's. Thus the Committee was instructed to evaluate and vote based on the data and specification submitted which was specific to IRFs.
- The Committee clarified that expression and memory are components of the self-care metric.
- The Committee proposed that the votes for measure 2286 be carried over to measures 2287 and 2321.

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

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

2a. Reliability: **H-6**; **M-6**; **L-1**; **I-4** 2b. Validity: **H-4**; **M-9**; **L-0**; **I-4**

<u>Rationale</u>:

- It was noted that these are clinician derived scores which require fairly rigorous training of appropriate clinicians to ensure reliability.
- The Committee clarified that sufficient evidence was provided for reliability at the patient level, but the agency level data included a beta binomial model and the interclass correlation coefficients look like a measure level mean variance. These rates were used to estimate rates as opposed to the composite score which is what would be sued to evaluate performance of the agencies. Thus, the interclass correlations are at the measure level versus the facility level. The developer confirmed this interpretation and indicated the availability of additional information to be supplied during the Public Comment period.
- The Committee inquired if the testing results were based on raw scores versus the Rasch-transformed scores. It was noted that the impact of change could differ based on the use of the raw scores. The developer indicated that by converting to Rasch scores, it helped to mitigate drastic differences. The data provided was all Rasch-transformed, and they are able to provide the raw data detail as well.
- The Committee requested clarification on the risk adjustment methodology. The developer starts by classifying patients into an impairment group and then calculates the patient score. They then proceed to look at facility case-mix; then make a final adjustment to have a facility adjusted score, in addition to the patient adjusted score. By adjusting at both levels, the results are comparable between facilities and between patients.
- The Committee clarified their request for data and asked for the Interclass Correlation Coefficients, as well as mean square fit statistics.

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

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- As discussed under reliability, the Committee raised the importance of proper training for clinicians using this tool. The developer indicated there are training modules available and variations in training systems (i.e., train the trainer)
- There was concern raised about feasibility in settings outside of the IRF; and although the developer indicates potential for wider spread use, the measure as submitted for Committee consideration is for IRFs only.

3. Use and Usability: H-6; M-9; L-0; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- The Committee requested clarification on the availability of data for accountability and benchmarking. The developer confirmed that the benchmarking piece is not publicly available.

5. Related and Competing Measures

- The Committee considered this measure to be related to the set of improvements in ADLs for home health measures, including 0167, 0174, and 0175, as these measures have the same focus area, but are specified for different settings and populations. Measures 0167, 0174, and 0175 are intended for certified home health patients ages 18 and above, and measure 2287 was submitted as an inpatient rehabilitation facility measure. The Committee agreed that there was a need for all of the aforementioned measures and thus made no recommendations for harmonization. In alignment with the IMPACT Act provisions, the Committee emphasized the importance of using cross-setting measures in programs for future considerations.

Standing Committee Recommendation for Endorsement: Y-15; N-2

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Two sets of comments suggested that 2286, 2287, and 2321 be harmonized. As this decision is up to the developer, these comments were forwarded for their response.

Developer response:

- We appreciate the endorsement. We agree that a composite measure is important. To that end, we have submitted a composite measure 2287: Functional Change: Change in Motor Score. This will allow for quality improvement in all levels of function being measured. However, we feel that leaving this as a separate measure offers greater refinement in assessing patient change relating to the construct measured. For instance, consider a patient admitted to a facility and upon admission is rated at the lowest functional levels for each item within a measure, upon discharge, the self-care items improved greatly however the mobility items did not change from the admission rating (perhaps the patient had not walked independently for many years prior to

onset of recent condition under treatment), as a composite score, functional gain would be evident from admission to discharge, but it would not show the domain specific changes (exceptional progress in self-care, which was likely the focus of rehabilitation). We believe the option of serving as a 'stand alone measure' may have interest and great utility to clinicians and since the motor measure is a combination of the self-care and mobility, the flexibility in options exist for clinical use.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-14; N-1; A-0

CSAC Decision: Approved for endorsement

8. Board of Directors Review: Yes (July 22, 2015)

Board Decision: Ratified for endorsement

9. Appeals

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

Submission **|** Specifications

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

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

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

Exclusions: 1) Patients with incomplete stays:

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

2) Patients discharged to hospice:

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

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

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

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

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

5) Patients younger than age 21:

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

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

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

Adjustment/Stratification:

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

Measure Steward: Centers for Medicare & Medicaid Services (CMS)

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-13**; **N-0**; 1b. Performance Gap: **H-1**; **M-8**; **L-0**; **I-4;** 1c. High Priority: **H-3**; **M-10**; **L-0**; **I-0**

<u>Rationale</u>:

- The developer stated that functional improvement is particularly relevant for patients who require ventilator support, since these patients traditionally have limited or no mobility because of cardiovascular and pulmonary instability, delirium, sedation, lack of rehabilitation therapy staff, and lack of physician referral. The Committee appreciated the background and especially the note that the measure is required by law, and is an example of where CMS is moving toward standardization and alignment of measures.
- The Committee noted the small study sample of 103 patients with respiratory failure needing ventilator support; however the developer corrected that the sample size was actually 455 patients. The Committee understands the complexity of getting a big enough sample for this type of patient population, however, expects that over time the developer will garner more adequate data.
- The Committee also noted the lack of data on performance gap. The developer explained that there is not a lot of literature about long-term care hospitals patients, in particular ventilator patients.

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

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

2a. Reliability: **H-1**; **M-7**; **L-3**; **I-2** 2b. Validity: **H-0**; **M-9**; **L-2**; **I-2**

<u>Rationale</u>:

- As with previous metrics, data was provided at the item or scale level which is acceptable under NQF criteria; the Committee noted lack of facility level testing data.

- The Committee questioned the developer's decision to utilize a complex calculation for the risk adjusted change score when there are other ways of risk adjusting that does not involve a predictive score. The Committee expressed concerns about reliability testing using the predictive score as opposed to the actual score.
- The Committee expressed concerns about the exclusion of all progressive neurologic conditions, especially MS and Parkinson's disease, where the patients' ability to function on or off a ventilator often fluctuates. While the Committee understands the impetus for excluding that population, they questioned what proportion of the 300,000 ventilated patients annually fall under those categories and which categories. Additionally, there might be some progressive neurologic conditions that would require exclusion (e.g., ALS) however their might be others that should be included (e.g., MS, Parkinson's). The Committee encouraged further exploration of the data to unearth some of these progressive neurologic conditions that should be included. The developer indicated inclusion of data and impact of exclusions in their submission and also indicated their technical expert panel considered exclusion at length during the development of the measure.
- The Committee questioned the developer's decision to omit patients who are on ventilators at home, nursing homes, and inpatient rehab facilities, when the goal is to standardize measures across all care settings. The developer indicated that the vast majority of PAC patients on ventilators are in LTCH's which are the care level included in the law that is the impetus for this measure. It was noted there would be a sample size issue if looking at patients on ventilators in other settings. The Committee agreed this would be an issue but still may be worth evaluating: where the patient is best served, being able to transport patients from one level of care to another and sharing information. The Committee understands the developers reasoning the exclusion however voiced that these populations should be included over time once the measure gets implemented.

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

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- The Committee raised no concerns with the measure's feasibility.

3. Use and Usability: H-3; M-7; L-1; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- The Committee raised no concerns with the measure's use or usability.

5. Related and Competing Measures

The Committee considered this measure to be related to 2612: CARE: Improvement in Mobility and 2321: Functional Change: Change in Mobility Score. These measures have the same focus area (mobility) but are specified for different types of target populations. The Committee agreed that there was a need for all of the aforementioned measures, but made no recommendations for harmonization.

Standing Committee Recommendation for Endorsement: **Y-12**; **N-1**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- One commenter stated that there does not appear to be a specific age exclusion for this measure and inquired whether the measure has been tested in patients under the age of 18.

Developer response:

- Thank you for your comment. Our testing data included patients in long-term care hospitals who were 20 to 99 years old. It did not include patients who were 18 or younger. However, we would like to note that this is a process measure focused on whether a functional assessment is completed and whether a functional goal is reported. It is not an outcome measure, and does not include comparing patient scores. The objective of this measure is to promote standardized functional assessment of basic daily activities for all patients. Therefore, we believe it applies to all patients, regardless of age.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-15; N-0; A-0

CSAC Decision: Approved for endorsement

8. Board of Directors Review: Yes (July 22, 2015)

Board Decision: Ratified for endorsement

9. Appeals

0701 Functional Capacity in COPD Patients Before and After Pulmonary Rehabilitation

Submission **|** Specifications

Description: The percentage of patients with COPD who are found to increase their functional capacity by at least 25 meters (82 feet), as measured by a standardized 6 minute walk test (6MWT) after participating in pulmonary rehabilitation (PR).

Numerator Statement: Number of patients who are found to increase their functional capacity by at least 25 meters (82 feet), as measured by 6MWT distance at PR program entry and completion.

Denominator Statement: All patients with clinician diagnosed COPD at PR program entry who completed PR during the measurement period and who completed at least 10 PR sessions within 3 months of PR program entry.

Exclusions: Patients for whom a 6MWT would be contraindicated due to acute or unstable medical conditions

Patients who are unable to perform a 6MWT due to orthopedic, neurological, cognitive or psychiatric impairments and/or safety reasons.

Patients who have not completed at least 10 PR sessions within 3 months of program entry.

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Outcome

Data Source: Management Data, Electronic Clinical Data : Registry

Measure Steward: American Association of Cardiovascular and Pulmonary Rehabilitation

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STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-15**; **N-2**; 1b. Performance Gap: **H-4**; **M-8**; **L-0**; **I-5;** 1c. High Priority: **H-7**; **M-10**; **L-0**; **I-0**

Rationale:

- The Committee noted that there is a clear link between exercise training and its value in improving COPD function but expressed some concerns that that data only exist at the patient level, with no quality information at the program or facility level to compare differences or to identify how reliable or reproducible these scores are at the facility or program level. The lack of facility or program data also impacts the ability to assess performance gap.
- NQF stated that since this is an outcome measure, as opposed to a patient reported outcome measure, it would meet the criteria by providing the patient level result or the measure level result, which has been provided by the developer. The developer reiterated that the measurement is at the patient level and it is for programs to measure their changes in functional capacity. In the future, they plan to have programs compare to benchmarks.

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

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

2a. Reliability: **H-3**; **M-6**; **L-3**; **I-4** (consensus not reached) 2b. Validity: **H-3**; **M-10**; **L-3**; **I-1** (consensus reached)

UPDATED VOTES FOR 2a. Reliability: H-4; M-15; L-0; I-0

Rationale:

- The committee once more raised concerns about not having any evidence beyond the patient level data. NQF stated that ideally data for both levels are preferred, but is not a requirement to endorse. The developer noted that a six minute walk test is done based on guidelines using a standardized tool, which is one of the reasons why the evidence from the previous literature can be used to show the measure is valid and reliable.
- One Committee member recommended that the measure should demonstrate a percent improvement in performance, as opposed to a specific number, since it could be clinically reasonable to migrate from a six minute walk test to a two minute test or other performance tests that are shorter. The developer responded that this would need a careful data analysis from the pulmonary rehab database to establish these cut points and this would change from the evidence base currently practiced, but they would certainly consider this suggestion in the future.

4. Feasibility: H-6; M-11; L-0; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- The Committee noted that data would be generated routinely and can be electronically submitted and abstracted. According to the developer, the measure can be submitted to the AACVPR Outpatient Pulmonary Rehabilitation Registry or another data base for quality improvement on a standardized data collection form, as recommended in the American Thoracic Society (ATS) guidelines for administration of the six minute walk test. The guidelines for administration are provided to all programs in the AACVPR PR Outcomes Resource Guide as well as published in ATS guidelines.

3. Use and Usability: H-7; M-9; L-1; I-0

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- This measure is currently in use for quality improvement (internal to the specific organization). The developer plans on using this measure for public reporting.

5. Related and Competing Measures

- No related or competing measures noted.

Standing Committee Recommendation for Endorsement: **Y-16**; **N-1; Y-19; N-0**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- One commenter requested a clarification in the specifications regarding ages.

Developer response:

- The age range is greater than or equal to 18 years old, with no upper limit.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for endorsement

9. Appeals

2624 Functional Outcome Assessment

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

Description: NOTE: Specification information in this section is from the 2014 Physician Quality Reporting System Manual. Note that Testing Information is based on the specification in the 2012 Physician Quality Reporting System Manual. Both 2012 and 2014 Specifications are included in the attached "NQF Endorsement Measurement Submission Summary Materials"

Percentage of visits for patients aged 18 years and older with documentation of a current functional outcome assessment using a standardized functional outcome assessment tool on the date of the encounter AND documentation of a care plan based on identified functional outcome deficiencies on the date of the identified deficiencies.

Numerator Statement: Patients with a documented current functional outcome assessment using a standardized tool AND a documented care plan based on the identified functional outcome deficiencies.

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 reasons(s) is documented:

• Patient refuses to participate

• Patient unable to complete questionnaire

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

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Process

Data Source: Administrative claims, Paper Medical Records

Measure Steward: Centers for Medicare and Medicaid Services

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **H-2**; **M-9**; **L-3**; **I-3; IE-2**; 1b. Performance Gap: **H-4**; **M-12**; **L-3**; **I-0;** 1c. High Priority: **H-4**; **M-12**; **L-3**; **I-0**

Rationale:

- The committee questioned the evidence base showing that the documentation of a standardized functional assessment care planning improves patient outcomes. The developer agreed that while there is definitely an established link between the care itself and the outcome measure, the evidence linking a recording of the use of the tool and improved outcomes is less strong.
- The median performance rate on this measure is 100%, but the developer states that this is based on a very small, self-selected population and that that data needs to be taken with a grain of salt. The developer's data indicates that the 2012 average performance rate on this measure was 80.9 percent, and that there were differences in performance rates among various demographic groups. In 2013, more providers were reporting on this measure but they do not

have updated averages and medians yet. They noted that the low number of participating providers could also indicate a gap in care. Developers noted that this process measure is intended to be an intermediate step to a future outcome measure.

- Committee members agreed that assessing function and developing a plan of care are basic practices for PT, OT, and chiropractic providers.

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

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

2a. Reliability: **H-0**; **M-10**; **L-4**; **I-5 (consensus not reached)** 2b. Validity: **H-0**; **M-8**; **L-6**; **I-5 (consensus not reached) UPDATED VOTES FOR 2a. Reliability: H-0**; **M-17**; **L-1**; **I-1 2b. Validity: H-1**; **M-15**; **L-2**; **I-1**

<u>Rationale</u>:

- The developers confirmed that both parts of the measure must be passed in order to meet the measure.
- Committee members wanted more information on operationalizing the measure; specifically, how to ensure a documented care plan would be addressing the identified functional outcome deficiencies and how that would be coded. The developer explained that they do not need to be linked but that both a functional status assessment and a care plan need to show up in the record.
- Committee members were also concerned that using claims data to fulfill this measure does not link the two pieces of the measure when it comes to actual provision of care. Committee members were concerned this measure is very "game-able" as the documentation of a care plan would fulfill the measure, but would not ensure that the patient received the right care. The developers noted that linking the care plan and the collection of outcomes data would naturally be linked for providers.

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

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

<u>Rationale</u>:

- Committee members noted that this is based on claims data; however, only 3.6% of eligible providers reported it, which could indicate feasibility issues. Data is abstracted from administrative claims and paper medical records, which can reduce feasibility.

3. Use and Usability: H-4; M-9; L-6; I-0

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

<u>Rationale</u>:

- The measure is currently in use in PQRS.

5. Related and Competing Measures

- The Committee considered this measure to be related to the set of FOTO measures on functional status change (0422, 0423, 0424, 0425, 0426, 0427, 0428), as they address functional status for patients age 18 years and older. However, they differ in type as 2624 is a process

measure while FOTO measures assess patient-reported outcomes. The Committee agreed that these measures were related but did not make recommendations for harmonization.

UPDATED VOTES FOR Standing Committee Recommendation for Endorsement: **Y-10**; **N-9(consensus not reached); Y-17; N-2**

6. Public and Member Comment : March 2, 2015- March 31, 2015

Comments received:

- There was only one comment received on this measure which supported its endorsement.

NQF response:

- Thank you for your comment.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-14; N-1; A-0

CSAC Decision: Approved for endorsement

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8. Board of Directors Review: Yes (July 22, 2015)

Board Decision: Ratified for endorsement

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9. Appeals

2653 Average Change in Functional Status Following Total Knee Replacement Surgery

Submission | Specifications

Description: For patients age 18 and older undergoing total knee replacement surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oxford Knee Score (OKS) patient reported outcome tool.

Numerator Statement: There is not a traditional numerator for this measure; the measure is calculating the average change in functional status score from pre-operative to post-operative functional status score. The measure is NOT aiming for a numerator target value for a post-operative OKS score.

For example:

The average change in knee function was an increase of 15.9 points one year post-operatively on a 48 point scale.

Denominator Statement: Adult patients age and older (no upper age limit) who undergo a primary or revision total knee replacement procedure during a calendar year performance period (e.g. dates of procedure occurring between 1/1/2013 and 12/31/2013) AND have a completed pre-operative and post-operative OKS patient reported outcome assessments.

Exclusions: There are no denominator exclusions from the initial patient population for this measure.

Adjustment/Stratification:

Level of Analysis: Clinician : Group/Practice

Setting of Care: Ambulatory Care : Clinician Office/Clinic

Type of Measure: PRO

Data Source: Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Patient Reported Data/Survey

Measure Steward: MN Community Measurement

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-16**; **N-3**; 1b. Performance Gap: **H-3**; **M-12**; **L-3**; **I-1;** 1c. Impact: **H-8**; **M-9**; **L-2**; **I-0**

<u>Rationale</u>:

- The number of total knee replacements (TKR) is rising and will continue to rise over the next 10 years as the Baby Boom generation ages, especially because the standard of care for end-stage degenerative arthritis of the knee is knee arthroplasy. The Committee agreed that patients could use information on what level of functional status they can expect after a TKR. The Committee agreed that a one-year postoperative assessment was the right timeframe as much sooner would not accurately measure real outcomes.
- The Committee requested more information on the effect of the measured improvement and whether is an amount that actually impacts outcomes. While the developers had not included that information in the submission form, a Committee member provided data from a different study that the standard deviation is 8, and so the difference noted in the measure would be very significant (two standard deviations).
- The Committee was concerned that the measure did not collect data on postoperative interventions, such as rehabilitation, that could affect outcomes separately from the surgery and that could not be held attributable to the surgeon. However, one Committee member suggested that a surgeon should be seen as the leader of a team taking care of a knee and that this sort of measure would encourage more focus on long-term outcomes.
- The developer confirmed that patients were involved in the measure development work group.

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

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

2a. Reliability: **H-0**; **M-9**; **L-3**; **I-7** (consensus not reached) 2b. Validity: **H-1**; **M-7**; **L-5; I-6** (consensus not reached)

UPDATED VOTES FOR 2a. Reliability: H-2; **M-13**; **L-3**; **I-0 2b. Validity: H-2**; **M-14**; **L-1; I-1**

<u>Rationale</u>:

- Committee members questioned why the measure is not risk adjusted; the developer explained that although a final risk adjustment strategy had not been submitted, upon the receipt of a full set of data they plan to test a number of variablesas potential adjustors. The developer utilizes a workgroup to advise on risk adjustment and a preliminary strategy has been developed and tested, but not yet finalized.
- The Committee wanted to know how different the average patient population in Minnesota would be from the average patient across the US, and also raised concerns that the measure

was originally tested on a very different patient population, potentially affecting the reliability and validity of the instrument used.

- The developer stated that this is a new type of measure that does not have a traditional numerator and denominator; it is a continuous measure. They stated that measurement science has not yet evolved to the point of determining appropriate methodology for testing reliability for this type of measure. The Committee suggested intraclass correlate testing as a possibility.
- The developer mentioned they had some difficulty with the PRO tool administration rates and that they were working with a phased approach to improve those rates.
- Committee members requested an estimation of reliability at the physician level and the developers agreed to follow up with that information.

4. Feasibility: H-1; M-15; L-2; I-1

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- In response to a request for more information, the developers explained that the measure requires a pre-operative OKS summary score, using a simple tool. Practices submit patient-level information to a portal that calculates the measures. They noted that orthopedic practices are new to measurement, and that their pilot groups said getting information into and out of their EMRs was easier than getting the patient-reported tools into their workflows. However, they are seeing gradual improvements.
- Post-operatively, the tool is filled out during an office visit or sent to the patient via mail or the patient portal.
- Committee members asked if this measure is susceptible to gaming; the developers said that there are no appropriateness criteria guidelines for knee replacement but that they collect the data on all patients, whether they completed one or both assessments.

3. Use and Usability: H-0; M-12; L-5; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- The measure is not currently in use, so no usability data is available, but the developer plans to report it statewide in Minnesota in 2016.

5. Related and Competing Measures

- The Committee considered whether this measure potentially competes with 0422: Functional Status Change for Patients with Knee Impairments (FOTO). The Committee determined that the measures have different focus in terms of the target population, provider types, and clinical settings, as well as the clinical area. The developers indicated that the FOTO measure is broader and applicable to any kind of knee impairments, as opposed to measure 2653, which only focuses on patients with knee replacements. Therefore, the Committee agreed that the measures were related but not competing. The Committee did not make recommendations for harmonization.

Standing Committee Recommendation for Endorsement: Y-11; **N-8 (consensus not reached); UPDATED Y-15; N-3**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Commenters strongly urge the Committee to reconsider and recommend this measure. The measure is deemed by consumers and purchasers to be important for assessing providers of knee replacement surgery. This is a high frequency and high cost procedure, and currently there is no information that enables patients to choose providers that can achieve better outcomes as assessed by patients themselves. Therefore, this measure is a high priority for these users. Commenters also asked NQF to consider ways to improve upon the validity and reliability of this measure and other similar measures should be considered in the future.

Committee response:

- The Committee requested additional information to allow for more comprehensive evaluation of the consensus not reached and not recommended measures. This additional information was discussed on the post-comment committee call and the Committee had an opportunity to re-vote on the applicable measures. This measure was recommended by the Committee after reviewing the additional information and the comments.

NQF response:

- NQF has reviewed your comment and appreciates your input. Your comment has been forwarded to the Standing Committee and Developer for consideration. NQF is not able to improve measures as our role is to endorse measures, not maintain them, but we do encourage improvements to measures over time and at the three-year maintenance cycle review.

Developer response:

- Thank you for your support! We agree that these types of measures focused on patient reported outcomes and change over time, which represent newer cutting-edge measures, are more difficult to evaluate as compared to traditional measures that are expressed as a binary Yes/No. We have provided additional testing in response to the Standing committee's concerns and look forward to continued conversation and working with NQF staff to determine the best statistical methods and tests for determining the reliability and validity performance scores. Thanks for your suggestion to determine modes that address survey burden. In addition to obtaining survey information from the patient during an in-person visit, we do allow mailed survey and when permitted by the tool developer/ copyright holder, electronic administration of the tool to the patient by patient portal. Additionally, although not yet submitted for endorsement, MN Community Measurement is also measuring the change in quality of life for this patient population, initially using the EQ5D and now transitioning to PROMIS Global Health-10.
- We agree that these types of measures focused on patient reported outcomes and change over time, which represent newer cutting-edge measures, are more difficult to evaluate as compared to traditional measures that are expressed as a binary Yes/No. We have provided additional testing in response to the Standing committee's concerns and look forward to continued conversation and working with NQF staff to determine the best statistical methods and tests for determining the reliability and validity performance scores.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for endorsement

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8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for endorsement

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9. Appeals

0422 Functional Status Change for Patients with Knee Impairments

Submission **|** Specifications

Description: A self-report measure of change in functional status for patients 18 year+ with knee impairments. The change in functional status assessed using FOTO's (knee) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

Numerator Statement: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for knee impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for knee impairment.

Denominator Statement: All patients 18 years and older with knee impairments who have initiated rehabilitation treatment and completed the FOTO knee FS PROM at admission and discharge.

Exclusions: •Patients who are not being treated for a Knee impairment

•<18 years of age

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Outcome
Data Source: Patient Reported Data/Survey
Measure Steward: Focus on Therapeutic Outcomes, Inc

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-13**; **N-5;** I-X; 1b. Performance Gap: **H-0**; **M-7**; **L-5**; **I-7** 1c. High Priority: **H-7**; **M-11**; **L-1**; **I-0**

UPDATED VOTES FOR 1b. Performance Gap: H-4; **M-13**; **L-1**; **I-0**

Rationale:

- Please see discussion under measure 0423.

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

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

2a. Reliability: **H-2**; **M-4**; **L-7**; **I-6** 2b. Validity: **H-2**; **M-2**; **L-9**; **I-6 (informational vote only; non-binding)**

UPDATED VOTES FOR 2a. Reliability: H-4; **M-12**; **L-1**; **I-1 2b. Validity: H-3**; **M-14**; **L-1**; **I-0**

Rationale:

- Please see discussion under measure 0423.

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3. Feasibility: H-7; M-8; L-3; I-1 (informational vote only; non-binding)

UPDATED VOTES FOR Feasibility: H-4; M-9; L-3; I-2

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

Rationale:

- Please see the discussion under measure 0423.

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4. Use and Usability: H-4; M-5; L-7; I-3 (informational vote only; non-binding)

UPDATED VOTES FOR Use and Usability: H-4; M-8; L-5; I-1

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

Rationale:

- Please see discussion under measure 0423.

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5. Related and Competing Measures

- The Committee discussed whether this measure potentially competes with 2653: Average change in functional status following total knee replacement surgery (Minnesota Community Measurement). The Committee determined that the measures have different focus in terms of the target population, provider types, and clinical settings, as well as the clinical area. The developers indicated that the FOTO measure is broader and applicable to any kind of knee impairments, as opposed to measure 2653, which only focuses on patients with knee replacements. Therefore, the Committee agreed that the measures were related but not competing. The Committee did not make recommendations for harmonization.
- The Committee also considered the suite of FOTO measures to be related to 2624: Functional outcome assessment (CMS), as they address functional status for patients age 18 years and older. However, they differ in type as 2624 is a process measure, while FOTO measures assess patient-reported outcomes. The Committee agreed that these measures were related, but did not make recommendations for harmonization.

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

- Please see discussion under measure 0423.

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6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Comments on the set of FOTO measures (0422 – 0428) noted that the measure is stated to apply to patients age 14 and older. The Children's Hospital Association agrees with the Committee's discussion and request for evidence that the measure is understandable and appropriate for patients under the age of 18 as the measure was initially developed for patients 18 and over. Additional, comments stated that they are important patient centered outcomes, and while the measures are not perfect they could be improved as additional data is collected. Commenters also believed this measure should be considered for endorsement because it focuses on an important patient-centered outcome and addressees an important gap area for quality improvement. While this measure may not be perfect, it is an important patient centered outcome. The measure can be analyzed and improved as additional data is collected.

Committee response:

- The Committee requested additional information to allow for more comprehensive evaluation of the consensus not reached and not recommended measures. This additional information was discussed on the post-comment committee call and the Committee had an opportunity to re-vote on the applicable measures. This measure was recommended by the Committee after reviewing the additional information and the comments.

Developer response:

- FOTO appreciates this support. The PFCC committee has requested and FOTO has provided additional analysis of validity and reliability at the clinician and clinic level. FOTO is committed to improvement of its measures and is involved in research to examine the relationship of its measures to other measures, including global ratings. In FOTO's survey development it has progressed from global measures to more body part specific measures because of the improved measure sensitivity realized with a specific vs. global measure, which FOTO believes is an important psychometric advantage. For example effect size was more than doubled comparing the FOTO Lumbar CAT (1.05) and AM PAC CAT Daily Activity Scale (.42) when applied to patients with spine impairments. This increased sensitivity has been noted in all of the body part data. There are also clinical advantages with the patient being presented with more pertinent (to their impairment) body part functional items to answer.
- The committee requested evidence that the instrument, which was originally developed for ages 18 and over, has been tested for understandability and appropriateness for youth down to age 14, as included in the measure. FOTO justified their initial request to change the inclusion criteria for its measures from 18 to 14 years old using the results of sensitivity analyses examining the impact of changing the age exclusion criteria on the risk adjustment models. However, in light of the discussions in committee, we recognize that additional testing is necessary. Therefore, we have requested permission to withdraw this change and return to the 18 years and older inclusion criteria. FOTO plans to perform studies on the understandability and appropriateness for youth 14-18 in the future. We have also recalculated the marginal means estimates by age-groups 18 and older.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

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8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

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9. Appeals

0423 Functional Status Change for Patients with Hip Impairments

Submission **|** Specifications

Description: A self-report measure of change in functional status for patients 18 years+ with hip impairments. The change in functional status assessed using FOTO's (hip) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

Numerator Statement: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for hip impairment.

Clinic Level: The average residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for hip impairment.

Denominator Statement: All patients 18 years and older with hip impairments who have initiated rehabilitation treatment and complete the FOTO hip FS PROM at admission and discharge.

Exclusions: •Patients who are not being treated for a Hip impairment

•<18 years of age

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Outcome

Data Source: Patient Reported Data/Survey

Measure Steward: Focus On Therapeutic Outcomes, Inc

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

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

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

1a. Evidence: **Y-13**; **N-5**; 1b. Performance Gap: **H-0**; **M-7**; **L-5**; **I-7** 1c. High Priority: **H-7**; **M-11**; **L-1**; **I-0**

UPDATED VOTES FOR 1b. Performance Gap: H-4; **M-13**; **L-1**; **I-0**

Rationale:

- The Committee discussed the general question of whether functional status measures should include attributions to specific body parts. The advantage is that it can enhance the specificity of treatment, but it both limits changes in functional status to a particular body part and it also limits the degree to which clinics can be compared across different types of injuries.
- The developer stated that wrist and hand conditions would affect functional status much differently than foot or ankle conditions, for example, and that is why they have different forms. They also noted that clinicians wanted a more efficient tool that did not ask patients irrelevant items.
- The committee remained concerned that it is difficult to risk adjust away variability by the different types of injuries and diseases included, but did note approval of the items included in the types of function assessed. However, they pointed out that different types of injuries would cause very different abilities to heal; the developer thought the focus on functional outcomes would be similar in terms of what the patients care about.
- In response to questions, the developer clarified that the measures have short forms that are in the public domain. The short form is on paper and the full form is a CAT measure. The developer stated that the short form predicts 96-97% of the variance of the full measure so there is minimal bias introduced by the different forms. In addition, the actual CAT survey is publically posted and can be used via the developer's website, along with the coefficients from the risk models. They further explained that short form contains the most important items from the full bank, and that it has also been tested. The form has been calibrated to the original CAT.
- The committee agreed the information provided on the site, which includes the short form and the CAT, and the fact that a provider can use the tool, derive a score, and report it, all without subscribing, meets the criteria for publically available.

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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-4**; **L-7**; **I-6** 2b. Validity: **H-2**; **M-2**; **L-9**; **I-6 (informational vote only; non-binding)**

UPDATED VOTES FOR 2a. Reliability: H-4; **M-12**; **L-1**; **I-1 2b. Validity: H-3**; **M-14**; **L-1**; **I-0**

Rationale:

- The Committee clarified what factors were risk adjusted for in the measure, and confirmed that the etiology of the hip impairment was not included in the risk adjustment. The developer agreed that it may be important in outcomes, but that it would be reflected in the intake functional assessment, and that they thought they could predict a fair amount of the variation in outcomes with characteristics they currently adjust for. Committee members agreed the best predictor of future function would be prior function for most functional status measures. The developers stated that a certain proportion of variability is also attributable to the clinic and the clinicians.
- The risk adjustment modeling includes all patients who have complete intake and discharge scores, but to calculate the performance measures, there are thresholds for participation. A committee member pointed out that the people who come in more often are more likely to get sampled and are more likely to get care, which could impact the link between process and outcome, and raised the concern that very small numbers could produce a lot of statistical noise. The developer explained that was why small sample sizes were excluded, and the committee member suggested hierarchical linear modeling to address this issue of floating sample sizes.

- The committee requested more information about the interclass correlation coefficients at the clinician and clinic levels, and the developer offered to follow up with that information. The committee noted that this information would make sure that there is enough evidence that the measure is distinguishing clinicians from each other.
- The developer noted that they had submitted supplementary information on the validity of the provider classification method, which showed that in the high-performing clinics, a greater proportion of patients improved more than a minimally clinically important amount.
- Raising the concern that the risk adjustment for gender and payer may actually mask disparities in care, the committee requested more information and a justification for the risk adjustment variables, especially gender and payer.
- They also requested evidence that the instrument, which was originally developed for ages 18 and over, has been tested for understandability and appropriateness for youth down to age 14, as included in the measure.

3. Feasibility: H-7; M-8; L-3; I-1 (informational vote only; non-binding)

UPDATED VOTES FOR Feasibility: H-4; M-9; L-3; I-2

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

Rationale:

- A committee member asked about the inclusion of fear or avoidance, stating that most are not collecting this information. The developer explained that they have found it is predictive of outcome, and that patients with higher levels of fear avoidance do not do as well, so they have incorporated it as a variable.
- They explained that the time it takes to collect this information using the CAT is one to two minutes. The FOTO CAT and the Oswestry, which takes 6-8 minutes, are similar psychometrically but the FOTO tool is less of a burden to complete, record, and score.
- The developer also noted that clinicians, patient managers, and patients were involved in the development of the items and that the CAT was well received by all three groups, for its efficiency and ease of use.

4. Use and Usability: H-4; M-5; L-7; I-3 (informational vote only; non-binding)

UPDATED VOTES FOR Use and Usability: H-4; M-8; L-5; I-1

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

Rationale:

- The committee had no additional comments regarding use and usability.

5. Related and Competing Measures

- The Committee considered the suite of FOTO measures to be related to 2624: Functional Outcome Assessment (CMS), as they address functional status for patients age 18 years and older. However, they differ in type, as 2624 is a process measure, while FOTO measures assess patient-reported outcomes. The Committee agreed that these measures were related but did not make recommendations for harmonization.

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

6. Public and Member Comment: March 2, 2015- March 31, 2015

- **Please see public and member comment under measure 0422.**

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

0424 Functional Status Change for Patients with Foot and Ankle Impairments

Submission **|** Specifications

Description: A self-report measure of change in functional status for patients 18 years+ with foot and ankle impairments. The change in functional status assessed using FOTO's (foot and ankle) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

Numerator Statement: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment)

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for foot and or ankle impairment.

Clinic Level: The average of residuals in patients who were treated by a clinic in a 12 month time period for foot and or ankle impairment.

Denominator Statement: All patients 18 years and older with foot or ankle impairments who have initiated rehabilitation treatment and completed the FOTO foot and ankle PROM at admission and discharge

Exclusions:

- Patients who are not being treated for a foot and ankle impairment
- <18 years of age

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Outcome

Data Source: Paper Medical Records

Measure Steward: Focus on Therapeutic Outcomes, Inc

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-13**; **N-5;** I-X; 1b. Performance Gap: **H-0**; **M-7**; **L-5**; **I-7** 1c. High Priority: **H-7**; **M-11**; **L-1**; **I-0**

UPDATED VOTES FOR 1b. Performance Gap: H-4; **M-13**; **L-1**; **I-0**

<u>Rationale</u>:

- Please see discussion under measure 0423.

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

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

2a. Reliability: **H-2**; **M-4**; **L-7**; **I-6** 2b. Validity: **H-2**; **M-2**; **L-9**; **I-6 (informational vote only; non-binding)**

UPDATED VOTES FOR 2a. Reliability: H-4; **M-12**; **L-1**; **I-1 2b. Validity: H-3**; **M-14**; **L-1**; **I-0**

<u>Rationale</u>:

- Please see discussion under measure 0423.

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3. Feasibility: H-7; M-8; L-3; I-1 (informational vote only; non-binding)

UPDATED VOTES FOR Feasibility: H-4; M-9; L-3; I-2

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

<u>Rationale</u>:

- Please see discussion under measure 0423.

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4. Use and Usability: H-4; M-5; L-7; I-3 (informational vote only; non-binding)

UPDATED VOTES FOR Use and Usability: H-4; M-8; L-5; I-1

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

<u>Rationale</u>:

- Please see discussion under measure 0423.

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5. Related and Competing Measures

- The Committee considered the suite of FOTO measures to be related to 2624: Functional Outcome Assessment (CMS), as they address functional status for patients age 18 years and older. However, they differ in type, as 2624 is a process measure, while FOTO measures assess patient-reported outcomes. The Committee agreed that these measures were related but did not make recommendations for harmonization.

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

- Please see discussion under measure 0423.

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6. Public and Member Comment: March 2, 2015- March 31, 2015
- **Please see public and member comment under measure 0422.**

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

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8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

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9. Appeals

0425 Functional Status Change for Patients with Lumbar Impairments

Submission **|** Specifications

Description: A self-report outcome measure of functional status for patients 18 years+ with lumbar impairments. The change in functional status assessed using FOTO (lumbar) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality.

Numerator Statement: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for lumbar impairment.

Clinic Level: The average of residuals) in functional status scores in patients who were treated by a clinic in a 12 month time period for lumbar impairment.

Denominator Statement: All patients 18 years and older with a lumbar impairment who have initiated rehabilitation treatment and completed the FOTO (lumbar) PROM.

Exclusions:
- Patients who are not being treated for a lumbar impairment
- <18 years of age

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Outcome

Data Source: Patient Reported Data/Survey

Measure Steward: Focus on Therapeutic Outcomes, Inc

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-13**; **N-5;** I-X; 1b. Performance Gap: **H-0**; **M-7**; **L-5**; **I-7** 1c. High Priority: **H-7**; **M-11**; **L-1**; **I-0**

UPDATED VOTES FOR 1b. Performance Gap: H-4; **M-13**; **L-1**; **I-0**

<u>Rationale</u>:

- Please see discussion under measure 0423.

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

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

2a. Reliability: **H-2**; **M-4**; **L-7**; **I-6** 2b. Validity: **H-2**; **M-2**; **L-9**; **I-6 (informational vote only; non-binding)**

UPDATED VOTES FOR 2a. Reliability: H-4; **M-12**; **L-1**; **I-1 2b. Validity: H-3**; **M-14**; **L-1**; **I-0**

<u>Rationale</u>:

- Please see discussion under measure 0423.

3. Feasibility: H-7; M-8; L-3; I-1 (informational vote only; non-binding)

UPDATED VOTES FOR Feasibility: H-4; M-9; L-3; I-2

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

<u>Rationale</u>:

- Please see discussion under measure 0423.

4. Use and Usability: H-4; M-5; L-7; I-3 (informational vote only; non-binding)

UPDATED VOTES FOR Use and Usability: H-4; M-8; L-5; I-1

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

<u>Rationale</u>:

- Please see discussion under measure 0423.

5. Related and Competing Measures

- The Committee considered the suite of measures to be related to 2624: Functional Outcome Assessment (CMS), as they address functional status for patients age 18 years and older. However, they differ in type, as 2624 is a process measure, while FOTO measures assess patient-reported outcomes. The Committee agreed that these measures were related but did not make recommendations for harmonization.

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

- Please see discussion under measure 0423.

6. Public and Member Comment: March 2, 2015- March 31, 2015

- **Please see public and member comment under measure 0422.**

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

0426 Functional Status Change for Patients with Shoulder Impairments

Submission **|** Specifications

Description: A self-report outcome measure of change in functional status for patients 18 years+ with shoulder impairments. The change in functional status assess using FOTO's (shoulder) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

Numerator Statement: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for shoulder impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for shoulder impairment.

Denominator Statement: All patients 18 years and older with shoulder impairments who have initiated rehabilitation treatment and completed the FOTO shoulder FS outcome instrument at admission and discharge.

Exclusions:

- Patients who are not being treated for a Shoulder impairment
- <18 years of age

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Outcome

Data Source: Patient Reported Data/Survey

Measure Steward: Focus on Therapeutic Outcomes, Inc

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-13**; **N-5;** I-X; 1b. Performance Gap: **H-0**; **M-7**; **L-5**; **I-7** 1c. High Priority: **H-7**; **M-11**; **L-1**; **I-0**

UPDATED VOTES FOR 1b. Performance Gap: H-4; **M-13**; **L-1**; **I-0**

<u>Rationale</u>:

- Please see discussion under measure 0423.

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

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

2a. Reliability: **H-2**; **M-4**; **L-7**; **I-6** 2b. Validity: **H-2**; **M-2**; **L-9**; **I-6 (informational vote only; non-binding)**

UPDATED VOTES FOR 2a. Reliability: H-4; **M-12**; **L-1**; **I-1 2b. Validity: H-3**; **M-14**; **L-1**; **I-0**

<u>Rationale</u>:

- Please see discussion under measure 0423.

3. Feasibility: H-7; M-8; L-3; I-1 (informational vote only; non-binding)

UPDATED VOTES FOR Feasibility: H-4; M-9; L-3; I-2

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

<u>Rationale</u>:

- Please see discussion under measure 0423.

4. Use and Usability: H-4; M-5; L-7; I-3 (informational vote only; non-binding)

UPDATED VOTES FOR Use and Usability: H-4; M-8; L-5; I-1

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

<u>Rationale</u>:

- Please see discussion under measure 0423.

5. Related and Competing Measures

- The Committee considered this measure to be related to 2624: Functional Outcome Assessment (CMS), as they address functional status for patients age 18 years and older. However, they differ in type, as 2624 is a process measure, while FOTO measures assess patient-reported outcomes. The Committee agreed that these measures were related, but did not make recommendations for harmonization.

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

- Please see discussion under measure 0423.

6. Public and Member Comment: March 2, 2015- March 31, 2015

- **Please see public and member comment under measure 0422.**

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

0427 Functional Status Change for Patients with Elbow, Wrist and Hand Impairments

Submission **|** Specifications

Description: A self-report outcome measure of functional status for patients 18 years+ with elbow, wrist, hand impairments. The change in functional status assessed using FOTO (elbow, wrist and hand) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

Numerator Statement: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for elbow, wrist and hand impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for elbow, wrist and hand impairments.

Denominator Statement: All patients 18 years and older with elbow, wrist or hand impairments who have initiated rehabilitation treatment and completed the FOTO (elbow, wrist and hand) PROM.

Exclusions:

- Patients who are not being treated for an elbow, wrist and/or hand impairment
- <18 years of age

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Outcome

Data Source: Patient Reported Data/Survey

Measure Steward: Focus on Therapeutic Outcomes, Inc

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-13**; **N-5;** I-X; 1b. Performance Gap: **H-0**; **M-7**; **L-5**; **I-7** 1c. High Priority: **H-7**; **M-11**; **L-1**; **I-0**

UPDATED VOTES FOR 1b. Performance Gap: H-4; **M-13**; **L-1**; **I-0**

<u>Rationale</u>:

- Please see discussion under measure 0423.

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

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

2a. Reliability: **H-2**; **M-4**; **L-7**; **I-6** 2b. Validity: **H-2**; **M-2**; **L-9**; **I-6 (informational vote only; non-binding)**

UPDATED VOTES FOR 2a. Reliability: H-4; **M-12**; **L-1**; **I-1 2b. Validity: H-3**; **M-14**; **L-1**; **I-0**

<u>Rationale</u>:

- Please see discussion under measure 0423.

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3. Feasibility: H-7; M-8; L-3; I-1 (informational vote only; non-binding)

UPDATED VOTES FOR Feasibility: H-4; M-9; L-3; I-2

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

<u>Rationale</u>:

- Please see discussion under measure 0423.

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4. Use and Usability: H-4; M-5; L-7; I-3 (informational vote only; non-binding)

UPDATED VOTES FOR Use and Usability: H-4; M-8; L-5; I-1

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

<u>Rationale</u>:

- Please see discussion under measure 0423.

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5. Related and Competing Measures

- The Committee considered the suite of FOTO measures to be related to 2624: Functional Outcome Assessment (CMS), as they address functional status for patients age 18 years and older. However, they differ in type, as 2624 is a process measure, while the FOTO measures assess patient-reported outcomes. The Committee agreed that these measures were related but did not make recommendations for harmonization.

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

- Please see discussion under measure 0423.

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6. Public and Member Comment: March 2, 2015- March 31, 2015

- Please see public and member comment under measure 0422.

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7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

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8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

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9. Appeals

0428 Functional Status Change for Patients with General Orthopaedic Impairments

Submission **|** Specifications

Description: A self-report outcome measure of functional status for patients 18 years+ with general orthopaedic impairments. The change in functional status assessed using FOTO (general orthopedic) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality.

Numerator Statement: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for general orthopaedic impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for general orthopaedic impairment.

Denominator Statement: All patients 18 years and older with general orthopaedic impairments who have initiated rehabilitation treatment and completed the FOTO (general orthopaedic) PROM.

Exclusions:
- Patients who are not being treated for a General orthopaedic impairment
- <18 years of age

Adjustment/Stratification:

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

Setting of Care: Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation

Type of Measure: Outcome

Data Source: Paper Medical Records

Measure Steward: Focus on Therapeutic Outcomes, Inc

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

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

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

1a. Evidence: **Y-13**; **N-5** 1b. Performance Gap: **H-0**; **M-7**; **L-5**; **I-7** 1c. High Priority: **H-7**; **M-11**; **L-1**; **I-0**

UPDATED VOTES FOR 1b. Performance Gap: H-4; **M-13**; **L-1**; **I-0**

Rationale:

- Since there are a number of body-part specific measures, the committee requested the rationale behind the general measure. The developer explained that this measure looks at impairments of the cervical and thoracic vertebrae, the ribs, TMJ, etc. They further explained that this data is the predominant impairment group, covering 70% of the data, but that there were 30-40% of the data that covered other body parts, so they elected to keep it as a general measure rather than a measure focused on the cervical vertebrae. They noted that they are developing a measure specifically focused on cervical but that it is not yet completed.
- Please see remaining discussion under measure 0423.

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

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

2a. Reliability: **H-2**; **M-4**; **L-7**; **I-6** 2b. Validity: **H-2**; **M-2**; **L-9**; **I-6 (informational vote only; non-binding)**

UPDATED VOTES FOR 2a. Reliability: H-4; **M-12**; **L-1**; **I-1 2b. Validity: H-3**; **M-14**; **L-1**; **I-0**

Rationale:

- Please see discussion under measure 0423.

3. Feasibility: H-7; M-8; L-3; I-1 (informational vote only; non-binding)

UPDATED VOTES FOR Feasibility: H-4; M-9; L-3; I-2

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

Rationale:

- Please see discussion under measure 0423.

4. Use and Usability: H-4; M-5; L-7; I-3 (informational vote only; non-binding)

UPDATED VOTES FOR Use and Usability: H-4; M-8; L-5; I-1

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

Rationale:

- Committee members noted there is a logic to the body-part specific surveys, but also noted that the different instruments have a lot of similarities and wondered if it really makes sense to have so many surveys, given the cost and time to implement different surveys for each patient, or if a more holistic model would be appropriate. They also mentioned that patients say that they are whole people, not just body parts. The developer agreed there are similarities, but explained that when they analyzed the data, they found that difficultly levels for various items change depending on the body part affected. The measure is more precise if they recalibrate the difficulty level for each item for each body part. They also agreed that providers need to address the total body to improve function, and should be doing so at each visit.

5. Related and Competing Measures

- The Committee considered the suite of FOTO measures to be related to 2624: Functional Outcome Assessment (CMS), as they address functional status for patients age 18 years and older. However, they differ in type, as 2624 is a process measure, while the FOTO measures assess patient-reported outcomes. The Committee agreed that these measures were related but did not make recommendations for harmonization.

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

- Please see discussion under measure 0423.

6. Public and Member Comment March 2, 2015- March 31, 2015

- Please see public and member comment under measure 0422.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for continued endorsement

9. Appeals

2643 Average Change in Functional Status Following Lumbar Spine Fusion Surgery

Submission **|** Specifications

Description: For patients age 18 and older undergoing lumbar spine fusion surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oswestry Disability Index (ODI version 2.1a) patient reported outcome tool.

Numerator Statement: There is not a traditional numerator for this measure; the measure is calculating the average change in functional status score from pre-operative to post-operative functional status score. The measure is NOT aiming for a numerator target value for a post-operative ODI score.

For example:

The average change in low back function was an increase in 17.2 points one year post-operatively on a 100 point scale.

Denominator Statement: Adult patients age and older (no upper age limit) who undergo a lumbar spine fusion procedure during a calendar year performance period (e.g. dates of procedure occurring between 1/1/2013 and 12/31/2013) AND have a completed pre-operative and post-operati

Exclusions: Exclusions are for patients with spine related cancer, fracture and infection and idiopathic or congenital scoliosis.

Adjustment/Stratification:

Level of Analysis: Clinician : Group/Practice

Setting of Care: Ambulatory Care : Clinician Office/Clinic

Type of Measure: PRO

Data Source: Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Patient Reported Data/Survey

Measure Steward: MN Community Measurement

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-18**; **N-1**; 1b. Performance Gap: **H-6**; **M-8**; **L-0**; **I-5** 1c. High Priority: **H-13**; **M-6**; **L-0**; **I-0**

<u>Rationale</u>:

- The developer introduced this new measure as a patient-reported outcome measure, which evaluates the change between a patient's preoperative functional status and their post-operational functional status at one year.
- The Committee applauded the developers for tackling this controversial and important area in utilization of surgical procedures, pointing to the developer's statement that there is a 15-fold increase in the number of complex fusion procedures performed for Medicare beneficiaries, which is a highly variable procedure. However, the Committee stated that this measure could imply that there is a gap in quality of care, but not a gap in variability in performance, based on the pilot data.
- The developer explained that this measure has gone through one phase of pilot testing involving four practices and is in the statewide quality reporting and measurement system for Minnesota, which is required of practitioners. The developer noted that they are expecting full implementation data to be available in May, 2015.
- The Committee members raised additional concerns that the Oswestry tool (pain questionnaire) may not be the best tool to use, because it is primarily aimed at pain and therefore would not capture other neurological dysfunctions or potential side effects of the surgery itself. They recommended that the measure be improved by adding other questions or tools that might speak to neurological symptoms that could present without pain.

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

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

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

UPDATED VOTES FOR 2a. Reliability: H-3; **M-15**; **L-0**; **I-0 2b. Validity: H-1**; **M-17**; **L-0**; **I-0**

<u>Rationale</u>:

- The Committee members commented that the specifications look very clear but the risk adjustment specifications have not been modeled yet. Further, the Committee noted that there is no score-level reliability testing data presented as well as data to demonstrate the intraclass correlations at the practice-level. The developer confirmed that similar to *Measure 2653 Average Change in Functional Status Following Total Knee Replacement Surgery,* they will submit final analysis of a risk adjustment methodology based on the Committee's recommendations.

- This measure did not pass reliability so the Committee stopped voting at this juncture and requested the aforementioned testing information from the developers to re-consider the measure after the public comment. One Committee member offered an additional suggestion for the developers to add questions such as whether or not non-invasive treatments were tried (e.g., physical therapy or pain consults, steroid injections) to get a sense for onset of symptoms, other treatments that were tried, and clinical indications for the procedure.

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

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

Rationale:

- This measure data source is Electronic Clinical Data, Electronic Health Record, Paper Medical Records, and Patient Reported Data/Survey.
- Also, all data elements are in defined fields in electronic health records (EHRs)

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4. Use and Usability: H-3; M-14; L-0; I-1

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

Rationale:

- This measure is not currently in use but planned for use in public reporting, payment program, and regulatory and accreditation programs.
- The developer also noted that this measure is planned for inclusion in the MN Department of Health (MDH) Statewide Quality Reporting and Measurement System. Mandatory data collection and reporting under 2008 MN Health Reform Legislation. MNCM was a subcontractor to MDH for measure development exploring the concept of low back pain. Statewide implementation is planned for submission in April/May 2015 for dates of procedure 1/1/2013 to 12/31/2013 with follow-up assessment period through March 31, 2015.

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5. Related and Competing Measures

- No related or competing measures noted.

Standing Committee Recommendation for Endorsement: **Y-18**; **N-0**

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6. Public and Member Comment

Comments received:

- Commenters believed this measure should be considered for endorsement once the reliability testing data is submitted by Minnesota Community Measurement because the measure focuses on an important patient-centered outcome and addressees an important gap area for quality improvement. We believe an explicit patient-centered focus on surgical outcomes is necessary and this measure begins to address this important quality issue.

Committee response:

- The Committee requested additional information to allow for more comprehensive evaluation of the consensus not reached and not recommended measures. This additional information

was discussed on the post-comment committee call and the Committee had an opportunity to re-vote on the applicable measures. This measure was recommended by the Committee after reviewing the additional information and the comments.

Developer response:

- Thank you for your support! We agree that these types of measures focused on patient reported outcomes and change over time, which represent newer cutting-edge measures, are more difficult to evaluate as compared to traditional measures that are expressed as a binary Yes/No. We have provided additional testing in response to the Standing committee's concerns and look forward to continued conversation and working with NQF staff to determine the best statistical methods and tests for determining the reliability and validity performance scores. A new published study supports the use of the Oswestry Disability Index as a PROM tool appropriate for outcome measurement. "A proposed set of metrics for standardized outcome reporting in the management of low back pain." Clement, RC et al Acta Orthopaedica 2015; 86 (4)

7. Consensus Standards Approval Committee (CSAC) Vote: Y-13; N-0; A-0

CSAC Decision: Approved for continued endorsement

8. Board of Directors Review: Yes (June 29, 2015)

Board Decision: Ratified for endorsement

9. Appeals

2286 Functional Change: Change in Self Care Score

Submission | Specifications

Description: Change in rasch derived values of self-care function from admission to discharge among adult patients treated at an inpatient rehabilitation facility who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 8 items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

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

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

Exclusions: National values used in the CMG-adjustment procedure will not include cases who died in the IRF (or other venue) or cases less than 18 years old. Cases who died during rehabilitation are not typical patients and are typically omitted in the literature when looking at rehabilitation outcomes. In addition, the FIM instrument is meant for an adult population (Ottenbacher et al. 1996).

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Home Health, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

Type of Measure: Outcome

Data Source: Electronic Clinical Data : Electronic Health Record, Other

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

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-17**; **N-0**; 1b. Performance Gap: **H-4**; **M-8**; **L-0**; **I-5;** 1c. High Priority: **H-9**; **M-8**; **L-0**; **I-0**

<u>Rationale</u>:

- This is one of a suite of measures derived from the FIM. This measure, 2286, calculates and reports a change in self-care score; measure 2321 reports a change in mobility score, and together they comprise measure 2287, which calculates a change in motor score. The developer explained they are proposing three measures because different aspects of the measures (self-care indicators vs. mobility indicators) could differ in importance based on the setting and the patient's prognosis or condition.
- The Committee inquired about the lack of information on disparities in measure performance; the developer indicated the data is available; however, due to the wealth of information they have, they were unsure how much and what data to submit. They agreed to provide additional information, specifically on age, race and payer source, during the public comment period.
- The Committee requested clarification on the measure timing requirements of one year; the developer responded that the assessments occur at admission and discharge, regardless of the length of stay. That the one-year period was a mechanism to assess facility performance for patients who have both the admission and discharge scores and then compare against benchmarks.
- The developer also explained that the FIM allows assessment of both function and burden of care. Burden of care refers to how much time a patient would require from a helper, another person, or one-on-one, if living within a community setting.
- The measure is not restricted to Medicare-only but can include patients starting at 18 years of age.
- There was discussion about the appropriate setting of care for measure implementation, and while the developers indicated it can be used across various settings, the data provided was only for IRF's. Thus the Committee was instructed to evaluate and vote based on the data and specification submitted which was specific to IRFs.
- The Committee clarified that expression and memory are components of the self-care metric.
- The Committee proposed that the votes for measure 2286 be carried over to measures 2287 and 2321.

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

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

2a. Reliability: **H-6**; **M-6**; **L-1**; **I-4** 2b. Validity: **H-4**; **M-9**; **L-0**; **I-4**

<u>Rationale</u>:

- It was noted that these are clinician-derived scores which require fairly rigorous training of appropriate clinicians to ensure reliability.
- The Committee clarified that sufficient evidence was provided for reliability at the patient level, but not at the agency level. The developer confirmed this interpretation and indicated the availability of additional information to be supplied during the public comment period.
- The Committee inquired if the testing results were based on raw scores versus the Rasch-transformed scores. It was noted that the impact of change could differ based on the use of the raw scores. The developer indicated that by converting to Rasch scores, it helped to mitigate drastic differences. The data provided was all Rasch-transformed, and they are able to provide the raw data detail as well.
- The Committee requested clarification on the risk adjustment methodology. The developer starts by classifying patients into an impairment group and then calculates the patient score. They then proceed to look at facility case-mix; then make a final adjustment to have a facility adjusted score, in addition to the patient adjusted score. By adjusting at both levels, the results are comparable between facilities and between patients.
- The Committee clarified their request for data and asked for the Interclass Correlation Coefficients, as well as mean square fit statistics.
- The Committee asked for additional information regarding the testing of 4 items correlated with the overall FIM since the result was .60. The developer indicated they specifically looked at the 4 items and assessed how they predict the patient's full 18-item FIM score and felt the results were reasonable. It was confirmed that they were looking at validity and the proportion of variance that was accounted for in those 4 items. The Committee suggested that over time, the measure may be better off with the 2-subscales as more valid overall.

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

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

<u>Rationale</u>:

- As discussed under reliability, the Committee raised the importance of proper training for clinicians using this tool. The developer indicated there are training modules available and variations in training systems (i.e., train the trainer).
- There was concern raised about feasibility in settings outside of the IRF; and although the developer indicates potential for wider spread use, the measure as submitted for Committee consideration is for IRFs only.

3. Use and Usability: H-6; M-9; L-0; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

<u>Rationale</u>:

- The Committee requested clarification on the availability of data for accountability and benchmarking. The developer confirmed that the benchmarking piece is not publicly available.
- It was noted that CMS conducts a significant amount of oversight on these facilities.

5. Related and Competing Measures

- The Committee considered this measure to potentially compete with 2633: IRF Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (CMS) and was asked to vote to determine whether these measures are directly competing and select the best in class measure. While the Committee agreed that these measures are competing, they did not achieve consensus on whether one measure was superior. When measures 2286 and 2633 moved forward, the CSAC voted to recommend 2286, but not 2633, as the measure was deemed as competing with 2286. The Board of Directors reviewed the recommendations of the CSAC and the rationale for non-approval of 2633. The Board provided greater policy context, including the importance of the IMPACT Act of 2014 and the need for aligned measures that can be used to assess care across settings. The Board therefore directed NQF staff to return the competing IRF measures (2286 and 2633) back to the CSAC for further consideration. In addition, the Board expressed concerns regarding measures derived from proprietary versus non-proprietary instruments, and the desirability of having measures that help assess quality improvement from the patient's perspective as he/she moves among multiple sites of care. In their reconsideration vote, 92% of the CSAC voted to approve endorsement for both measures with conditions for specific update requirements. The Committee also considered this measure to be related to 2635: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (CMS) and 2613: CARE: Improvement in Self Care (AHCA); however, there were no recommendations for harmonization.

Standing Committee Recommendation for Endorsement: **Y-15**; **N-2**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Two sets of comments suggested that 2286, 2287, and 2321 be harmonized. As this decision is up to the developer, these comments were forwarded for their response.

Developer response:

We appreciate the endorsement. We agree that a composite measure is important. To that end, we have submitted a composite measure 2287: Functional Change: Change in Motor Score. This will allow for quality improvement in all levels of function being measured. However, we feel that leaving this as a separate measure offers greater refinement in assessing patient change relating to the construct measured. For instance, consider a patient admitted to a facility and upon admission is rated at the lowest functional levels for each item within a measure, upon discharge, the self-care items improved greatly however the mobility items did not change from the admission rating (perhaps the patient had not walked independently for many years prior to onset of recent condition under treatment), as a composite score, functional gain would be evident from admission to discharge, but it would not show the domain specific changes (exceptional progress in self-care, which was likely the focus of rehabilitation). We believe the option of serving as a 'stand alone measure' may have interest and great utility to clinicians and since the motor measure is a combination of the self-care and mobility, the flexibility in options exist for clinical use.

7. Review 1: Consensus Standards Approval Committee (CSAC) Vote June 29, 2015: Y-14; N-1; A-0

   Review 2: CSAC Vote September 17, 2015: Y-12; N-1; A-0

CSAC Decision: Approved for endorsement with conditions for updates – Final Decision made September 17, 2015

8. Review 1: Board of Directors Review: No (July 22, 2015)

   Board Decision: The Board decided to send Measure 2286 back to the CSAC for further consideration.

   Review 2: Board of Directors Review: Yes (November 4, 2015)

   Board Decision: Ratified for endorsement– Final Decision made November 4, 2015

9. Appeals

2321 Functional Change: Change in Mobility Score

Submission **|** Specifications

Description: Change in rasch derived values of mobility function from admission to discharge among adult inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility FIM® items:Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

Numerator Statement: Average change in rasch derived mobility functional score from admission to discharge at the facility level. Includes the following FIM items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Average is calculated as (sum of change at the patient level/total number of patients). 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: National values used in the CMG-adjustment procedure will not include cases who died in the IRF (or other venue) or cases less than 18 years old. Cases who died during rehabilitation are not typical patients and are typically omitted in the literature when looking at rehabilitation outcomes. In addition, the FIM instrument is meant for an adult population (Ottenbacher et al. 1996).

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

Type of Measure: Outcome

Data Source: Electronic Clinical Data : Electronic Health Record

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

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-17**; **N-0**; 1b. Performance Gap: **H-4**; **M-8**; **L-0**; **I-5;** 1c. High Priority: **H-9**; **M-8**; **L-0**; **I-0**

<u>Rationale</u>:

- This is one of a suite of measures derived from the FIM Measure 2286 calculates and reports a change in self-care score; this measure, 2321, reports a change in mobility score, and together they comprise measure 2287 which calculates a change in motor score. The developer indicated it was important of the committee to understand this and why they are proposing three measures. Different aspects of the measure (self-care indicators vs. mobility indicators) could differ in importance based on the setting and the patient prognosis or condition.
- The Committee inquired as to the lack of information on disparities in measure performance; the developer indicated the data is available, however, due to the wealth of information they have, they were unsure how much and what data to submit. They agreed to provide additional information, specifically on age, race and payer source, during the public comment period.
- The Committee requested clarification on the measure timing requirements of one year; the developer responded that the assessments occur at admission and discharge, regardless of the length of stay. That the one-year period was a mechanism to assess facility performance for patients who have both the admission and discharge scores and then compare against benchmarks.
- The developer also explained that the FIM allows assessment of both function and burden of care. Burden of care refers to how much time a patient would require from a helper, another person, or one-on-one if living within a community setting.
- The measure is not restricted to Medicare-only but can include patients starting at 18 years of age.
- There was discussion about the appropriate setting of care for measure implementation, and while the developers indicated it can be used across various settings, the data provided was only for IRF's. Thus the Committee was instructed to evaluate and vote based on the data and specification submitted which was specific to IRFs.
- The Committee clarified that expression and memory are components of the self-care metric.
- The Committee proposed that the votes for measure 2286 be carried over to measures 2287 and 2321.

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

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

2a. Reliability: **H-6**; **M-6**; **L-1**; **I-4** 2b. Validity: **H-4**; **M-9**; **L-0**; **I-4**

<u>Rationale</u>:

- It was noted that these are clinician derived scores which require fairly rigorous training of appropriate clinicians to ensure reliability.
- The Committee clarified that sufficient evidence was provided for reliability at the patient level, but the agency level data included a beta binomial model and the interclass correlation coefficients look like a measure level mean variance. These rates were used to estimate rates as opposed to the composite score which is what would be sued to evaluate performance of the agencies. Thus, the interclass correlations are at the measure level versus the facility level. The

developer confirmed this interpretation and indicated the availability of additional information to be supplied during the Public Comment period.

- The Committee inquired if the testing results were based on raw scores versus the Rasch-transformed scores. It was noted that the impact of change could differ based on the use of the raw scores. The developer indicated that by converting to Rasch scores, it helped to mitigate drastic differences. The data provided was all Rasch-transformed, and they are able to provide the raw data detail as well.
- The Committee requested clarification on the risk adjustment methodology. The developer starts by classifying patients into an impairment group and then calculates the patient score. They then proceed to look at facility case-mix; then make a final adjustment to have a facility adjusted score, in addition to the patient adjusted score. By adjusting at both levels, the results are comparable between facilities and between patients.
- The Committee clarified their request for data and asked for the Interclass Correlation Coefficients, as well as mean square fit statistics.

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

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- As discussed under reliability, the Committee raised the importance of proper training for clinicians using this tool. The developer indicated there are training modules available and variations in training systems (i.e., train the trainer)
- There was concern raised about feasibility in settings outside of the IRF; and although the developer indicates potential for wider spread use, the measure as submitted for Committee consideration is for IRFs only.

3. Use and Usability: H-6; M-9; L-0; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- The Committee requested clarification on the availability of data for accountability and benchmarking. The developer confirmed that the benchmarking piece is not publicly available.

5. Related and Competing Measures

- The Committee considered this measure to be related to 2612: CARE: Improvement in Mobility (AHCA), 2632: Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (CMS), and 2636: IRF Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients (CMS). These measures have the same focus area (mobility) but are specified for different types of target populations. The Committee agreed that there was a need for all of the aforementioned measures, but made no recommendations for harmonization.
- The Committee considered this measure to potentially compete with 2634: IRF Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients (CMS) and was asked to vote to determine whether these measures are directly competing and select the best in class measure.

- While the Committee agreed that these measures are competing, they did not achieve consensus on whether one measure was superior. When measures 2321 and 2634 moved forward, the CSAC voted to recommend 2321, but not 2634, as the measure was deemed as competing with 2321. The Board of Directors reviewed the recommendations of the CSAC and the rationale for non-approval of 2634. The Board provided greater policy context, including the importance of the IMPACT Act of 2014 and the need for aligned measures that can be used to assess care across settings. The Board therefore directed NQF staff to return the competing IRF measures (2321 and 2634) back to the CSAC for further consideration. In addition, the Board expressed concerns regarding measures derived from proprietary versus non-proprietary instruments, and the desirability of having measures that help assess quality improvement from the patient's perspective as he/she moves among multiple sites of care. In their reconsideration vote, 92% of the CSAC voted to approve endorsement for both measures with conditions for specific update requirements.

Standing Committee Recommendation for Endorsement: **Y-15**; **N-2**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Two sets of comments suggested that 2286, 2287, and 2321 be harmonized. As this decision is up to the developer, these comments were forwarded on for their response.

Developer response:

- We appreciate the endorsement. We agree that a composite measure is important. To that end, we have submitted a composite measure 2287: Functional Change: Change in Motor Score. This will allow for quality improvement in all levels of function being measured. However, we feel that leaving this as a separate measure offers greater refinement in assessing patient change relating to the construct measured. For instance, consider a patient admitted to a facility and upon admission is rated at the lowest functional levels for each item within a measure, upon discharge, the self-care items improved greatly however the mobility items did not change from the admission rating (perhaps the patient had not walked independently for many years prior to onset of recent condition under treatment), as a composite score, functional gain would be evident from admission to discharge, but it would not show the domain specific changes (exceptional progress in self-care, which was likely the focus of rehabilitation). We believe the option of serving as a 'stand alone measure' may have interest and great utility to clinicians and since the motor measure is a combination of the self-care and mobility, the flexibility in options exist for clinical use.

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7. Review 1: Consensus Standards Approval Committee (CSAC) Vote June 29, 2015: Y-14; N-1; A-0

Review 2: CSAC Vote September 17, 2015: Y-12; N-1; A-0

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8. Review 1: Board of Directors Review: No (July 22, 2015)

Board Decision: The Board decided to send Measure 2321 back to the CSAC for further consideration.

Review 2: Board of Directors Review: Yes (November 4, 2015)

Board Decision: Ratified for endorsement, with conditions for updates– Final Decision made November 4, 2015

2631 Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function

Submission **|** Specifications

Description: This quality measure reports the percentage of all Long-Term Care Hospital (LTCH) patients with an admission and discharge functional assessment and a care plan that addresses function.

Numerator Statement: The numerator for this quality measure is the number of Long-Term Care Hospital (LTCH) patients with complete functional assessment data and at least one self-care or mobility goal.

For patients with a complete stay, all three of the following are required for the patient to be counted in the numerator: (1) a valid numeric score indicating the patient's status or response, or a valid code indicating the activity was not attempted or could not be assessed, for each of the functional assessment items on the admission assessment; (2) a valid numeric score, which is a discharge goal indicating the patient's expected level of independence, for at least one self-care or mobility item on the admission assessment; and (3) a valid numeric score indicating the patient's status or response, or a valid code indicating the activity was not attempted or could not be assessed, for each of the functional assessment items on the discharge assessment.

For patients who have an incomplete stay, discharge data are not required. The following are required for the patients who have an incomplete stay to be counted in the numerator: (1) a valid numeric score indicating the patient's status or response, or a valid code indicating the activity was not attempted or could not be assessed, for each of the functional assessment items on the admission assessment; and (2) a valid numeric score, which is a discharge goal indicating the patient's expected level of independence, for at least one self-care or mobility item on the admission assessment.

Patients who have incomplete stays are defined as those patients (1) with incomplete stays due to a medical emergency, (2) who leave the LTCH against medical advice, or (3) who die while in the LTCH. Discharge functional status data are not required for these patients because these data may be difficult to collect at the time of the medical emergency, if the patient dies or if the patient leaves against medical advice.

Denominator Statement: The denominator is the number of LTCH patients discharged during the targeted 12 month (i.e., 4 quarters) time period.

Exclusions: There are no denominator exclusions for this measure.

Adjustment/Stratification:

Level of Analysis: Facility

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

Type of Measure: Process

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services (CMS)

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **H-1**; **M-5**; **L-9**; **I-9; IE-3**; 1b. Performance Gap: **H-1**; **M-2**; **L-3**; **I-12;** 1c. High Priority: **H-0**; **M-0**; **L-0**; **I-0**

UPDATED VOTES FOR 1a. Evidence: H-4; M-10; L-1; I-0; IE-2; (pass) 1b. Performance Gap: H-2; M-8; L-3; I-4; (consensus not reached) 1c. High Priority: H-10; M-6; L-1; I-0 (pass)

UPDATED VOTES FOR 1b. Performance Gap: H-4; M-11; L-2; I-1

Rationale:

- This measure was not recommended initially in the January 21-22 Committee in-person meeting because it did not pass the importance criteria. However, the Committee conducted a subsequent review of this measure on the January 28 post-meeting call per the developer's request. This time the measure passed the importance criteria in the gray zone based on the additional information that was presented by the developers.
- The developer noted that this measure has two components, including: 1) the collection of standardized functional assessment data in the areas of self-care, mobility, cognition, and bladder management, and 2) the reporting, on admission, of a discharge goal (i.e., score) for one or more self-care or mobility items.
- The Committee questioned whether the two components of documenting a functional status assessment on admission and a goal for function are linked together. The developer responded that the goal has to be tied to one of the self-care or mobility items. So if the person has a functional limitation in eating, rolling left or right, getting on and off the toilet, the clinicians have to report a goal for at least one of those items using the functional scale.
- The Committee expressed concern that the only data presented to support the performance gap was qualitative data collected from site visits to 28 facilities and there were no quantitative data and data for a care plan gap. The developer stated that based on their understanding, qualitative data is sometimes adequate for a measure when it is first being proposed especially process measures that are directly tied to expert opinion in terms of validity and clinical practice guidelines.
- The Committee also had concerns that this might be a hard measure to get a good grade on because there are three components to the numerator which the long-term care facilities have to comply with. The developer explained that all the items will be nested within the LTCH care data set and collected through a standardized assessment tool, which long-term hospitals are required to use.
- Additional questions were raised regarding the assessment in setting a goal for the purpose of data collection versus holding the facility accountable for that goal. The developer explained that CMS is attempting to collect data to examine a change in independence on self-care and mobility and see if these items line up to a goal of care and then standardize data assessment across settings to follow persons as they traverse across care settings.

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

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

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

UPDATED VOTES FOR 2a. Reliability: H-0; **M-7**; **L-5**; **I-5 (consensus not reached) 2b. Validity:** H-0**; M-7**; L-4**; I-6 **(consensus not reached)**

UPDATED VOTES FOR 2a. Reliability: H-4; M-12; L-2; I-0 2b. Validity: H-2; M-14; L-2; I-0

Rationale:

- The Committee noted that there is a good evidence for reliability and validity of the care component and the functional status component, but there is no data regarding the care plan piece of the measure. The measure also lacks the inter-rater reliability data on the degree to which an appropriate goal is set. The developer responded that the "appropriate" in this argument may not essentially fit within this measure. This measure is just looking at the items for self-care and mobility and whether one of those items was documented on the goal of care at discharge.
- One Committee member raised concerns about the face validity of the measure if documentation of functional status and a related goal is called a care plan. Another Committee member agreed that a goal is not equal to a care plan; however, she supported the idea of a measure that links current functional status and the goal for improvement and suggested the developer tweak the semantics for this measure. CMS will consider revising the measure title to address the Committee's concerns.
- One Committee member pointed out that there is no evidence of intraclass correlation coefficients that would suggest the signal to noise ratio which helps distinguish within facility variability from between facility variation and asked the developers whether they have the data to analyze that. The developer explained that they don't have data to analyze facilities over time. As part of the post-acute payment reform demonstration, they had 28 LTCHs volunteered to use the standardized dataset to collect and enter data into an electronic system whereby provided the reliability and validity data.

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4. Feasibility: H-0; M-0; L-0; I-0

UPDATED VOTES FOR Feasibility: H-4; M-12; L-1; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- All data elements are in defined fields in electronic clinical data and the functional assessment items included in this quality measure will be included in a future version of the LTCH CARE Data Set (Version 3.00). The LTCH CARE Data Set has been the assessment data set used in LTCHs since 2012, when the LTCH Quality Reporting Program was implemented, as required by the Patient Protection and Affordable Care Act.

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

UPDATED VOTES FOR Use and Usability: H-2; M-12; L-3; I-0

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- Data collection for this quality measure begins on April 1, 2016 as part of the Long-Term Care Hospital Quality Reporting Program. Proposed plans for the public reporting of this quality measure will be included in future rulemaking published in the Federal Register.

- A Committee member raised a question regarding the possibility of non-response rate of facilities in terms of reporting this data. CMS explained that LTCHs that do not collect and submit data for this measure by the submission deadline may be subject to a two percentage point reduction in the annual payment update for fiscal year 2018 and subsequent years.

5. Related and Competing Measures

- No related or competing measures noted.

Standing Committee Recommendation for Endorsement: **Y-9**; **N-8 (consensus not reached) UPDATED Y-15**; **N-3**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Two comments were received on this measure of which one supported the endorsement of this measure. The second commenter noted that this measure is an important topic within the PAC industry and has been subject to contentious discussions across NQF committees and raised concern about the NQF processes for re-consideration and re-voting. The commenter further noted that the MAP Committees have "Conditionally Supported" this measure for use within all PAC venues and recommended that the Committee take all PAC settings into consideration when reviewing this measure to identify whether it meets all of the criteria previously reviewed not just for LTCHs, but also for SNFs, IRFs, and Home Health agencies.

NQF response:

- We appreciate your input, but would note that this measure was re-discussed during the follow up call after the in-person meeting. During the meeting, the Committee requested additional information regarding the measure. The developers had already submitted this information; however, due to timing of receipt being just prior to the in-person meeting; the Committee did not have time to review it. Due to the fact the information was already available, NQF agreed to have the Committee re-discuss the measure during the post-meeting call rather than waiting until after the public comment period.

Committee response:

- This comment was addressed on the post-comment call. Consensus has not been reached on some of the required criteria, and additional information was requested. While the comments on expanding the settings for the measure's use are appreciated, the Committee is charged with evaluating measures based on the information submitted and for the level of analysis and care setting as submitted by the developer. This measure was recommended by the Committee after reviewing the additional information and the comments.

Developer response:

- Thank you for your comment. The Improving Medicare Post-Acute Care Transformation (IMPACT) Act directs the Secretary to specify quality measures on which PAC providers are required to submit standardized patient assessment data and other necessary data specified by the Secretary with respect to five quality domains, one of which is functional status, cognitive function, and changes in function and cognitive function. Following the enactment of the IMPACT Act, a technical expert panel (TEP) was convened by the Centers for Medicare and Medicare Services' measure development contractor and provided input on implementing an application of this measure across four post-acute care settings, including IRFs, LTCHs, SNFs and HHAs. The TEP supported the implementation of this measure as specified across PAC providers and also supported our efforts to standardize this measure for cross-setting use. The Measures Application Partnership (MAP) met on February 9, 2015 and conditionally supported the specification of an application of Percent of LTCH Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631; under

review) for use as a cross-setting measure. MAP conditionally supported this measure pending NQF-endorsement and resolution of the use of two different functional status scales for quality reporting and payment purposes. MAP reiterated its support for adding measures addressing function, noting the group's special interest in this PAC/LTC core concept. More information about the MAPs recommendations for this measure is available at: http://www.qualityforum.org/Setting_Priorities/Partnership/MAP_Final_Reports.aspx.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-12; N-3; A-0

CSAC Decision: Approved for endorsement

8. Board of Directors Review: Yes (July 22, 2015)

Board Decision: Ratified for endorsement

9. Appeals

An appeal was received on this measure. NQF determined the rationale for the appeal had already been discussed at the Standing Committee, CSAC, and Board levels and thus was not further adjudicated.

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

Submission | Specifications

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

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

Denominator Statement: Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare beneficiaries, are not independent on all of the self-care activities at the time of admission, and have complete stays.

Exclusions: This quality measure has 6 exclusion criteria:

1) Patients with incomplete stays.

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

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

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

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

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

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for children.

5) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay.

6) Patients who are not Medicare beneficiaries.

Patients not covered by the Medicare program.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services (CMS)

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-15**; **N-1**; 1b. Performance Gap: **H-2**; **M-12**; **L-1**; **I-1;** 1c. High Priority: **H-9**; **M-6**; **L-1**; **I-0**

Rationale:

- The Committee noted that the measure is proposed for use for Medicare only, and felt that this limits the use of the measure and potentially introduces duplication of efforts if using multiple tools for differing payer populations.
- The Committee requested clarification on the intent of the measure and if it was a reflection of the care in the IRF or how the patient was prepare for integration back into the community. Specifically, they wanted to know if there is a connection between how a patient is doing at discharge and how they will do in the community. The developer indicated that information was provided in the supplemental information specific to the evidence behind the measure. CMS further explained this is another attempt to standardize measurement and allow tracking of patients as they traverse the care continuum and between settings. The measures allow the comparison of uniform assessment data, whether it's self-care or mobility.
- The Committee asked for the reasoning behind the proposal of four measures using essentially the same data. The developer indicated that when testing understanding of the measures with consumers, they were led to develop both a change score concept for use by facilities and then the percentage of patients that achieve a certain status to improve consumer understanding. They would have provided both in the same measure if the NQF submissions allowed. There was a suggestion that these two pairs of measures be considered "paired" measure to promote their use together. A member from the rehabilitation community indicated he would find the

information provided from both levels of measurement useful. Internally they can be used for the facility for quality improvement and externally for use with consumers.

- The Committee requested clarification of the 6-point measure scale. Based on input from an expert panel and comparison of current tools in use for similar purposes, the scale proposed was deemed the best fit for purpose. This became important because there is another tool in use by IRFs – the FIM– that is required for payment and uses a different scale; members indicated that facilities may find that confusing if there were different requirements for different programs. CMS indicated that a determination has not been made to convert to function items from the CARE Item Set [tool].

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

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

2a. Reliability: **H-0**; **M-7**; **L-2**; **I-6** (consensus not reached) 2b. Validity: **H-1**; **M-7**; **L-1**; **I-6** (consensus not reached)

UPDATED VOTES FOR 2a. Reliability: H-5; **M-10**; **L-3**; **I-0 2b. Validity: H-4**; **M-12**; **L-2**; **I-0**

<u>Rationale</u>:

- As raised with previous measures, the Committee indicated a strong interest in seeing scientific acceptability data at the facility level. A member notes that Crohnbach alphas provided are at the patient level. The developer indicated they could provide facility level error bars on splines for consideration.
- The Committee asked the developer to consider if it would be more accurate to assess change in function between admission and discharge versus coming up with an expected functional level and seeing if it could be achieved. The assumption is that the comparison to an expected score would be more game-able. The developer indicated they use every bit of data they have available and the true intent of the percent of patients measure is for consumer understandability.
- The Committee acknowledged the wealth of data provided on the reliability and validity of the CARE tool. They continued to struggle with lack of data at the facility level. The developer directed the Committee to supplemental information they provided which may have come in after the Committee reviewed each measure. Supplemental information included the relationship between discharge scores and discharge back to the community and between CARE scores and length of stay.
- The Committee noted that there was some data available, specifically generalized estimation equation data that have splines and error bars, and upon submission that data will be extremely helpful.
- NQF staff clarified that this is not a unique situation and as measures become operationalized, more data becomes available and as this is a standing committee, that data will come back to this committee for further review. There is also the understanding that with the movement toward pay for performance, Committees want more data and NQF is trying to work those issues into the process.

4. Feasibility: H-4; M-8; L-3; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

<u>Rationale</u>:

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

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3. Use and Usability: H-3; M-7; L-3; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

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

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5. Related and Competing Measures

- The Committee considered this measure to potentially compete with 2286: Functional Change: Change in Self-Care Score (UDSMR) and was asked to vote on these measures. While the Committee agreed that these measures are competing, they did not achieve consensus on whether one measure was superior. When measures 2286 and 2633 moved forward, the CSAC voted to recommend 2286, but not 2633, as the measure was deemed as competing with 2286. The Board of Directors reviewed the recommendations of the CSAC and the rationale for non-approval of 2633. The Board provided greater policy context, including the importance of the IMPACT Act of 2014 and the need for aligned measures that can be used to assess care across settings. The Board therefore directed NQF staff to return the competing IRF measures (2286 and 2633) back to the CSAC for further consideration. In addition, the Board expressed concerns regarding measures derived from proprietary versus non-proprietary instruments, and the desirability of having measures that help assess quality improvement from the patient's perspective as he/she moves among multiple sites of care. In their reconsideration vote, 92% of the CSAC voted to approve endorsement for both measures with conditions for specific update requirements.
- The Committee also considered this measure to be related to 2635: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (CMS), however, there were no recommendations for harmonization.

Standing Committee Recommendation for Endorsement: Y-10; N-5; UDPATED Y-16; N-2

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6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- One commenter noted that these are important measures but they need to be analyzed and improved as additional data is collected. Another commenter concurred with the Committee's concern with the validity and reliability of measures developed using a cross-sectional study design from a demonstration project, which did not follow the same patients across venues of care and thus limiting applicability across sites.

Committee response:

- The Committee requested additional information to allow for more comprehensive evaluation of the consensus not reached and not recommended measures. This additional information was discussed on the post-comment committee call and the Committee had an opportunity to re-vote on the applicable measures. This measure was recommended by the Committee after reviewing the additional information and the comments.

Developer response:

- Thank you for your comment. As discussed during the measure review on January 22, 2015 and documented in the Person- and Family-Centered Care Phase 2 Draft Report on page 11, the Post-Acute Care Payment Reform demonstration was a prospective cohort study, not a cross-sectional study. In addition to collecting admission and discharge data using the CARE Tool during the post-acute care stay, inpatient claims data for acute care stays prior to and following the post-acute care stay were linked to the CARE admission and discharge data. The reliability and validity of the CARE function items were presented and discussed during the January 21-22, 2015 meeting, and several committee members referred to our analysis as very good. We have also submitted provider-level reliability data to the committee for review, as requested during the January 21-22, 2015 meeting. The Improving Medicare Post Acute Care Transformation (IMPACT) Act directs the Secretary to specify quality measures on which PAC providers are required to submit standardized patient assessment data and other necessary data specified by the Secretary with respect to five quality domains, one of which is functional status, cognitive function, and changes in function and cognitive function.

- The Post-Acute Care Payment Reform Demonstration was a prospective cohort study. It was not a cross-sectional study. For the study, data were collected at admission and discharge for each patient in the study. In addition, we collected interim assessment data for patients in the cost-resource utilization segment of the study. As part of the study, we also linked the CARE admission and discharge data with acute care and post-acute care claims data in order to examine episodes of care and post discharge readmissions. (B). The items and the summed self-care and mobility scores are statistically significantly associated with several outcomes, including length of stay and discharge destination. The admission IRF self-care and IRF mobility scores were moderately correlated with length of stay with coefficients of -0.463 (p < .0001) for self-care and -0.474 (p < .001) for mobility. As expected, the summed self-care and mobility discharge scores for patients who were discharged to home were significantly different than the scores of patients discharged to a long-term care/nursing home setting. The mean (standard deviation) discharge self-care score for patients going home and to long-term care/nursing home were 34.29 (7.04) and 24.57 (9.39), respectively. For mobility, the mean (standard deviation) scores were 57.35 (15.68) and 36.57 (15.07), respectively. The patients going home had higher scores, indicating more function, as we expected. (C). The CARE function items included in the 4 IRF quality measures and 2 LTCH quality measures have undergone validity testing. In addition to the results we present in our testing documentation, the data presented above (in 3b), we examined the relationship between the current functional assessment items and the CARE items for each PAC setting. The reports describing the testing are available at: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Post-Acute-Care-Quality-Initiatives/CARE-Item-Set-and-B-CARE.html.

7. **Review 1: Consensus Standards Approval Committee (CSAC) Vote June 29, 2015: Y-10; N-5; A-0**
   Review 2: CSAC Vote September 17, 2015: Y-13; N-0; A-0

CSAC Decision: Approved for endorsement – Final Decision made September 17, 2015

8. **Review 1: Board of Directors Review: No (July 22, 2015)**
   Board Decision: The Board decided to send Measure 2633 back to the CSAC for further consideration.
   Review 2: Board of Directors Review: Yes (November 4, 2015)

Board Decision: Ratified for endorsement, with conditions for updates– Final Decision made November 4, 2015

9. Appeals

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Submission **|** Specifications

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

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

Denominator Statement: Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare beneficiaries, are not independent with all of the mobility activities at the time of admission, and have complete stays.

Exclusions: This quality measure has 5 exclusion criteria:

1) Patients with incomplete stays.

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

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

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

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

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

4) Patients younger than age 21.

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

5) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay.

6) Patients not covered by the Medicare program.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services (CMS)

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-13**; **N-0**; 1b. Performance Gap: **H-3**; **M-8**; **L-2**; **I-0;** 1c. High Priority: **H-7**; **M-6**; **L-0**; **I-0**

Rationale:

- The developer noted that IRF measures are limited to Medicare only and that the Long-Term Care Hospital Quality Reporting Program was established as a Medicare program. The Committee highlighted that there are talks about these quality measures becoming pay-for-performance measures; however, in IRFs there are currently requirements for pay for performance such as a two-percent reduction in payments for failure to submit certain quality data. The Committee questioned the connection between these specific measures and pay-for-performance measures. The developer clarified that the Inpatient Rehabilitation Quality Reporting Program assigns a penalty for failure to report, however it is not tied to a pay-for-performance program.

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

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

2a. Reliability: **H-0**; **M-10**; **L-0**; **I-3** 2b. Validity: **H-1**; **M-9**; **L-1**; **I-2**

Rationale:

- The developers utilized different types of reliability including Inter-rater reliability and patient videos reliability. Items that did not test well during the PAC demo were not included. Test-retest reliability was not performed due to the instability of the patients' function.
- The Committee expressed concerns that reliability and validity data was at the care level and not at the facility level; however, since this is an outcome measure the Committee agreed that both reliability and validity should be considered moderate.
- The developers confirmed that the data elements they are using in the risk adjustment model and that the observed or expected calculation comes from the assessment data and comorbidities from the claims data.

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4. Feasibility: H-6; M-5; L-2; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- The Committee questioned the length of time it takes to administer or grade the instrument. The developer noted that clinicians are assessing patients on the ability to complete the activities listed in the measure.

3. Use and Usability: H-6; M-5; L-0; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- The Committee had no concerns with the usability of the measure.

5. Related and Competing Measures

- The Committee considered this measure to compete with 2321: Functional Change: Change in Mobility Score (UDSMR). While the Committee agreed that these measures are competing, they did not achieve consensus on whether one measure was superior. When measures 2321 and 2634 moved forward, the CSAC voted to recommend 2321, but not 2634, as the measure was deemed as competing with 2286. The Board of Directors reviewed the recommendations of the CSAC and the rationale for non-approval of 2634. The Board provided greater policy context, including the importance of the IMPACT Act of 2014 and the need for aligned measures that can be used to assess care across settings. The Board therefore directed NQF staff to return the competing IRF measures (2321 and 2634) back to the CSAC for further consideration. In addition, the Board expressed concerns regarding measures derived from proprietary versus non-proprietary instruments, and the desirability of having measures that help assess quality improvement from the patient's perspective as he/she moves among multiple sites of care. In their reconsideration vote, 92% of the CSAC voted to approve endorsement for both measures with conditions for specific update requirements.
- The Committee also considered this measure to be related to 2636: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients (CMS), however there were no recommendations for harmonization.

Standing Committee Recommendation for Endorsement: **Y-11**; **N-2**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Measures 2634 and 2636 received two similar comments. The first commenter supported the underlying concept of the measures, stating that inpatient rehabilitation facilities need to be measured on outcomes based on functional improvement. However, the commenter suggested that an alternative measure that determines how the provider improved the patient's life (mobility) would better incentivize a change in clinical practice and associated patient-level outcomes as opposed to measure 2634 and measure 2636. Another commenter concurred with the Committee's concern with the validity and reliability of measures developed using a cross-sectional study design from a demonstration project, which did not follow the same patients across venues of care and thus limiting applicability across sites.

NQF response:

- NQF is limited to reviewing measures that are submitted for endorsement. We have added this suggestion to the measure gap list in the report. Thank you for your comment.

Developer response:

- Thank you for your comment. As discussed during the measure review on January 22, 2015 and documented in the Person- and Family-Centered Care Phase 2 Draft Report on page 11, the

Post-Acute Care Payment Reform demonstration was a prospective cohort study, not a cross-sectional study. In addition to collecting admission and discharge data using the CARE Tool during the post-acute care stay, inpatient claims data for acute care stays prior to and following the post-acute care stay were linked to the CARE admission and discharge data. The reliability and validity of the CARE function items were presented and discussed during the January 21-22, 2015 meeting, and several committee members referred to our analysis as very good. We have also submitted provider-level reliability data to the committee for review, as requested during the January 21-22, 2015 meeting. The Improving Medicare Post Acute Care Transformation (IMPACT) Act directs the Secretary to specify quality measures on which PAC providers are required to submit standardized patient assessment data and other necessary data specified by the Secretary with respect to five quality domains, one of which is functional status, cognitive function, and changes in function and cognitive function.

7. **Review 1: Consensus Standards Approval Committee (CSAC) Vote June 29, 2015: Y-10; N-5; A-0**

   Review 2: CSAC Vote September 17, 2015: Y-13; N-0; A-0

CSAC Decision: Approved for endorsement – Final Decision made September 17, 2015

8. **Review 1: Board of Directors Review: No (July 22, 2015)**

   Board Decision: The Board decided to send Measure 2634 back to the CSAC for further consideration.

   Review 2: Board of Directors Review: Yes (November 4, 2015)

   Board Decision: Ratified for endorsement, with conditions for updates– Final Decision made November 4, 2015

9. **Appeals**

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

Submission **|** Specifications

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

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

Denominator Statement: Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare beneficiaries, and are not independent on all of the self-care activities at the time of admission, and have complete stays.

Exclusions: This quality measure has 5 exclusion criteria:

1) Patients with incomplete stays.

Rationale: It can be challenging to gather accurate discharge functional status data for patients who experience incomplete stays. Patients with incomplete stays include patients who are unexpectedly

discharged to an acute care setting (Short-stay Acute Hospital, Critical Access Hospital, Inpatient Psychiatric Facility, or Long-term Care Hospital), because of a medical emergency; patients discharged to a hospice; patients discharged to another IRF; patients who die or leave an Inpatient Rehabilitation Facility (IRF) against medical advice; patients discharged directly to another IRF and patients with a length of stay less than 3 days.

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

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

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for children.

4) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay.

5) Patients not covered by the Medicare program.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services (CMS)

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-15**; **N-1**; 1b. Performance Gap **H-2**; **M-12**; **L-1**; **I-1;** 1c. High Priority: **H-9**; **M-6**; **L-1**; **I-0**

<u>Rationale</u>:

- The Committee noted that the measure is proposed for use for Medicare only, and felt that this limits the use of the measure and potentially introduces duplication of efforts if using multiple tools for differing payer populations.
- The Committee requested clarification on the intent of the measure and if it was a reflection of the care in the IRF or how the patient was prepared for integration back into the community. Specifically, they wanted to know if there is a connection between how a patient is doing at discharge and how they will do in the community. The developer indicated that information was provided in the supplemental information for the measure's evidence. CMS further explained this is another attempt to standardize measurement and allow tracking of patients as they traverse the care continuum and between settings. The measures allow the comparison of uniform outcome measurement, whether it is self-care or mobility.
- The Committee asked for the reasoning behind the proposal of four measures using essentially the same data. The developer explained that when testing understanding of the measures with consumers, they were led to develop both a change score concept for use by facilities, and then the percentage of patients that achieve a certain status to improve consumer understanding. They would have provided in the same measure if the NQF submissions allowed. There was a suggestion that these two pairs of measures be considered "paired" measure to promote their

use together. A member from the rehabilitation community indicated he would find the information provided from both levels of measurement useful; it could be used internally for the facility for quality improvement and externally with consumers.

- The Committee requested clarification of the 6-point measure scale. Based on input from an expert panel and comparison of current tools in use for similar purposes, the scale proposed was deemed the best fit for purpose. This became important because there is another tool in use by IRFs (the FIM) that is required for payment and uses a different scale; members indicated that facilities may find that confusing if there were different requirements for different programs. CMS indicated that a determination has not been made to convert to the function items from the CARE item Set [tool].

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

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

2a. Reliability: **H-0**; **M-7**; **L-2**; **I-6** (Consensus not reached) 2b. Validity: **H-1**; **M-7**; **L-1**; **I-6** (consensus not reached)

UPDATED VOTES FOR 2a. Reliability: H-5; **M-11**; **L-2**; **I-0 2b. Validity: H-3**; **M-14**; **L-0**; **I-1**

Rationale:

- As raised with previous measures, the Committee indicated a strong interest in seeing scientific acceptability data at the facility level. A member noted that Crohnbach alphas provided are at the patient level. The developer indicated they could provide facility level error bars on splines for consideration.

- The Committee asked the developer to consider if it would be more accurate to assess change in function between admission and discharge versus coming up with an expected functional level and seeing if it could be achieved. The assumption is that the comparison to an expected score would be more gameable. The developer indicated they use every bit of data they have available and the true intent of the percent of patients measure is for consumer understandability.

- The Committee acknowledged the wealth of data provided on the reliability and validity of the CARE tool. They continued to struggle with lack of data at the facility level. The developer directed the Committee to supplemental information they provided which was submitted late and may have come in after the Committee reviewed each measure. The supplemental information included the relationship between discharge scores and discharge back to the community and between CARE scores and length of stay.

- The Committee noted that there was some data available, specifically generalized estimation equation data that have splines and error bars, and upon submission will be extremely helpful.

- NQF staff clarified that this is not a unique situation and as measures become operationalized, more data becomes available and as a standing committee, that data will come back for further review. There is also the understanding that with the movement toward pay for performance, Committees want more data and NQF is trying to work those issues into the process.

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4. Feasibility: H-4; M-8; L-3; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

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

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3. Use and Usability: H-3; M-7; L-3; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

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

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5. Related and Competing Measures

- The Committee considered this measure to be related to 2633: IRF Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (CMS) and 2286: Functional Change: Change in Self-Care Score (USDMR), however there were no recommendations for harmonization.

Standing Committee Recommendation for Endorsement: **Y-10**; **N-5; UPDATED Y-17**; **N-1**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- One commenter noted that these are important measures but they need to be analyzed and improved as additional data is collected. Another commenter concurred with the Committee's concern with the validity and reliability of measures developed using a cross-sectional study design from a demonstration project, which did not follow the same patients across venues of care and thus limiting applicability across sites.

Committee response:

- The Committee requested additional information to allow for more comprehensive evaluation of the consensus not reached and not recommended measures. This additional information was discussed on the post-comment committee call and the Committee had an opportunity to re-vote on the applicable measures. This measure was recommended by the Committee after reviewing the additional information and the comments.

Developer response:

- Thank you for your comment. As discussed during the measure review on January 22, 2015 and documented in the Person- and Family-Centered Care Phase 2 Draft Report on page 11, the Post-Acute Care Payment Reform demonstration was a prospective cohort study, not a cross-sectional study. In addition to collecting admission and discharge data using the CARE Tool during the post-acute care stay, inpatient claims data for acute care stays prior to and following the post-acute care stay were linked to the CARE admission and discharge data. The reliability and validity of the CARE function items were presented and discussed during the January 21-22, 2015 meeting, and several committee members referred to our analysis as very good. We have also submitted provider-level reliability data to the committee for review, as requested during the January 21-22, 2015 meeting. The Improving Medicare Post Acute Care Transformation (IMPACT) Act directs the Secretary to specify quality measures on which PAC providers are required to submit standardized patient assessment data and other necessary data specified by the Secretary with respect to five quality domains, one of which is functional status, cognitive function, and changes in function and cognitive function.

- The Post-Acute Care Payment Reform Demonstration was a prospective cohort study. It was not a cross-sectional study. For the study, data were collected at admission and discharge for each patient in the study. In addition, we collected interim assessment data for patients in the cost-resource utilization segment of the study. As part of the study, we also linked the CARE admission and discharge data with acute care and post-acute care claims data in order to examine episodes of care and post discharge readmissions. (B). The items and the summed self-care and mobility scores are statistically significantly associated with several outcomes, including length of stay and discharge destination. The admission IRF self-care and IRF mobility scores were moderately correlated with length of stay with coefficients of -0.463 (p < .0001) for self-care and -0.474 (p < .001) for mobility. As expected, the summed self-care and mobility discharge scores for patients who were discharged to home were significantly different than the scores of patients discharged to a long-term care/nursing home setting. The mean (standard deviation) discharge self-care score for patients going home and to long-term care/nursing home were 34.29 (7.04) and 24.57 (9.39), respectively. For mobility, the mean (standard deviation) scores were 57.35 (15.68) and 36.57 (15.07), respectively. The patients going home had higher scores, indicating more function, as we expected. (C). The CARE function items included in the 4 IRF quality measures and 2 LTCH quality measures have undergone validity testing. In addition to the results we present in our testing documentation, the data presented above (in 3b), we examined the relationship between the current functional assessment items and the CARE items for each PAC setting. The reports describing the testing are available at: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Post-Acute-Care-Quality-Initiatives/CARE-Item-Set-and-B-CARE.html.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-12; N-3; A-0

CSAC Decision: Approved for endorsement

8. Board of Directors Review: Yes (July 22, 2015)

Board Decision: Ratified for endorsement

9. Appeals:

An appeal was received on this measure. NQF determined the rationale for the appeal had already been discussed at the Standing Committee, CSAC and Board levels and thus was not further adjudicated.

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

Submission **|** Specifications

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

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

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

Exclusions: This quality measure has 4 exclusion criteria:

1) Patients with incomplete stays.

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

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

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

3) Patients younger than age 21.

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

4) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay.

5) Patients who are not Medicare beneficiaries.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility

Type of Measure: Outcome

Data Source: Electronic Clinical Data

Measure Steward: Centers for Medicare & Medicaid Services (CMS)

STANDING COMMITTEE MEETING [01/21/2015-01/22/2015]

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

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

1a. Evidence: **Y-13**; **N-0**; 1b. Performance Gap: **H-3**; **M-8**; **L-2**; **I-0;** 1c. High Priority: **H-7**; **M-6**; **L-0**; **I-0**

<u>Rationale</u>:

- The Committee highlighted that there are talks about these quality measures becoming pay-for-performance measures; however, in IRFs there are currently requirements for pay for reporting such as a two-percent reduction in payments for failure to submit certain quality data. The Committee questioned the connection between these specific measures and pay-for-performance measures. The developer clarified that the Inpatient Rehabilitation Quality Reporting Program assigns a penalty for failure to report quality data however it is not tied to a pay-for-performance program.

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

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

2a. Reliability: **H-0**; **M-10**; **L-0**; **I-3** 2b. Validity: **H-1**; **M-9**; **L-1**; **I-2**

Rationale:

- The developers utilized different types of reliability including inter-rater reliability and the use of video to assess clinician assessments. Items that did not test well during the PAC demo were not included. Test-retest reliability was not performed due to the instability of the patients' change in function.
- The Committee expressed concerns that reliability and validity data was at the scale level and the not facility level. However, since this is an outcome measure, the Committee agreed that both reliability and validity should be considered moderate.
- The developers confirmed that the data elements they are using in the risk adjustment model and the observed or expected calculation comes from the other assessment data and comorbidities from the claims data.

4. Feasibility: H-6; M-5; L-2; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- The Committee questioned the length of time it takes to administer or grade the instrument. The developer noted that clinicians are assessing patients on the ability to complete the activities listed in the measure.

3. Use and Usability: H-6; M-5; L-0; I-2

(Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)

Rationale:

- The developer noted that IRF measures are limited to Medicare only and that the Long-Term Care Hospital Quality Reporting Program was established as a Medicare program.

5. Related and Competing Measures

- The Committee considered this measure to be related to 2321: Functional Change: Change in Mobility Score and 2634: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients. There were no recommendations for harmonization.

Standing Committee Recommendation for Endorsement: **Y-11**; **N-2**

6. Public and Member Comment: March 2, 2015- March 31, 2015

Comments received:

- Measures 2634 and 2636 received two similar comments. The first commenter supported the underlying concept of the measures, stating that inpatient rehabilitation facilities need to be measured on outcomes based on functional improvement. However, the commenter suggested that an alternative measure that determines how the provider improved the patient's life

(mobility) would better incentivize a change in clinical practice and associated patient-level outcomes as opposed to measure 2634 and measure 2636. Another commenter concurred with the Committee's concern with the validity and reliability of measures developed using a cross-sectional study design from a demonstration project, which did not follow the same patients across venues of care and thus limiting applicability across sites.

NQF response:

- NQF is limited to reviewing measures that are submitted for endorsement. We have added this suggestion to the measure gap list in the report. Thank you for your comment.

Developer response:

- Thank you for your comment. As discussed during the measure review on January 22, 2015 and documented in the Person- and Family-Centered Care Phase 2 Draft Report on page 11, the Post-Acute Care Payment Reform demonstration was a prospective cohort study, not a cross-sectional study. In addition to collecting admission and discharge data using the CARE Tool during the post-acute care stay, inpatient claims data for acute care stays prior to and following the post-acute care stay were linked to the CARE admission and discharge data. The reliability and validity of the CARE function items were presented and discussed during the January 21-22, 2015 meeting, and several committee members referred to our analysis as very good. We have also submitted provider-level reliability data to the committee for review, as requested during the January 21-22, 2015 meeting. The Improving Medicare Post Acute Care Transformation (IMPACT) Act directs the Secretary to specify quality measures on which PAC providers are required to submit standardized patient assessment data and other necessary data specified by the Secretary with respect to five quality domains, one of which is functional status, cognitive function, and changes in function and cognitive function.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-11; N-4; A-0

CSAC Decision: Approved for endorsement

8. Board of Directors Review: Yes (July 22, 2015)

Board Decision: Ratified for endorsement

9. Appeals: An appeal was received on this measure. NQF determined the rationale for the appeal had already been discussed at the Standing Committee, CSAC and Board levels and thus was not further adjudicated.

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

NQF's person- and family-centered care portfolio consists of 70 measures. The Person- and Family-Centered Care Committee is responsible for 28 measures in phase 2 (*denotes phase 2 measures). The 14 measures in red (and marked with †) are newly submitted for consideration for endorsement by the Person- and Family-Centered Care Committee in 2015.

Experience of Care

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

0006   CAHPS Health Plan Survey v 4.0 - Adult questionnaire

0009   CAHPS Health Plan Survey v 3.0 children with chronic conditions supplement

0010   Young Adult Health Care Survey (YAHCS)

0011   Promoting Healthy Development Survey (PHDS)

0166   HCAHPS

0208   Family Evaluation of Hospice Care

0228   3-Item Care Transition Measure (CTM-3)

0258   CAHPS In-Center Hemodialysis Survey

0517   CAHPS® Home Health Care Survey

0691   Consumer Assessment of Health Providers and Systems (CAHPS®) Nursing Home Survey: Discharged Resident Instrument

0692   Consumer Assessment of Health Providers and Systems (CAHPS®) Nursing Home Survey: Long-Stay Resident Instrument

0693   Consumer Assessment of Health Providers and Systems (CAHPS®) Nursing Home Survey: Family Member Instrument

0725   Validated family-centered survey questionnaire for parents' and patients' experiences during inpatient pediatric hospital stay

0726   Inpatient Consumer Survey (ICS) consumer evaluation of inpatient behavioral healthcare services

1623   Bereaved Family Survey

1632   CARE - Consumer Assessments and Reports of End of Life

1741   Patient Experience with Surgical Care Based on the Consumer Assessment of Healthcare Providers and Systems (CAHPS)® Surgical Care Survey

1902   Clinicians/Groups' Health Literacy Practices Based on the CAHPS Item Set for Addressing Health Literacy

1904   Clinician/Group's Cultural Competence Based on the CAHPS® Cultural Competence Item Set

2548   Child Hospital CAHPS (HCAPHS)

Function/HRQoL

0030   Urinary Incontinence Management in Older Adults - a. Discussing urinary incontinence, b. Receiving urinary incontinence treatment – A patient reported measure

0167*   Improvement in Ambulation/locomotion

0174*   Improvement in Bathing

0175*   Improvement in Bed Transferring

0176*   Improvement in Management of Oral Medications

0177*   Improvement in Pain Interfering with Activity

0260   Assessment of Health-Related Quality of Life in Dialysis Patients

0422*   Functional Status Change for Patients with Knee Impairments

0423*   Functional Status Change for Patients with hip impairments

0424*   Functional Status Change for Patients with Foot/Ankle Impairments

0425*   Functional Status Change for Patients with Lumbar Spine Impairments

0426*   Functional Status Change for Patients with Shoulder Impairments

0427*   Functional Status Change for Patients with Elbow, Wrist or Hand Impairments

0428*   Functional Status Change for Patients with General Orthopedic Impairments

0429   Change in Basic Mobility as Measured by the AM-PAC:

0430   Change in Daily Activity Function as Measured by the AM-PAC:

0673   Physical Therapy or Nursing Rehabilitation/Restorative Care for Long-stay Patients with New Balance Problem

0685   Percent of Low Risk Residents Who Lose Control of Their Bowels or Bladder (Long-Stay)

0688*   Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)

0700   Health-Related Quality of Life in COPD Patients Before and After Pulmonary Rehabilitation

0701*   Functional Capacity in COPD Patients Before and after Pulmonary Rehabilitation

2286*† Functional Change: Change in Self Care Score (*new measure submission)

2287*† Functional Change: Change in Motor Score (*new measure submission)

2321*† Functional Change: Change in Mobility Score (*new measure submission)

2612*† CARE: Improvement in Mobility (*new measure submission)

2613*† CARE: Improvement in Self Care (*new measure submission)

2624*† Functional Outcome Assessment (*new measure submission)

2631*† Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (*new measure submission)

2632*† Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (*new measure submission)

2633*† Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients (*new measure submission)

2634*† Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients (*new measure submission)

2635*† Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (*new measure submission)

2636*† Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients (*new measure submission)

2643*† Average Change in Functional Status Following Lumbar Spine Fusion Surgery (*new measure submission)

2653*† Average Change in Functional Status Following Total Knee Replacement Surgery (*new measure submission)

Miscellaneous (Language, communication, culture, staff survey)

1821 L2: Patients Receiving Language Services Supported by Qualified Language Services Providers

1824 L1A: Screening for Preferred Spoken Language for Health Care

1888 Workforce Development Measure Derived from Workforce Development Domain of the C-CAT

1892 Individual Engagement Measure Derived from the Individual Engagement Domain of the C-CAT

1894 Cross-Cultural Communication Measure Derived from the Cross-Cultural Communication Domain of the C-CAT

1896 Language Services Measure Derived from Language Services Domain of the C-CAT

1898 Health Literacy Measure Derived from the Health Literacy Domain of the C-CAT

1901 Performance Evaluation Measure Derived from Performance Evaluation Domain of the C-CAT

1905 Leadership Commitment Measure Derived from the Leadership Commitment Domain of the C-CAT

1919 Cultural Competency Implementation Measure

Symptom/Symptom Burden (Pain)

0209 Comfortable Dying: Pain Brought to a Comfortable Level Within 48 Hours of Initial Assessment

0420 Pain Assessment Prior to Initiation of Patient Therapy

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)

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

NQF #	Title	Federal Programs: Finalized as of January 31, 2015
0167	Improvement in Ambulation/Locomotion	Home Health Quality Reporting
0174	Improvement in Bathing	Home Health Quality Reporting
0175	Improvement in Bed Transferring	Home Health Quality Reporting
0176	Improvement in Management of Oral Medications	Home Health Quality Reporting
0177	Improvement in Pain Interfering with Activity	Home Health Quality Reporting
0422	Functional Status Change for Patients with Knee Impairments	Physician Quality Reporting System (PQRS)
0423	Functional Status Change for Patients with Hip Impairments	Physician Quality Reporting System (PQRS)
0424	Functional Status Change for Patients with Foot/Ankle Impairments	Physician Quality Reporting System (PQRS)
0425	Functional Status Change for Patients with Lumbar Spine Impairments	Physician Quality Reporting System (PQRS)
0426	Functional Status Change for Patients with Shoulder Impairments	Physician Quality Reporting System (PQRS)
0427	Functional Status Change for Patients with Elbow, Wrist or Hand Impairments	Physician Quality Reporting System (PQRS)
0428	Functional Status Change for Patients with General Orthopedic Impairments	Physician Quality Reporting System (PQRS)
0688	Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)	Nursing Home Compare and Nursing Home Quality Reporting

Appendix D: Project Standing Committee and NQF Staff

STANDING COMMITTEE

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Washington, District of Columbia

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Appendix E: Implementation Comments

Comments received as of December 22, 2014.

Topic: 2612: CARE: Improvement in Mobility

Submitted by Sharmila Sandhu, American Occupational Therapy Association

The American Occupational Therapy Association (AOTA) is the national professional association representing the interests of more than 185,000 occupational therapists, students of occupational therapy, and occupational therapy assistants.

As discussed in AOTA's comments for the CARE Improvement in Self-Care Measure, we note that a statement in the proposed measure description is unclear and may be misleading; patients are not generally "admitted to a SNF from a hospital or another post-acute care setting for therapy (i.e., PT or OT)" but rather are admitted because of overall need. Every patient in a SNF regardless of their underlying diagnosis is entitled to medically necessary therapy to meet their needs to have a successful discharge. This measure seeks to identify effectiveness of therapy and thus should be applicable to all patients who receive therapy as the first sentence states.

Topic: 2613: CARE: Improvement in Self Care

Submitted by Sharmila Sandhu, American Occupational Therapy Association

The American Occupational Therapy Association (AOTA) is the national professional association representing the interests of more than 185,000 occupational therapists, students of occupational therapy, and occupational therapy assistants.

AOTA closely reviewed the CARE assessment tool (for Institutional settings) under section VI, Functional Status. Improvement in Self-Care is critical to achieving positive outcomes post-discharge from a SNF. The CARE measure proposed does not incorporate the following aspects of self-care into the CARE tool's "core self-care items" at section VI(A), which are recognized in the Occupational Therapy Framework: Domain & Process (3rd Edition, American Journal of Occupational Therapy, November/December 2008, Vol. 62, 625-683) as being critical aspects of self-care and function. We respectfully request that the following aspects be added to the Improvement in Self-Care measure:

> Personal hygiene/grooming and

> Personal device care

We are also concerned that the Improvement in Self-Care measures appears to consider self-care related movement alone and does not consider performance and cognitive elements of self-care such as sequencing, problem solving, temporal appropriateness (e.g., whether to dress for day or bed), memory, and activity planning. Further, it is notable that the Improvement in Self-Care measure does not consider or measure performance of activities of daily living, including the broader instrumental activities of daily living (IADLs) which significantly impact a patient's ability to function and live independently in the community. AOTA recommends both the inclusion of the above items from the CARE Tool in the proposed measure as well as the development of additional IADL, cognition and

performance measures that include attention to patient executive function, which has a direct impact on successful post-SNF functioning and progress.

We also note that a statement in the proposed measure description is unclear and may be misleading; patients are not generally "admitted to a SNF from a hospital or another post-acute care setting for therapy (i.e., PT or OT)" but rather are admitted because of overall need. Every patient in a SNF regardless of their underlying diagnosis is entitled to medically necessary therapy to meet their needs to have a successful discharge. This measure seeks to identify effectiveness of therapy and thus should be applicable to all patients who receive therapy as the first sentence states.

Topic: 2636: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients

Submitted by Mrs. Elizabeth Demakos

UDSMR has carefully reviewed this measure and all related materials provided as part of the measure submission and consideration process, and would like to express the following concerns related to the potential implementation of this measure:

First, we are highly concerned about the validity of the measure. The demonstration project in which the measures were developed used a cross-sectional study design, whereby patient data was collected on a single post-acute stay. There is no data (medical or functional) from the patient's acute stay, or no information on any subsequent acute or post-acute care utilization. This is problematic because aside from demonstrating the reliability of the measure (stability and consistency of items), the study design used cannot determine if the measures predict anything, such as likelihood of discharge to a community setting, resource utilization including cost of care, patient length of stay in post-acute care, patient likelihood of readmission to acute care, or appropriateness of inpatient readmission (functional gain). If it cannot be demonstrated that the measure can predict outcomes of interest, it is highly questionable as to what the proposed measures will add to the existing administrative data collection that the inpatient rehabilitation facilities are already heavily burdened with. A strong rationale with compelling supportive data is needed and has not been provided to the general public to date.

2. The risk adjustment methodology appears to have been developed from a limited data set constructed as part of the PAC PRD project. In comparison to IRF statistics reported in the March 2014 MedPAC report, the sample utilized in the development of this measure represents only 1% of all IRF Medicare cases from just 3% of all IRFs. This brings into question the measures ability to be representative of the IRF population. Some of the risk adjustment coefficients were produced on populations that are very small, as several impairment groups have less than 30 cases included. It is highly questionable how a severity adjustment methodology could be reliable or furthermore, would even be able to be produced, as many Classification and Regression Tree modeling (which was used for the analysis) recommends hundreds or thousands of cases to be considered reliable. We caution CMS and the Post-Acute Care/Long-Term Care Workgroup to carefully review the analyses as it would be unfortunate to proceed with a risk adjustment methodology that was developed from twenty or thirty patients with brain injury collected from two or three IRFs, and to use the results as a basis for outcomes reporting or perhaps reimbursement in the future.

3. Adding to the concern regarding the sample size used for the analysis, we would like to bring attention to the fact that the data set used for measure development is now between 4-6 years old and, as the previously referenced MedPAC Report shows, there have been changes within impairment populations admitted to an IRF within the past two years. In the past, orthopedic cases were among the most prevalent impairment conditions presenting to inpatient rehabilitation. At present, the number of patients with an orthopedic condition has decreased substantially and replaced with patients with neurologic impairments. The data used in the measure development does not account for this shift in patient distribution. With these concerns about the applicability to the current IRF population, we question the measure's ability to add value to the IRF program measure set as well as the measure's ability to improve patient outcomes.

4. We are concerned about the measure being constructed with functional items that are very similar or bordering on duplicative in nature to items that are currently assessed as part of the IRF-PAI for payment purposes. As was noted above, this measure utilized data from the PAC PRD project, which was tasked with identifying items (functional, medical or otherwise) for utilization in a potential post-acute care standardized assessment instrument. To date, these functional items that were identified as part of the PAC PRD project have not been approved for use as part of a standardized assessment instrument within the IRF population, and the research has not supplied evidence to suggest that these functional items provide any additional value or predictability as it pertains to IRF outcomes. Additionally, because these items may be considered similar or duplicative in nature to FIM Instrument items currently assessed in the IRF, we are concerned about the burden of collection and reporting of this measure, as well as the potential for impacting the current IRF-PAI data utilized for payment as part of the IRF PPS. Implementation of this individual measure would require the collection of an additional 15 functional items which utilize a different rating scale and assessment time frame than is currently utilized by IRFs. We believe that the time required assessing the patients on both the current functional items for payment (in IRF-PAI) and proposed functional items for 'quality' will take away from time to be spent on actual patient care, and could negatively impact patient outcomes. As a result, we believe that this would place an undue burden for data collection and reporting on IRFs, of a measure that is very similar to existing items already collected and have not demonstrated any improvement, greater predictability of outcomes or any added value for patients or the IRFs. In other words, how is the proposed measure going to improve patient outcomes over what is presently in place? It is respected that improvement in measurement or the collection of data that has not previously been collected is warranted, but demonstrating the extent of improvement is needed. Otherwise, adding measures may have the opposite effect of what was intended as data may become unreliable or, as mentioned above, clinicians are spending more time completing paperwork and less time providing patient care and rehabilitation.

UDSMR believes that any quality measures used in the inpatient rehabilitation setting must take into account the overriding goal of rehabilitation, which is to decrease the burden of care among individuals requiring rehabilitation and, by doing so, allow the patients to return to a community setting. UDSMR urges CMS and the Person and Family Centered Care Standing Committee to carefully consider the limitations inherent in the measures under consideration.

Topic: 2635: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients

Submitted by Mrs. Elizabeth Demakos

We would like to thank the NQF Person and Family Centered Care Standing Committee for this opportunity to provide feedback regarding the IRF Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (S2635) measure.

UDSMR has carefully reviewed this measure and all related materials provided as part of the measure submission and consideration process, and would like to express the following concerns related to the potential implementation of this measure:

First, we are highly concerned about the validity of the measure. The demonstration project in which the measures were developed used a cross-sectional study design, whereby patient data was collected on a single post-acute stay. There is no data (medical or functional) from the patient's acute stay, or no information on any subsequent acute or post-acute care utilization. This is problematic because aside from demonstrating the reliability of the measure (stability and consistency of items), the study design used cannot determine if the measures predict anything, such as likelihood of discharge to a community setting, resource utilization including cost of care, patient length of stay in post-acute care, patient likelihood of readmission to acute care, or appropriateness of inpatient readmission (functional gain). If it cannot be demonstrated that the measure can predict outcomes of interest, it is highly questionable as to what the proposed measures will add to the existing administrative data collection that the inpatient rehabilitation facilities are already heavily burdened with. A strong rationale with compelling supportive data is needed and has not been provided to the general public to date.

2. The risk adjustment methodology appears to have been developed from a limited data set constructed as part of the PAC PRD project. In comparison to IRF statistics reported in the March 2014 MedPAC report, the sample utilized in the development of this measure represents only 1% of all IRF Medicare cases from just 3% of all IRFs. This brings into question the measures ability to be representative of the IRF population. Some of the risk adjustment coefficients were produced on populations that are very small, as several impairment groups have less than 30 cases included. It is highly questionable how a severity adjustment methodology could be reliable or furthermore, would even be able to be produced, as many Classification and Regression Tree modeling (which was used for the analysis) recommends hundreds or thousands of cases to be considered reliable. We caution CMS and the Post-Acute Care/Long-Term Care Workgroup to carefully review the analyses as it would be unfortunate to proceed with a risk adjustment methodology that was developed from twenty or thirty patients with brain injury collected from two or three IRFs, and to use the results as a basis for outcomes reporting or perhaps reimbursement in the future.

3. Adding to the concern regarding the sample size used for the analysis, we would like to bring attention to the fact that the data set used for measure development is now between 4-6 years old and, as the previously referenced MedPAC Report shows, there have been changes within impairment populations admitted to an IRF within the past two years. In the past, orthopedic cases were among the most prevalent impairment conditions presenting to inpatient rehabilitation. At present, the number of patients with an orthopedic condition has decreased substantially and replaced with patients with

neurologic impairments. The data used in the measure development does not account for this shift in patient distribution. With these concerns about the applicability to the current IRF population, we question the measure's ability to add value to the IRF program measure set as well as the measure's ability to improve patient outcomes.

4. We are concerned about the measure being constructed with functional items that are very similar or bordering on duplicative in nature to items that are currently assessed as part of the IRF-PAI for payment purposes. As was noted above, this measure utilized data from the PAC PRD project, which was tasked with identifying items (functional, medical or otherwise) for utilization in a potential post-acute care standardized assessment instrument. To date, these functional items that were identified as part of the PAC PRD project have not been approved for use as part of a standardized assessment instrument within the IRF population, and the research has not supplied evidence to suggest that these functional items provide any additional value or predictability as it pertains to IRF outcomes. Additionally, because these items may be considered similar or duplicative in nature to FIM Instrument items currently assessed in the IRF, we are concerned about the burden of collection and reporting of this measure, as well as the potential for impacting the current IRF-PAI data utilized for payment as part of the IRF PPS. Implementation of this individual measure would require the collection of an additional 7 functional items which utilize a different rating scale and assessment time frame than is currently utilized by IRFs. We believe that the time required assessing the patients on both the current functional items for payment (in IRF-PAI) and proposed functional items for 'quality' will take away from time to be spent on actual patient care, and could negatively impact patient outcomes.   As a result, we believe that this would place an undue burden for data collection and reporting on IRFs, of a measure that is very similar to existing items already collected and have not demonstrated any improvement, greater predictability of outcomes or any added value for patients or the IRFs. In other words, how is the proposed measure going to improve patient outcomes over what is presently in place? It is respected that improvement in measurement or the collection of data that has not previously been collected is warranted, but demonstrating the extent of improvement is needed. Otherwise, adding measures may have the opposite effect of what was intended as data may become unreliable or, as mentioned above, clinicians are spending more time completing paperwork and less time providing patient care and rehabilitation.

UDSMR believes that any quality measures used in the inpatient rehabilitation setting must take into account the overriding goal of rehabilitation, which is to decrease the burden of care among individuals requiring rehabilitation and, by doing so, allow the patients to return to a community setting. UDSMR urges CMS and the Person and Family Centered Care Standing Committee to carefully consider the limitations inherent in the measures under consideration.

Topic: 2634: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

Submitted by Mrs. Elizabeth Demakos

We would like to thank the NQF Person and Family Centered Care Standing Committee for this opportunity to provide feedback regarding the IRF Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients (S2634) measure.

UDSMR has carefully reviewed this measure and all related materials provided as part of the measure submission and consideration process, and would like to express the following concerns related to the potential implementation of this measure:

First, we are highly concerned about the validity of the measure. The demonstration project in which the measures were developed used a cross-sectional study design, whereby patient data was collected on a single post-acute stay. There is no data (medical or functional) from the patient's acute stay, or no information on any subsequent acute or post-acute care utilization. This is problematic because aside from demonstrating the reliability of the measure (stability and consistency of items), the study design used cannot determine if the measures predict anything, such as likelihood of discharge to a community setting, resource utilization including cost of care, patient length of stay in post-acute care, patient likelihood of readmission to acute care, or appropriateness of inpatient readmission (functional gain). If it cannot be demonstrated that the measure can predict outcomes of interest, it is highly questionable as to what the proposed measures will add to the existing administrative data collection that the inpatient rehabilitation facilities are already heavily burdened with. A strong rationale with compelling supportive data is needed and has not been provided to the general public to date.

2. The risk adjustment methodology appears to have been developed from a limited data set constructed as part of the PAC PRD project. In comparison to IRF statistics reported in the March 2014 MedPAC report, the sample utilized in the development of this measure represents only 1% of all IRF Medicare cases from just 3% of all IRFs. This brings into question the measures ability to be representative of the IRF population. Some of the risk adjustment coefficients were produced on populations that are very small, as several impairment groups have less than 30 cases included. It is highly questionable how a severity adjustment methodology could be reliable or furthermore, would even be able to be produced, as many Classification and Regression Tree modeling (which was used for the analysis) recommends hundreds or thousands of cases to be considered reliable. We caution CMS and the Post-Acute Care/Long-Term Care Workgroup to carefully review the analyses as it would be unfortunate to proceed with a risk adjustment methodology that was developed from twenty or thirty patients with brain injury collected from two or three IRFs, and to use the results as a basis for outcomes reporting or perhaps reimbursement in the future.

3. Adding to the concern regarding the sample size used for the analysis, we would like to bring attention to the fact that the data set used for measure development is now between 4-6 years old and, as the previously referenced MedPAC Report shows, there have been changes within impairment populations admitted to an IRF within the past two years. In the past, orthopedic cases were among the most prevalent impairment conditions presenting to inpatient rehabilitation. At present, the number of patients with an orthopedic condition has decreased substantially and replaced with patients with neurologic impairments. The data used in the measure development does not account for this shift in patient distribution. With these concerns about the applicability to the current IRF population, we question the measure's ability to add value to the IRF program measure set as well as the measure's ability to improve patient outcomes.

4. We are concerned about the measure being constructed with functional items that are very similar or bordering on duplicative in nature to items that are currently assessed as part of the IRF-PAI for payment purposes. As was noted above, this measure utilized data from the PAC PRD project, which

was tasked with identifying items (functional, medical or otherwise) for utilization in a potential post-acute care standardized assessment instrument. To date, these functional items that were identified as part of the PAC PRD project have not been approved for use as part of a standardized assessment instrument within the IRF population, and the research has not supplied evidence to suggest that these functional items provide any additional value or predictability as it pertains to IRF outcomes. Additionally, because these items may be considered similar or duplicative in nature to FIM Instrument items currently assessed in the IRF, we are concerned about the burden of collection and reporting of this measure, as well as the potential for impacting the current IRF-PAI data utilized for payment as part of the IRF PPS. Implementation of this individual measure would require the collection of an additional 15 functional items which utilize a different rating scale and assessment time frame than is currently utilized by IRFs. We believe that the time required assessing the patients on both the current functional items for payment (in IRF-PAI) and proposed functional items for 'quality' will take away from time to be spent on actual patient care, and could negatively impact patient outcomes. As a result, we believe that this would place an undue burden for data collection and reporting on IRFs, of a measure that is very similar to existing items already collected and have not demonstrated any improvement, greater predictability of outcomes or any added value for patients or the IRFs. In other words, how is the proposed measure going to improve patient outcomes over what is presently in place? It is respected that improvement in measurement or the collection of data that has not previously been collected is warranted, but demonstrating the extent of improvement is needed. Otherwise, adding measures may have the opposite effect of what was intended as data may become unreliable or, as mentioned above, clinicians are spending more time completing paperwork and less time providing patient care and rehabilitation.

UDSMR believes that any quality measures used in the inpatient rehabilitation setting must take into account the overriding goal of rehabilitation, which is to decrease the burden of care among individuals requiring rehabilitation and, by doing so, allow the patients to return to a community setting. UDSMR urges CMS and the Person and Family Centered Care Standing Committee to carefully consider the limitations inherent in the measures under consideration.

Topic: 2633: Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients

Submitted by Mrs. Elizabeth Demakos

We would like to thank the NQF Person and Family Centered Care Standing Committee for this opportunity to provide feedback regarding the IRF Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients (S2633) measure.

UDSMR has carefully reviewed this measure and all related materials provided as part of the measure submission and consideration process, and would like to express the following concerns related to the potential implementation of this measure:

First, we are highly concerned about the validity of the measure. The demonstration project in which the measures were developed used a cross-sectional study design, whereby patient data was collected on a single post-acute stay. There is no data (medical or functional) from the patient's acute stay, or no information on any subsequent acute or post-acute care utilization. This is problematic because aside

from demonstrating the reliability of the measure (stability and consistency of items), the study design used cannot determine if the measures predict anything, such as likelihood of discharge to a community setting, resource utilization including cost of care, patient length of stay in post-acute care, patient likelihood of readmission to acute care, or appropriateness of inpatient readmission (functional gain). If it cannot be demonstrated that the measure can predict outcomes of interest, it is highly questionable as to what the proposed measures will add to the existing administrative data collection that the inpatient rehabilitation facilities are already heavily burdened with. A strong rationale with compelling supportive data is needed and has not been provided to the general public to date.

2. The risk adjustment methodology appears to have been developed from a limited data set constructed as part of the PAC PRD project. In comparison to IRF statistics reported in the March 2014 MedPAC report, the sample utilized in the development of this measure represents only 1% of all IRF Medicare cases from just 3% of all IRFs. This brings into question the measures ability to be representative of the IRF population. Some of the risk adjustment coefficients were produced on populations that are very small, as several impairment groups have less than 30 cases included. It is highly questionable how a severity adjustment methodology could be reliable or furthermore, would even be able to be produced, as many Classification and Regression Tree modeling (which was used for the analysis) recommends hundreds or thousands of cases to be considered reliable. We caution CMS and the Post-Acute Care/Long-Term Care Workgroup to carefully review the analyses as it would be unfortunate to proceed with a risk adjustment methodology that was developed from twenty or thirty patients with brain injury collected from two or three IRFs, and to use the results as a basis for outcomes reporting or perhaps reimbursement in the future.

3. Adding to the concern regarding the sample size used for the analysis, we would like to bring attention to the fact that the data set used for measure development is now between 4-6 years old and, as the previously referenced MedPAC Report shows, there have been changes within impairment populations admitted to an IRF within the past two years. In the past, orthopedic cases were among the most prevalent impairment conditions presenting to inpatient rehabilitation. At present, the number of patients with an orthopedic condition has decreased substantially and replaced with patients with neurologic impairments. The data used in the measure development does not account for this shift in patient distribution. With these concerns about the applicability to the current IRF population, we question the measure's ability to add value to the IRF program measure set as well as the measure's ability to improve patient outcomes.

4. We are concerned about the measure being constructed with functional items that are very similar or bordering on duplicative in nature to items that are currently assessed as part of the IRF-PAI for payment purposes. As was noted above, this measure utilized data from the PAC PRD project, which was tasked with identifying items (functional, medical or otherwise) for utilization in a potential post-acute care standardized assessment instrument. To date, these functional items that were identified as part of the PAC PRD project have not been approved for use as part of a standardized assessment instrument within the IRF population, and the research has not supplied evidence to suggest that these functional items provide any additional value or predictability as it pertains to IRF outcomes. Additionally, because these items may be considered similar or duplicative in nature to FIM Instrument items currently assessed in the IRF, we are concerned about the burden of collection and reporting of this measure, as well as the potential for impacting the current IRF-PAI data utilized for payment as part

of the IRF PPS. Implementation of this individual measure would require the collection of an additional 7 functional items which utilize a different rating scale and assessment time frame than is currently utilized by IRFs. We believe that the time required assessing the patients on both the current functional items for payment (in IRF-PAI) and proposed functional items for 'quality' will take away from time to be spent on actual patient care, and could negatively impact patient outcomes.   As a result, we believe that this would place an undue burden for data collection and reporting on IRFs, of a measure that is very similar to existing items already collected and have not demonstrated any improvement, greater predictability of outcomes or any added value for patients or the IRFs. In other words, how is the proposed measure going to improve patient outcomes over what is presently in place? It is respected that improvement in measurement or the collection of data that has not previously been collected is warranted, but demonstrating the extent of improvement is needed. Otherwise, adding measures may have the opposite effect of what was intended as data may become unreliable or, as mentioned above, clinicians are spending more time completing paperwork and less time providing patient care and rehabilitation.

UDSMR believes that any quality measures used in the inpatient rehabilitation setting must take into account the overriding goal of rehabilitation, which is to decrease the burden of care among individuals requiring rehabilitation and, by doing so, allow the patients to return to a community setting. UDSMR urges CMS and the Person and Family Centered Care Standing Committee to carefully consider the limitations inherent in the measures under consideration.

4. We are concerned about the measure being constructed with functional items that are very similar or bordering on duplicative in nature to items that are currently assessed as part of the IRF-PAI for payment purposes. As was noted above, this measure utilized data from the PAC PRD project, which was tasked with identifying items (functional, medical or otherwise) for utilization in a potential post-acute care standardized assessment instrument. To date, these functional items that were identified as part of the PAC PRD project have not been approved for use as part of a standardized assessment instrument within the IRF population, and the research has not supplied evidence to suggest that these functional items provide any additional value or predictability as it pertains to IRF outcomes. Additionally, because these items may be considered similar or duplicative in nature to FIM Instrument items currently assessed in the IRF, we are concerned about the burden of collection and reporting of this measure, as well as the potential for impacting the current IRF-PAI data utilized for payment as part of the IRF PPS. Implementation of this individual measure would require the collection of an additional 7 functional items which utilize a different rating scale and assessment time frame than is currently utilized by IRFs. We believe that the time required assessing the patients on both the current functional items for payment (in IRF-PAI) and proposed functional items for 'quality' will take away from time to be spent on actual patient care, and could negatively impact patient outcomes.   As a result, we believe that this would place an undue burden for data collection and reporting on IRFs, of a measure that is very similar to existing items already collected and have not demonstrated any improvement, greater predictability of outcomes or any added value for patients or the IRFs. In other words, how is the proposed measure going to improve patient outcomes over what is presently in place? It is respected that improvement in measurement or the collection of data that has not previously been collected is warranted, but demonstrating the extent of improvement is needed. Otherwise, adding measures may have the opposite effect of what was intended as data may become unreliable or, as mentioned above,

clinicians are spending more time completing paperwork and less time providing patient care and rehabilitation.

UDSMR believes that any quality measures used in the inpatient rehabilitation setting must take into account the overriding goal of rehabilitation, which is to decrease the burden of care among individuals requiring rehabilitation and, by doing so, allow the patients to return to a community setting. UDSMR urges CMS and the Person and Family Centered Care Standing Committee to carefully consider the limitations inherent in the measures under consideration.

Appendix F: Measure Specifications

0167 Improvement in Ambulation/Locomotion

STATUS

Endorsed

STEWARD

Centers for Medicare & Medicaid Services

DESCRIPTION

Percentage of home health episodes of care during which the patient improved in ability to ambulate.

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data The measure is calculated based on the data obtained from the Home Health Outcome and Assessment Information Set (OASIS-C), which is a core standard assessment data set that home health agencies integrate into their own patient-specific, comprehensive assessment to identify each patient´s need for home care. The data set is the foundation for valid and reliable information for patient assessment, care planning, and service delivery in the home health setting, as well as for the home health quality assessment and performance improvement program. Home health agencies are required to collect OASIS data on all non-maternity Medicare/Medicaid patients, 18 or over, receiving skilled services. Data are collected at specific time points (admission, resumption of care after inpatient stay, recertification every 60 days that the patient remains in care, transfer, and at discharge). HH agencies are required to encode and transmit patient OASIS data to the state OASIS repositories. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data to the state OASIS repositories. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data submissions, as well as comparative state and national aggregate reports, case mix reports, and potentially avoidable event reports. CMS regularly collects OASIS data from the states for storage in the national OASIS repository, and makes measures based on these data (including the Improvement in Ambulation/Locomotion measure) available to consumers and to the general public through the Medicare Home Health Compare website.

Available at measure-specific web page URL identified in S.1 Attachment OASISQM_data_dictionary_and_Ambulation_Risk_Adj.xls

LEVEL

Facility

SETTING

Home Health

TIME WINDOW

CMS systems report data on episodes that end within a rolling 12 month period, updated quarterly.

NUMERATOR STATEMENT

Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in ambulation/locomotion at discharge than at start (or resumption) of care.

NUMERATOR DETAILS

The number of home health episodes of care from the denominator in which the value recorded for the OASIS-C item M1860 ("Ambulation/Locomotion") on the discharge assessment is numerically less than the value recorded on the start (or resumption) of care assessment, indicating less impairment at discharge compared to start of care.

DENOMINATOR STATEMENT

Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

DENOMINATOR DETAILS

All home health episodes of care (except those defined in the denominator exclusions) in which the patient was eligible to improve in walking or moving around (i.e., were not at the optimal level of health status according to the "Ambulation/Locomotion" OASIS-C item M1860).

EXCLUSIONS

All home health episodes where the value recorded for the OASIS-C item M1860 ("Ambulation/Locomotion") on the start (or resumption) of care assessment indicates minimal or no impairment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death at home, or the episode is covered by the generic exclusions.

EXCLUSION DETAILS

Home health episodes of care for which (1) at start/resumption of care, OASIS item M1860 "Ambulation/ Locomotion" = 0, indicating that the patient was able to ambulate independently; OR (2) at start/resumption of care, OASIS item M1700 "Cognitive Functioning" is 4, or M1710 "When Confused" is NA, or M1720 "When Anxious" is NA, indicating the patient is non-responsive; OR (3) The patient did not have a discharge assessment because the episode of care ended in transfer to inpatient facility or death at home; OR (4) All episodes covered by the generic exclusions:

a. Pediatric home health patients - less than 18 years of age.

b. Home health patients receiving maternity care only.

c. Home health clients receiving non-skilled care only.

d. Home health patients for which neither Medicare or Medicaid is a payment source.

e. The episode of care does not end during the reporting period.

f. Small and new agencies and rare conditions - the publicly-reported data on CMS' Home Health Compare web site also repress cells with fewer than 20 observations, and reports for home health agencies in operation less than six months.

Statistical risk model

The risk adjustment methodology used is based on logistic regression analysis which results in a statistical prediction model for each outcome measure. For each home health agency patient who is included in the denominator of the outcome measure, the model is used to calculate the expected probability that the patient will experience the outcome. Logistic regression models for risk adjustment were developed using three million episodes of care based on OASIS national repository data from assessments submitted between January 1, 2010 and September 30, 2010. Details of the model and a table showing all variables are available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/downloads/HHQILogisticRegressionModelsforRiskAdjustmentUpdated.pdf

Also see S. 15a

Provided in response box S.15a

STRATIFICATION

Not Applicable

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

Data from matched pairs of OASIS assessments for each episode of care (start or resumption of care paired with a discharge or transfer to inpatient facility) are used to calculate individual patient outcome measures.

Target population: All episodes of care ending during a specified time interval (usually a period of twelve months), subject to generic and measure-specific exclusions.

Generic exclusions: Episodes of care ending in discharge due to death (M0100_ASSMT_REASON[2] = 08).

Measure specific exclusions: Episodes of care ending in transfer to inpatient facility (M0100_ASSMT_REASON[2] IN (06,07), patients who are comatose or non-responsive at start/resumption of care (M1700_COG_FUNCTION[1] = 04 OR M1710_WHEN_CONFUSED[1] = NA OR M1720_WHEN_ANXIOUS[1] = NA), and patients independent in ambulation/locomotion at start/resumption of care (M1860_CRNT_AMBLTN[1] = 00).

Cases meeting the target outcome: Patient is more independent in ambulation/mobility at discharge than at start/resumption of care (M1860_CRNT_AMBLTN[2] < M1860_CRNT_AMBLTN[1]).

Aggregating Data: The observed outcome measure value for each HHA is calculated as the percentage of cases meeting the target population (denominator) criteria that meet the target outcome (numerator) criteria.

Risk Adjustment: The expected probability for a patient is calculated using the following formula:

E(x)=1/(1+e-(a+sum(bi x i)))

Where:

E(x) = expected probability of achieving outcome x

a = constant parameter listed in the model documentation

bi = coefficient for risk factor i in the model documentation

xi = value of risk factor i for this patient

Expected probabilities for all patients included in the measure denominator are then averaged to derive an expected outcome value for the agency. This expected value is then used, together with the observed (unadjusted) outcome value and the expected value for the national population of home health agency patients for the same data collection period, to calculated a risk-adjusted outcome value for the home health agency. The formula for the adjusted value of the outcome measure is as follows:

X(A ra) = X(A obs) + X(N exp) − X(A exp)

Where:

X(A r a) = Agency risk-adjusted outcome measure value

X(A obs) = Agency observed outcome measure value

X(A exp) = Agency expected outcome measure value

X(N exp) = National expected outcome measure value

Note that OASIS data items are referred to using field names specified in OASIS Data Submission Specifications published by CMS. For additional details, please consult the technical specifications available at:

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIQualityMeasures.htm No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: see 5b.1.

5b.1 If competing, why superior or rationale for additive value: A search using the NQF QPS for outcome measures reporting rates of improvement in Ambulation/Locomotion indicated there are no other endorsed measures that report on Improvement in Ambulation in the Home Health population. Change in Basic Mobility as Measured by the AM-PAC (NQF #0429) is a measure of reported changes in patient functioning in transfers, walking, wheelchair skills, stairs, bend/lift/ and carrying tasks as measured by the Activity Measure for Post Acute Care (AM-PAC). The AM-PAC is a functional status assessment instrument developed specifically for use in facility and community dwelling post acute care (PAC) patients. However, these measures are focused on overall mobility (not just ambulation/locomotion), and are calculated using data that are not currently collected in the home health setting.

0174 Improvement in Bathing

STATUS

Endorsed

STEWARD

Centers for Medicare & Medicaid Services

DESCRIPTION

Percentage of home health episodes of care during which the patient got better at bathing self.

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data The measure is calculated based on the data obtained from the Home Health Outcome and Assessment Information Set (OASIS-C), which is a core standard assessment data set that home health agencies integrate into their own patient-specific, comprehensive assessment to identify each patient´s need for home care. The data set is the foundation for valid and reliable information for patient assessment, care planning, and service delivery in the home health setting, as well as for the home health quality assessment and performance improvement program. Home health agencies are required to collect OASIS data on all non-maternity Medicare/Medicaid patients, 18 or over, receiving skilled services. Data are collected at specific time points (admission, resumption of care after inpatient stay, recertification every 60 days that the patient remains in care, transfer, and at discharge). HH agencies are required to encode and transmit patient OASIS data to the state OASIS repositories. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data to the state OASIS repositories. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data submissions, as well as comparative state and national aggregate reports, case mix reports, and potentially avoidable event reports. CMS regularly collects OASIS data from the states for storage in the national OASIS repository, and makes measures based on these data (including the Improvement in Bathing measure) available to consumers and to the general public through the Medicare Home Health Compare website.

Available at measure-specific web page URL identified in S.1 Attachment OASISQM_data_dictionary_and_Bathing_Risk_Adj.xls

LEVEL

Facility

SETTING

Home Health

TIME WINDOW

CMS systems report data on episodes that end within a rolling 12 month period, updated quarterly.

NUMERATOR STATEMENT

Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in bathing at discharge than at start (or resumption) of care.

NUMERATOR DETAILS

Number of home health episodes from the denominator in which the value recorded for the OASIS-C item M1830 ("Bathing") on the discharge assessment is numerically less than the value recorded on the start (or resumption) of care assessment, indicating less impairment at discharge compared to start of care.

DENOMINATOR STATEMENT

Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

DENOMINATOR DETAILS

All home health episodes of care (except those defined in the denominator exclusions) in which the patient was eligible to improve in bathing (i.e., were not at the optimal level of health status according to the "Bathing" OASIS-C item M1830).

EXCLUSIONS

All home health episodes where at the start (or resumption) of care assessment the patient had minimal or no impairment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death at home, or was covered by the generic exclusions.Exclusion details

Home health episodes of care for which [1] at start/resumption of care OASIS item M1830 = 0, indicating the patient was able to bathe self independently; OR (2) at start/resumption of care, OASIS item M1700 "Cognitive Functioning" is 4, or M1710 "When Confused" is NA, or M1720 "When Anxious" is NA, indicating the patient is non-responsive; OR (3) The patient did not have a discharge assessment because the episode of care ended in transfer to inpatient facility or death at home; OR (4) All episodes covered by the generic exclusions -

a. Pediatric home health patients - less than 18 years of age.

b. Home health patients receiving maternity care only.

c. Home health clients receiving non-skilled care only.

d. Home health patients for which neither Medicare or Medicaid is a payment source.

e. The episode of care does not end during the reporting period.

f. Small and new agencies and rare conditions - the publicly-reported data on CMS' Home Health Compare web site also repress cells with fewer than 20 observations, and reports for home health agencies in operation less than six months.

RISK ADJUSTMENT

Statistical risk model

The risk adjustment methodology used is based on logistic regression analysis which results in a statistical prediction model for each outcome measure. For each home health agency patient who is included in the denominator of the outcome measure, the model is used to calculate the expected probability that the patient will experience the outcome. Logistic regression models for risk adjustment were developed using three million episodes of care based on OASIS national repository data from assessments submitted between January 1, 2010 and September 30, 2010. Details of the model and a table showing all variables are available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/downloads/HHQILogisticRegressionModelsforRiskAdjustmentUpdated.pdf

Also see S. 15a

Available in attached Excel or csv file at S.2b

STRATIFICATION

Not applicable

Rate/proportion better quality = higher score

Data from matched pairs of OASIS assessments for each episode of care (start or resumption of care paired with a discharge or transfer to inpatient facility) are used to calculate individual patient outcome measures.

Target population: All episodes of care ending during a specified time interval (usually a period of twelve months), subject to generic and measure-specific exclusions.

Generic exclusions: Episodes of care ending in discharge due to death (M0100_ASSMT_REASON[2] = 08).

Measure specific exclusions: Episodes of care ending in transfer to inpatient facility (M0100_ASSMT_REASON[2] IN (06,07), patients who are comatose or non-responsive at start/resumption of care (M1700_COG_FUNCTION[1] = 04 OR M1710_WHEN_CONFUSED[1] = NA OR M1720_WHEN_ANXIOUS[1] = NA), and patients independent in bathing at start/resumption of care (M1830_CRNT_BATHG[1] = 00).

Cases meeting the target outcome: Patient is more independent in bathing at discharge than at start/resumption of care (M1830_CRNT_BATHG[2] < M1830_CRNT_BATHG[1]).

Aggregating Data: The observed outcome measure value for each HHA is calculated as the percentage of cases meeting the target population (denominator) criteria that meet the target outcome (numerator) criteria.

Risk Adjustment: The expected probability for a patient is calculated using the following formula:

$E(x) = 1/(1+e^{-(a+sum(b_i \, x \, i))})$

Where:

$E(x)$ = expected probability of achieving outcome x

a = constant parameter listed in the model documentation

b_i = coefficient for risk factor i in the model documentation

x_i = value of risk factor i for this patient

Expected probabilities for all patients included in the measure denominator are then averaged to derive an expected outcome value for the agency. This expected value is then used, together with the observed (unadjusted) outcome value and the expected value for the national population of home health agency patients for the same data collection period, to calculated a risk-adjusted outcome value for the home health agency. The formula for the adjusted value of the outcome measure is as follows:

$X(A \, ra) = X(A \, obs) + X(N \, exp) - X(A \, exp)$

Where:

$X(A \, r \, a)$ = Agency risk-adjusted outcome measure value

$X(A \, obs)$ = Agency observed outcome measure value

$X(A \, exp)$ = Agency expected outcome measure value

$X(N \, exp)$ = National expected outcome measure value

Note that OASIS data items are referred to using field names specified in OASIS Data Submission Specifications published by CMS. For additional details, please consult the technical specifications available at:

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIQualityMeasures.htm No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: see 5b.1.

5b.1 If competing, why superior or rationale for additive value: A search using the NQF QPS indicated there are no other endorsed measures that report on rates of improvement in bathing in the home health population. NQF #0430 (Change in Daily Activity Function) is a measure of reported changes in patient functioning in the areas of feeding, meal preparation, hygiene, grooming, and dressing as measured by the Activity Measure for Post Acute Care (AM-PAC), a functional status assessment instrument developed specifically for use in facility and community dwelling post acute care (PAC) patients. However, the AM-PAC measure is focused on overall functioning (not just bathing), and is calculated using data that are not currently collected in the home health setting.

0175 Improvement in Bed Transferring

STATUS

Endorsed

STEWARD

Centers for Medicare & Medicaid Services

DESCRIPTION

Percentage of home health episodes of care during which the patient improved in ability to get in and out of bed.

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data The measure is calculated based on the data obtained from the Home Health Outcome and Assessment Information Set (OASIS-C), which is a core standard assessment data set that home health agencies integrate into their own patient-specific, comprehensive assessment to identify each patient´s need for home care. The data set is the foundation for valid and reliable information for patient assessment, care planning, and service delivery in the home health setting, as well as for the home health quality assessment and performance improvement program. Home health agencies are required to collect OASIS data on all non-maternity Medicare/Medicaid patients, 18 or over, receiving skilled services. Data are collected at specific time points (admission, resumption of care after inpatient stay, recertification every 60 days that the patient remains in care, transfer, and at discharge). HH agencies are required to encode and transmit patient OASIS data to the state OASIS repositories. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data to the state OASIS repositories. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data submissions, as well as comparative state and

national aggregate reports, case mix reports, and potentially avoidable event reports. CMS regularly collects OASIS data from the states for storage in the national OASIS repository, and makes measures based on these data (including the Improvement in Bed Transferring measure) available to consumers and to the general public through the Medicare Home Health Compare website.

Available at measure-specific web page URL identified in S.1 Attachment OASISQM_data_dictionary_and_Transfer_Risk_Adj.xls

LEVEL

Facility

SETTING

Home Health

TIME WINDOW

CMS systems report data on episodes that end within a rolling 12 month period, updated quarterly.

NUMERATOR STATEMENT

Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in bed transferring at discharge than at start (or resumption) of care.

NUMERATOR DETAILS

Home health episodes of care from the denominator in which the value recorded for the OASIS-C item M1850 ("Transferring") on the discharge assessment is numerically less than the value recorded on the start (or resumption) of care assessment, indicating less impairment at discharge compared to start of care.

DENOMINATOR STATEMENT

Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

DENOMINATOR DETAILS

All home health episodes of care (except those defined in the denominator exclusion) in which the patient was eligible to improve in bed transferring (i.e., were not at the optimal level of health status according to the "Transferring" OASIS-C item M1850).

EXCLUSIONS

All home health episodes where at the start (or resumption) of care assessment the patient is able to transfer independently, or the patient is non-responsive. or the episode of care ended in transfer to inpatient facility or death at home, or the episode is covered by the generic exclusions.

EXCLUSION DETAILS

Home health episodes of care for which [1] at start/resumption of care OASIS item M1850 = 0, indicating the patient was able to transfer to/from bed independently; OR (2) at start/ resumption of care, OASIS item M1700 "Cognitive Functioning" is 4, or M1710 "When Confused" is NA, or M1720 "When Anxious" is NA, indicating the patient is non-responsive; OR (3) The

patient did not have a discharge assessment because the episode of care ended in transfer to inpatient facility or death at home; OR (4) All episodes covered by the generic exclusions -

a. Pediatric home health patients - less than 18 years of age.

b. Home health patients receiving maternity care only.

c. Home health clients receiving non-skilled care only.

d. Home health patients for which neither Medicare or Medicaid is a payment source.

e. The episode of care does not end during the reporting period.

f. Small and new agencies and rare conditions - the publicly-reported data on CMS' Home Health Compare web site also repress cells with fewer than 20 observations, and reports for home health agencies in operation less than six months.

RISK ADJUSTMENT

Statistical risk model

The risk adjustment methodology used is based on logistic regression analysis which results in a statistical prediction model for each outcome measure. For each home health agency patient who is included in the denominator of the outcome measure, the model is used to calculate the expected probability that the patient will experience the outcome. Logistic regression models for risk adjustment were developed using three million episodes of care based on OASIS national repository data from assessments submitted between January 1, 2010 and September 30, 2010. Details of the model and a table showing all variables are available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/downloads/HHQILogisticRegressionModelsforRiskAdjustmentUpdated.pdf

Also see S. 15a

Available in attached Excel or csv file at S.2b

STRATIFICATION

Not Applicable

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

Data from matched pairs of OASIS assessments for each episode of care (start or resumption of care paired with a discharge or transfer to inpatient facility) are used to calculate individual patient outcome measures.

Target population: All episodes of care ending during a specified time interval (usually a period of twelve months), subject to generic and measure-specific exclusions.

Generic exclusions: Episodes of care ending in discharge due to death (M0100_ASSMT_REASON[2] = 08).

Measure specific exclusions: Episodes of care ending in transfer to inpatient facility (M0100_ASSMT_REASON[2] IN (06,07), patients who are comatose or non-responsive at start/resumption of care (M1700_COG_FUNCTION[1] = 04 OR M1710_WHEN_CONFUSED[1] = NA OR M1720_WHEN_ANXIOUS[1] = NA), and patients independent in bed transferring at start/resumption of care (M1850_CRNT_TRNSFRNG[1] = 00).

Cases meeting the target outcome: Patient is more independent in bed transferring at discharge than at start/resumption of care (M1850_CRNT_TRNSFRNG[2] < M1850_CRNT_TRNSFRNG[1]).

Aggregating Data: The observed outcome measure value for each HHA is calculated as the percentage of cases meeting the target population (denominator) criteria that meet the target outcome (numerator) criteria.

Risk Adjustment: The expected probability for a patient is calculated using the following formula:

$E(x)=1/(1+e-(a+sum(bi \times i)))$

Where:

$E(x)$ = expected probability of achieving outcome x

a = constant parameter listed in the model documentation

bi = coefficient for risk factor i in the model documentation

xi = value of risk factor i for this patient

Expected probabilities for all patients included in the measure denominator are then averaged to derive an expected outcome value for the agency. This expected value is then used, together with the observed (unadjusted) outcome value and the expected value for the national population of home health agency patients for the same data collection period, to calculated a risk-adjusted outcome value for the home health agency. The formula for the adjusted value of the outcome measure is as follows:

$X(A\ ra) = X(A\ obs) + X(N\ exp) - X(A\ exp)$

Where:

$X(A\ r\ a)$ = Agency risk-adjusted outcome measure value

$X(A\ obs)$ = Agency observed outcome measure value

$X(A\ exp)$ = Agency expected outcome measure value

$X(N\ exp)$ = National expected outcome measure value

Note that OASIS data items are referred to using field names specified in OASIS Data Submission Specifications published by CMS. For additional details, please consult the technical specifications available at:

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIQualityMeasures.htm No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: see 5b.1.

5b.1 If competing, why superior or rationale for additive value: A search using the NQF QPS indicated there are no other endorsed measures that report specifically on rates of improvement in transfer in the home health population. Change in Basic Mobility as Measured by the AM-PAC (NQF #0429) is a measure of reported changes in patient functioning as measured by the Activity Measure for Post Acute Care (AM-PAC). AM-PAC is a functional status assessment instrument developed specifically for use in facility and community dwelling post acute care (PAC) patients. The Basic Mobility domain consists of functional tasks in the following areas: transfers, walking, wheelchair skills, stairs, bend/lift/ and carrying tasks. Unlike NQF #0175 "Improvement in Transferring", the AM-PAC measure is focused on overall mobility (not just transferring), and is calculated using data that are not currently collected in the home health setting.

0176 Improvement in Management of Oral Medications

STATUS

Endorsed

STEWARD

Centers for Medicare & Medicaid Services

DESCRIPTION

Percentage of home health episodes of care during which the patient improved in ability to take their medicines correctly, by mouth.

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data The measure is calculated based on the data obtained from the Home Health Outcome and Assessment Information Set (OASIS-C), which is a core standard assessment data set that home health agencies integrate into their own patient-specific, comprehensive assessment to identify each patient´s need for home care. The data set is the foundation for valid and reliable information for patient assessment, care planning, and service delivery in the home health setting, as well as for the home health quality assessment and performance improvement program. Home health agencies are required to collect OASIS data on all non-maternity Medicare/Medicaid patients, 18 or over, receiving skilled services. Data are collected at specific time points (admission, resumption of care after inpatient stay, recertification every 60 days that the patient remains in care, transfer, and at discharge). HH agencies are required to encode and transmit patient OASIS data to the state OASIS repositories. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data to the state OASIS repositories. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data submissions, as well as comparative state and national aggregate reports, case mix reports, and potentially avoidable event reports. CMS regularly collects OASIS data from the states for storage in the national OASIS repository, and makes measures based on these data (including the Improvement in Management of Oral Medications measure) available to consumers and to the general public through the Medicare Home Health Compare website.

Available at measure-specific web page URL identified in S.1 Attachment OASISQM_data_dictionary_and_Oral_Meds_Risk_Adj.xls

LEVEL

Facility

SETTING

Home Health

TIME WINDOW

CMS systems report data on episodes that end within a rolling 12 month period, updated quarterly.

NUMERATOR STATEMENT

Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in taking oral medications at discharge than at start (or resumption) of care.

NUMERATOR DETAILS

Home health episodes of care from the denominator in which the value recorded for the OASIS-C item M2020 ("Management of Oral Medications") on the discharge assessment is numerically less than the value recorded on the start (or resumption) of care assessment, indicating less impairment at discharge compared to start of care.

DENOMINATOR STATEMENT

Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

DENOMINATOR DETAILS

All home health episodes of care (except those defined in the denominator exclusions) in which the patient was eligible to improve in taking medications correctly; i.e., were not at the optimal level of health status according to the "Management of Oral Medications" (OASIS-C item M2020, response 0, which states, "Able to independently take the correct oral medication(s) and proper dosage(s) at the correct time").

EXCLUSIONS

All home health episodes where at start (or resumption) of care the patient is not taking any oral medications or has minimal or no impairment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death, or the episode is covered by the generic exclusions.

EXCLUSION DETAILS

Home health episodes of care for which [1] at start/resumption of care OASIS item M2020 = 0, indicating the patient was able to independently take the correct oral medication(s) and proper dosage(s) at the correct time , OR (2) at start/ resumption of care or at discharge, OASIS item M2020 = NA or blank, indicating the patient is not taking any oral medications; OR (3) at start/resumption of care, OASIS item M1700 "Cognitive Functioning" is 4,indicating the patient is non-responsive; or M1710 "When Confused" is NA,indicating the patient is non-responsive; or M1720 "When Anxious" is NA, indicating the patient is non-responsive; OR (4) The patient did not have a discharge assessment because the episode of care ended in transfer to inpatient facility or death at home; OR (4) All episodes covered by the generic exclusions -
a. Pediatric home health patients - less than 18 years of age.
b. Home health patients receiving maternity care only.
c. Home health clients receiving non-skilled care only.
d. Home health patients for which neither Medicare or Medicaid is a payment source.
e. The episode of care does not end during the reporting period.
f. Small and new agencies and rare conditions - the publicly-reported data on CMS' Home Health Compare web site also repress cells with fewer than 20 observations, and reports for home health agencies in operation less than six months.

Statistical risk model

The risk adjustment methodology used is based on logistic regression analysis which results in a statistical prediction model for each outcome measure. For each home health agency patient who is included in the denominator of the outcome measure, the model is used to calculate the expected probability that the patient will experience the outcome. Logistic regression models for risk adjustment were developed using three million episodes of care based on OASIS national repository data from assessments submitted between January 1, 2010 and September 30, 2010. Details of the model and a table showing all variables are available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/downloads/HHQILogisticRegressionModelsforRiskAdjustmentUpdated.pdf

Also see S. 15a

Available in attached Excel or csv file at S.2b

STRATIFICATION

Not Applicable

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

Data from matched pairs of OASIS assessments for each episode of care (start or resumption of care paired with a discharge or transfer to inpatient facility) are used to calculate individual patient outcome measures.

Target population: All episodes of care ending during a specified time interval (usually a period of twelve months), subject to generic and measure-specific exclusions.

Generic exclusions: Episodes of care ending in discharge due to death (M0100_ASSMT_REASON[2] = 08).

Measure specific exclusions: Episodes of care ending in transfer to inpatient facility (M0100_ASSMT_REASON[2] IN (06,07), patients who are comatose or non-responsive at start/resumption of care (M1700_COG_FUNCTION[1] = 04 OR M1710_WHEN_CONFUSED[1] = NA OR M1720_WHEN_ANXIOUS[1] = NA), patients not taking any oral medications at start/resumption of care or discharge (M2020_CRNT_MGMT_ORAL_MDCTN[1] IS BLANK OR M2020_CRNT_MGMT_ORAL_MDCTN[1] = NA OR M2020_CRNT_MGMT_ORAL_MDCTN[2] = NA), and patients independent in management of oral medications at start/resumption of care (M2020_CRNT_MGMT_ORAL_MDCTN[1] = 00).

Cases meeting the target outcome: Patient is more independent in management of oral medications at discharge than at start/resumption of care (M2020_CRNT_MGMT_ORAL_MDCTN[2] < M2020_CRNT_MGMT_ORAL_MDCTN[1]).

Aggregating Data: The observed outcome measure value for each HHA is calculated as the percentage of cases meeting the target population (denominator) criteria that meet the target outcome (numerator) criteria.

Risk Adjustment: The expected probability for a patient is calculated using the following formula:

$E(x) = 1/(1+e-(a+sum(bi \ x \ i)))$

Where:

E(x) = expected probability of achieving outcome x

a = constant parameter listed in the model documentation

bi = coefficient for risk factor i in the model documentation

xi = value of risk factor i for this patient

Expected probabilities for all patients included in the measure denominator are then averaged to derive an expected outcome value for the agency. This expected value is then used, together with the observed (unadjusted) outcome value and the expected value for the national population of home health agency patients for the same data collection period, to calculated a risk-adjusted outcome value for the home health agency. The formula for the adjusted value of the outcome measure is as follows:

X(A ra) = X(A obs) + X(N exp) − X(A exp)

Where:

X(A r a) = Agency risk-adjusted outcome measure value

X(A obs) = Agency observed outcome measure value

X(A exp) = Agency expected outcome measure value

X(N exp) = National expected outcome measure value

Note that OASIS data items are referred to using field names specified in OASIS Data Submission Specifications published by CMS. For additional details, please consult the technical specifications available at:

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIQualityMeasures.htm No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: see 5b.1.

5b.1 If competing, why superior or rationale for additive value: A search using the NQF QPS for outcome measures reporting rates of improvement in medication management identified several disease-specific process measures related to medication management (e.g.; NQF #0105 Antidepressant Medication Management (AMM); NQF #1799 Medication Management for People with Asthma) but no outcome measures that report on the patient's ability to manage oral medications and no other measures of medication management in the home health population.

0177 Improvement in Pain Interfering with Activity

STATUS

Endorsed

STEWARD

Centers for Medicare & Medicaid Services

DESCRIPTION

Percentage of home health episodes of care during which the frequency of the patient's pain when moving around improved.

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data The measure is calculated based on the data obtained from the Home Health Outcome and Assessment Information Set (OASIS-C), which is a core standard assessment data set that home health agencies integrate into their own patient-specific, comprehensive ass

Available at measure-specific web page URL identified in S.1 Attachment OASISQM_data_dictionary_and_Pain_Risk_Adj.xls

LEVEL

Facility

SETTING

Home Health

TIME WINDOW

CMS systems report data on episodes that end within a rolling 12 month period, updated quarterly.

NUMERATOR STATEMENT

Number of home health episodes of care where the value recorded on the discharge assessment indicates less frequent pain at discharge than at start (or resumption) of care.

NUMERATOR DETAILS

The number of home health episodes where the value recorded for the OASIS-C item M1242 ("Frequency of Pain Interfering with Activity") on the discharge assessment is numerically less than the value recorded on the start (or resumption) of care assessment, indicating less frequent pain interfering with activity at discharge.

DENOMINATOR STATEMENT

Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by generic or measure-specific exclusions.

DENOMINATOR DETAILS

All home health episodes of care (except those defined in the denominator exclusions) in which the patient was eligible to improve in pain interfering with activity or movement; i.e., were not at the optimal level of health status according to the "Frequency of Pain Interfering" OASIS-C item M1242.

EXCLUSIONS

All home health episodes where there is no pain reported at the start (or resumption) of care assessment, or the patient is non-responsive, or the episode of care ended in transfer to inpatient facility or death at home, or the episodes is covered by one of the generic exclusions.

EXCLUSION DETAILS

Home health episodes of care for which [1] at start/resumption of care OASIS item M1242 = 0, indicating the patient had no pain; OR [2] at start/ resumption of care, OASIS item M1700 "Cognitive Functioning" is 4, or M1710 "When Confused" is NA, or M1720 "When Anxious" is NA, indicating the patient is non-responsive; OR [3] The patient did not have a discharge assessment because the episode of care ended in transfer to inpatient facility or death at home; OR [4] All episodes covered by the generic exclusions -

a. Pediatric home health patients - less than 18 years of age.

b. Home health patients receiving maternity care only.

c. Home health clients receiving non-skilled care only.

d. Home health patients for which neither Medicare or Medicaid is a payment source.

e. The episode of care does not end during the reporting period.

f. Small and new agencies and rare conditions - the publicly-reported data on CMS' Home Health Compare web site also repress cells with fewer than 20 observations, and reports for home health agencies in operation less than six months.

RISK ADJUSTMENT

Statistical risk model

The risk adjustment methodology used is based on logistic regression analysis which results in a statistical prediction model for each outcome measure. For each home health agency patient who is included in the denominator of the outcome measure, the model is used to calculate the expected probability that the patient will experience the outcome. Logistic regression models for risk adjustment were developed using three million episodes of care based on OASIS national repository data from assessments submitted between January 1, 2010 and September 30, 2010. Details of the model and a table showing all variables are available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/downloads/HHQILogisticRegressionModelsforRiskAdjustmentUpdated.pdf

Also see S. 15a

Available in attached Excel or csv file at S.2b

STRATIFICATION

Not Applicable

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

Data from matched pairs of OASIS assessments for each episode of care (start or resumption of care paired with a discharge or transfer to inpatient facility) are used to calculate individual patient outcome measures.

Target population: All episodes of care ending during a specified time interval (usually a period of twelve months), subject to generic and measure-specific exclusions.

Generic exclusions: Episodes of care ending in discharge due to death (M0100_ASSMT_REASON[2] = 08).

Measure specific exclusions: Episodes of care ending in transfer to inpatient facility (M0100_ASSMT_REASON[2] IN (06,07), patients who are comatose or non-responsive at start/resumption of care (M1700_COG_FUNCTION[1] = 04 OR M1710_WHEN_CONFUSED[1] = NA OR M1720_WHEN_ANXIOUS[1] = NA), and patients free of pain at start/resumption of care (M1242_PAIN_FREQ_ACTVTY_MVMT[1] = 00).

Cases meeting the target outcome: Pain interferring with activity is less frequent at discharge than at start/resumption of care (M1242_PAIN_FREQ_ACTVTY_MVMT[2] < M1242_PAIN_FREQ_ACTVTY_MVMT[1]).

Aggregating Data: The observed outcome measure value for each HHA is calculated as the percentage of cases meeting the target population (denominator) criteria that meet the target outcome (numerator) criteria.

Risk Adjustment: The expected probability for a patient is calculated using the following formula:

$E(x) = 1/(1+e-(a+sum(bi \times i)))$

Where:

E(x) = expected probability of achieving outcome x

a = constant parameter listed in the model documentation

bi = coefficient for risk factor i in the model documentation

xi = value of risk factor i for this patient

Expected probabilities for all patients included in the measure denominator are then averaged to derive an expected outcome value for the agency. This expected value is then used, together with the observed (unadjusted) outcome value and the expected value for the national population of home health agency patients for the same data collection period, to calculated a risk-adjusted outcome value for the home health agency. The formula for the adjusted value of the outcome measure is as follows:

X(A ra) = X(A obs) + X(N exp) − X(A exp)

Where:

X(A r a) = Agency risk-adjusted outcome measure value

X(A obs) = Agency observed outcome measure value

X(A exp) = Agency expected outcome measure value

X(N exp) = National expected outcome measure value

Note that OASIS data items are referred to using field names specified in OASIS Data Submission Specifications published by CMS. For additional details, please consult the technical specifications available at:

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIQualityMeasures.htm No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: see 5b.1.

5b.1 If competing, why superior or rationale for additive value: A search using the NQF QPS for outcome measures reporting rates of improvement in pain identified two measures used in the nursing home setting (NQF# 0676, 0677 - Percent of Residents Who Self-Report Moderate to Severe Pain). These measures are focused on inpatient (not homebound) patients, are calculated using data that are not currently collected in the home health setting, and do not consider the functional impact of pain.

0422 Functional Status Change for Patients with Knee Impairments

STATUS

Endorsed

STEWARD

Focus on Therapeutic Outcomes, Inc

DESCRIPTION

A self-report measure of change in functional status for patients 18 year+ with knee impairments. The change in functional status assessed using FOTO's (knee) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

TYPE

Outcome

DATA SOURCE

Patient Reported Data/Survey Focus On Therapeutic Outcomes, Inc maintains the database. Information on the instrument, risk-adjustment procedures etc. is available at http://www.fotoinc.com/science-of-foto/NQF0425.html

Available at measure-specific web page URL identified in S.1 Attachment 1.a_Data_dictionary_lower_extremity_1.b_Risk_Adjusted_Coefficents_ICD10_Mapping.xlsx

LEVEL

Facility, Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation Hospital Outpatient

TIME WINDOW

Both Numerator and denominator aggregate the past 12 months of data

NUMERATOR STATEMENT

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for knee impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for knee impairment.

NUMERATOR DETAILS

Patient Level: The residual score for the individual patients with knee impairments is derived by applying the statistical risk adjustment model described in S.14 and S.15 and applying steps 1-5 as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1j of this application.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for knee impairment. Average scores are calculated for all clinicians, however performance is evaluated only for those clinicians that had a minimum of 10 patients in the previous 12 months. To maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinician regardless of clinic size, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Clinic Level: The average of residuals in functional status scores in patients who were treated within a clinic in a 12 month time period for knee impairment. Average scores are calculated for all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10 patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Both comparative benchmark reports (i.e., scale ranging from 0 to 100 with higher scores meaning higher functional abilities) at the clinician or clinic level include patients with knee impairments, who were treated in therapy, had their functional status assessed at admission and at the end of their episode of therapy and were discharged from therapy.

DENOMINATOR STATEMENT

All patients 18 years and older with knee impairments who have initiated rehabilitation treatment and completed the FOTO knee FS PROM at admission and discharge.

DENOMINATOR DETAILS

The established ICD-9-CM codes for the knee include:

Diagnoses specific to the knee:

682.6, 711.06, 711.16, 711.26, 711.36, 711.46, 711.56, 711.76, 711.86, 711.96, 712.16, 712.26, 712.36, 712.86, 715.16, 715.26, 715.36, 715.86, 715.96, 716.06, 716.16, 716.26, 716.36, 716.46, 716.56, 716.66, 716.86, 716.96, *717, 718.26, 718.36, 718.46, 718.56, 718.76, 718.86, 719.06, 719.16, 719.26, 719.36, 719.46, 719.56, 719.66, 719.86, 719.96, *726.6, 726.90, 727.51, 727.65, 727.66, 729.31, 730.06, 730.16, 730.26, 730.36, 730.76, 730.86, 732.4, 736.4, 736.5, 736.6, 739.6, 755.64, *822, *836, *844, 928.10, 924.11, 959.7, V43.65

* Use of an asterisk is to include all codes in the category

Or

Diagnoses not specific to the knee, but affect the function of the knee:

337.22, 355.2, 355.3, 355.4, 355.71, 355.79, 355.8, 355.9, 710.4, 710.8, 710.9, 711.09, 711.19, 711.29, 711.39, 711.59, 711.69, 711.79, 711.89, 711.99, 712.29, 712.39, 712.89, 714.0, 714.30, 714.4, 714.89, 714.9, 715.09, 715.18, 715.28, 715.38, 715.89, 715.98, 716.09, 716.19, 719.29, 716.39, 716.49, 716.59, 719.89, 716.99, 718.29, 718.39, 718.49, 718.59, 718.89, 719.09, 719.19, 719.29, 719.39, 719.49, 719.59, 719.69, 719.7, 719.89, 719.99, 726.90, 727.00, 727.02, 727.09, 727.2, 727.3, 727.40, *727.8, 727.9, 728.2, 728.3, 728.4, 728.5, 728.87, 728.89, 728.9, 729.0, 729.1, 729.2, 729.4, 729.5, 729.81, 729.89, 729.90, 730.09, 730.19, 730.29, 730.39, 730.79, 730.89, 732.9, *733.0, 733.49, 736.81, 780.79, 781.2, 781.3, 827.0, 827.1, 848.8, *891, 897.0, 897.1, 924.4, 996.77, 996.78, V49.75, V54.81, V57.1, V57.81, V57.89, V58.78

* Use of an asterisk is to include all codes in the category

Please refer to the Letter of Intent submitted to NQF under separate cover (email) to complete ICD10 Mapping for this measure by end of February 2015. Please refer also to the sample ICD10 Mapping for this measure included in the S.2b attachment (third tab: ICD10 Mapping).

EXCLUSIONS

•Patients who are not being treated for a Knee impairment

•<18 years of age

EXCLUSION DETAILS

•Patients who are not being treated for a knee impairment

•Age under 18 years old.

RISK ADJUSTMENT

Statistical risk model

The change in functional status assessed using FOTO (knee) PROM is risk adjusted using a multivariate linear regression model that includes the following independent variables: intake functional status, age, symptom acuity, surgical history, payer source, gender, fear-avoidance beliefs of physical activities and number of functional comorbidities. The public domain short form and internet CAT produce a measure that can be risk adjusted.

Available in attached Excel or csv file at S.2b

STRATIFICATION

Risk adjusted - not stratified

TYPE SCORE

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

ALGORITHM

STEPS TAKEN TO PRODUCE THIS MEASURE:

Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO (knee) PROM administered by internet or paper and pencil survey. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co morbidities, payer type, and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and the predicted change scores (after risk adjustment) is the residual score and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient, and risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were less than predicted given the risk-adjustment variables of the patient.

Aggregated risk-adjusted residual scores: The average of residual scores of functional status (actual change - predicted change after risk adjustment) from a provider (clinician or clinic). The aggregated scores are used to make comparisons between clinicians or clinics.

STEPS:

First, the patient completes FOTO's functional status survey for the Knee at Admission, which generates the Patient's Functional Status Score at Admission

Second, patient completes FOTO's functional status survey at or near Discharge, which generates the Patient's Functional Status Score at Discharge

Third, the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

Fourth, a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

Fifth, a Risk-adjusted Functional Status Change Residual Score is generated for each patient.

Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance. No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact: NA

5b.1 If competing, why superior or rationale for additive value: NA

0423 Functional Status Change for Patients with Hip Impairments

STATUS

Endorsed

STEWARD

Focus On Therapeutic Outcomes, Inc

DESCRIPTION

A self-report measure of change in functional status for patients 18 years+ with hip impairments. The change in functional status assessed using FOTO's (hip) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

TYPE

Outcome

DATA SOURCE

Patient Reported Data/Survey Focus On Therapeutic Outcomes, Inc maintains the database. Information on the instrument, risk-adjustment procedures etc. is available at http://www.fotoinc.com/science-of-foto/NQF0425.html

Available at measure-specific web page URL identified in S.1 Attachment 1a_Data_dictionary_hip__1b_coefficients_092814-635501033723979650.xlsx

LEVEL

Facility, Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation Hospital Outpatient

TIME WINDOW

Both Numerator and denominator aggregate the past 12 months of data

NUMERATOR STATEMENT

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for hip impairment.

Clinic Level: The average residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for hip impairment.

NUMERATOR DETAILS

Patient Level: The residual score for the individual patients with hip impairments is derived by applying the statistical risk adjustment model described in S.14 and S.15 and applying steps 1-5

as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1j of this application.

Individual Clinician Level: The average residuals in scores in patients who were treated by a clinician in a 12 month time period for hip impairment. Average scores are calculated for all clinicians, however, performance is evaluated only for those clinicians that had a minimum of 10 patients in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinician regardless of clinic size, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Clinic Level: The average residuals functional status scores in patients who were treated within a clinic in a 12 month time period for hip impairment. Average scores are calculated for all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10 patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Both comparative benchmark reports (i.e., scale ranging from 0 to 100 with higher scores meaning higher functional abilities) at the clinician or clinic level include patients with hip impairments, who were treated in therapy and had their functional status assessed at admission and at the end of their episode of therapy and were discharged from therapy.

DENOMINATOR STATEMENT

All patients 18 years and older with hip impairments who have initiated rehabilitation treatment and complete the FOTO hip FS PROM at admission and discharge.

DENOMINATOR DETAILS

The established ICD-9-CM codes for the hip include:

Diagnoses specific to the hip:

715.05, 715.15, 715.25, 715.35, 715.95, 716.05, 716.15, 716.25, 716.35, 716.45, 716.55, 716.65, 716.85, 716.95, 718.05, 718.15, 718.25, 718.35, 718.45, 718.55, 718.65, 718.75, 718.85, 718.95, 719.05, 719.15, 719.25, 719.35, 719.45, 719.55, 719.65, 719.75, 719.85, 719.95, 726.5, 730.05, 730.15, 730.25, 730.35, 730.75, 730.85, 730.95, 733.98, *736.3, 738.6, 739.4, 739.5, *754.3, 755.63, *808, *821, *835, *843, *846, 847.3, 847.4, 848.5, *924.0, *928.0, V54.13, V54.23, V57.1.

* Use of an asterisk is to include all codes in the category

Or

Diagnoses not specific to the hip, but affect the function of the hip:

*355, 710.05, 710.3, 710.4, 710.8710.9, 711.99, 714.31, 714.4, 715.09, 715.80, 715.89, 715.98, 716.09, 716.19, 719.29, 716.39, 716.49, 716.59, 716.89, 716.99, 718.09, 718.19, 718.29, 718.39, 718.49, 718.59, 718.79, 718.89, 718.99, 719.09, 719.19, 719.29, 719.39, 719.49, 719.59, 719.69, 719.89, 719.99, 725, 726.8, 726.90, 727.09, 727.3, *724.4, 727.50, 728.3, 718.4, 728.0, *728.1, 728.2, 728.5, *728.8, 728.9, 729.0, 729.1, 729.2, 729.5, *729.8, *729.9, 730.09, 730.19, 730.29, 730.39, 730.79, 730.89, 730.99, 732.1, 732.2, 732.9, *733.0, 733.15, 733.19, 733.29, 733.40, 733.42, *733.8, 733.90, 733.91, 733.96, 733.97, 780.79, 780.96, 781.2, 792.3, *827, 848.8, 848.9, *897, 922.31, 922.32, 928.8, *956, 959.6, *996.4, 996.70, 996.77, V54.81, V54.89, V58.78

* Use of an asterisk is to include all codes in the category

Please refer to the Letter of Intent submitted to NQF under separate cover (email) to complete ICD10 Mapping for this measure by end of February 2015.

EXCLUSIONS

•Patients who are not being treated for a Hip impairment

•<18 years of age

EXCLUSION DETAILS

•Patients who are not being treated for a hip impairment

•<18 years of age

RISK ADJUSTMENT

Statistical risk model

The change in functional status assessed using FOTO (hip) PROM is risk adjusted using a multivariate linear regression model that includes the following independent variables: intake functional status, age, symptom acuity, surgical history, payer source, gender, fear-avoidance beliefs of physical activities and number of functional comorbidities. The public domain short form and internet CAT produce a measure that can be risk adjusted.

Available in attached Excel or csv file at S.2b

STRATIFICATION

Risk adjusted - not stratified

TYPE SCORE

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

ALGORITHM

STEPS TAKEN TO PRODUCE THIS MEASURE:

Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO (hip) PROM administed by internet or paper and pencil. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co morbidities, payer type, and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and the predicted change scores (after risk adjustment) is the residual score and should

be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted, respectively, given the risk-adjustment variables of the patient. Risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were less than predicted given the risk-adjustment variables of the patient.

Aggregated risk-adjusted residual scores: The average of residual scores of functional status (actual change - predicted change after risk adjustment) from a provider (clinician or clinic). The aggregated scores are used to make comparisons between clinicians or clinics.

STEPS:

First, the patient completes FOTO's functional status survey for the Hip at Admission, which generates the Patient's Functional Status Score at Admission

Second, patient completes FOTO's functional status survey at or near Discharge, which generates the Patient's Functional Status Score at Discharge

Third, the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

Fourth, a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

Fifth, a Risk-adjusted Functional Status Change Residual Score is generated for each patient.

Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance. No diagram provided

5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: NA

5b.1 If competing, why superior or rationale for additive value: NA

0424 Functional Status Change for Patients with Foot and Ankle Impairments

STATUS

Endorsed

STEWARD

Focus on Therapeutic Outcomes, Inc

DESCRIPTION

A self-report measure of change in functional status for patients 18 years+ with foot and ankle impairments. The change in functional status assessed using FOTO's (foot and ankle) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

TYPE

Outcome

DATA SOURCE

Paper Medical Records Focus On Therapeutic Outcomes, Inc maintains the database. Information on the instrument, risk-adjustment procedures etc. is available at http://www.fotoinc.com/science-of-foto/NQF0425.html

Available at measure-specific web page URL identified in S.1 Attachment 1a_Data_dictionary_Foot_Ankle_1b._Risk_Adjusted_Coefficients_Foot_Ankle_092814.xlsx

LEVEL

Facility, Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation Hospital Outpatient

TIME WINDOW

The time period of data for the patient level measure is the episode of care. For the clinician and clinic level the data are aggregated for the past 12 months

NUMERATOR STATEMENT

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment)

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for foot and or ankle impairment.

Clinic Level: The average of residuals in patients who were treated by a clinic in a 12 month time period for foot and or ankle impairment.

NUMERATOR DETAILS

Patient Level: The residual score for the individual patients with foot and ankle impairments is derived by applying the statistical risk adjustment model described in S.14 and S.15 and applying steps 1-5 as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1j of this application.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for foot and ankle impairment. Average scores are calculated for all clinicians, however only those clinicians that had a minimum of 10 patients in the previous 12 months. are included in the comparative benchmarked report. In 2011-2013, FOTO used a standard threshold of 40 patients/clinician, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for foot and ankle impairment. Average scores are calculated for all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10 patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Both comparative benchmark reports (i.e., scale ranging from 0 to 100 with higher scores meaning higher functional abilities) at the clinician or clinic level include patients with foot and ankle impairments, who were treated in therapy and had their functional status assessed at admission and at the end of their episode of therapy and were discharged from therapy.

DENOMINATOR STATEMENT

All patients 18 years and older with foot or ankle impairments who have initiated rehabilitation treatment and completed the FOTO foot and ankle PROM at admission and discharge

DENOMINATOR DETAILS

The established ICD-9-CM codes for the the FOTO foot and ankle measure are: soft tissue disorders of muscle, synovium, tendon, bursa, plantar fasciitis, or enthesopathies (ICD-9 codes 725-729); sprains and strains of the ankle or foot (ICD-9 codes 844-845 including unspecified sprain or strain); fractures (ICD-9 823-826 including ankle, tarsal, metatarsal bones, or phalanges of foot); arthropathies (ICD-9 codes 710-719, including osteoarthoses, rheumatoid arthritis); disorders of the bone and cartilage (ICD-9 codes 730-739); uncomplicated post-surgical (CPT codes 29894-29899, including arthroscopy of the ankle); and gait abnormality (ICD-9 code 781.2).

Please refer to the Letter of Intent submitted to NQF under separate cover (email) to complete ICD10 Mapping for this measure by end of February 2015.

EXCLUSIONS

- Patients who are not being treated for a foot and ankle impairment
- <18 years of age

- Patients who are not being treated for a foot and ankle impairment conditions
- Age under 18 years old.

RISK ADJUSTMENT

Statistical risk model

The change in functional status assessed using FOTO (foot and ankle) PROM is risk adjusted using a multivariate linear regression model that includes the following independent variables: intake functional status, age, symptom acuity, surgical history, payer source, gender, fear-avoidance beliefs of physical activities and number of functional comorbidities. The public domain short form and internet CAT produce a measure that can be risk adjusted.

Available in attached Excel or csv file at S.2b

STRATIFICATION

Risk adjusted - not stratified

TYPE SCORE

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

ALGORITHM

STEPS TAKEN TO PRODUCE THIS MEASURE:

Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO PROM administered by internet or paper and pencil. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co morbidities, payer type, and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and the predicted change scores (after risk adjustment) is the residual score and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient. Risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were less than predicted given the risk-adjustment variables of the patient.

Aggregated risk-adjusted residual scores: The average of residual scores of functional status (actual change - predicted change after risk adjustment) from a provider (clinician or clinic). The aggregated scores are used to make comparisons between clinicians or clinics.

STEPS:

Patient, level measures use steps 1-5

Clinician and clinic level measures use steps 1-6.

1) the patient completes FOTO's functional status survey for the foot and ankle impairment at Admission, which generates the Patient's Functional Status Score at Admission

2) the patient completes FOTO's functional status survey at or near Discharge, which generates the Patient's Functional Status Score at Discharge

3) the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

4) a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

5) a Risk-adjusted Functional Status Change Residual Score is generated for each patient.

6.) the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance. No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0425 Functional Status Change for Patients with Lumbar Impairments

STATUS

Endorsed

STEWARD

Focus on Therapeutic Outcomes, Inc

DESCRIPTION

A self-report outcome measure of functional status for patients 18 years+ with lumbar impairments. The change in functional status assessed using FOTO (lumbar) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality.

Outcome

DATA SOURCE

Patient Reported Data/Survey Focus On Therapeutic Outcomes, Inc. maintains the database. Information on the instrument, risk-adjustment procedures etc. is available at http://www.fotoinc.com/science-of-foto/NQF0425.html

Available at measure-specific web page URL identified in S.1 Attachment 1a_Data_Dictionary_081214_1b_Detailed_risk_model_specifications_061114.xlsx

LEVEL

Facility, Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation Hospital Outpatient

TIME WINDOW

The time period of data for the patient level measure is the episode of care. For the clinician and clinic level the data are aggregated for the past 12 months.

NUMERATOR STATEMENT

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for lumbar impairment.

Clinic Level: The average of residuals) in functional status scores in patients who were treated by a clinic in a 12 month time period for lumbar impairment.

NUMERATOR DETAILS

Patient Level: The residual score for the individual patients with lumbar impairments is derived by applying the statistical risk adjustment model described in S.14 and S.15 and applying steps 1-5 as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1j of this application.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for lumbar impairment. Average scores are calculated for all clinicians, however performance is evaluated only for those clinicians that had a minimum of 10 patients in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinician regardless of clinic size, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Clinic Level: The average of residuals in functional status scores in patients who were treated within a clinic in a 12 month time period for lumbar impairments. Average scores are calculated for all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10

patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Both comparative benchmark reports (i.e., scale ranging from 0 to 100 with higher scores meaning higher functional abilities) at the clinician or clinic level include patients with lumbar impairments, who were treated in therapy and had their functional status assessed at admission and at the end of their episode of therapy and were discharged from therapy.

DENOMINATOR STATEMENT

All patients 18 years and older with a lumbar impairment who have initiated rehabilitation treatment and completed the FOTO (lumbar) PROM.

DENOMINATOR DETAILS

The established ICD-9-CM codes for the lumbar spine include:

Diagnoses specific to the lumbar spine:

*720, 721.3, 721.42, 721.5, 721.6, 721.7, 721.8, *721.9, 722.10, 722.2, 722.32, *722.5, 722.6, 722.73, 722.83, 722.93, 724.02, 724.2, 724.3, 724.4, 724.5, 724.8, 724.9, 732.0, *737, 738.4, 738.5, 739.3, *756.1, 805.4, 805.5, 806.4, 806.5, 839.20, 839.30, *846, 847.2, 847.3, 847.4, 922.31, 926.11, 952.2, 952.3, 953.2, 953.3, 953.5

* Use of an asterisk is to include all codes in the category

Or

Diagnoses not specific to the lumbar spine, but affect the function of the lumbar spine:

355.0, 356.9, 646.84, 648.73, 648.74, 724.6, *724.7, 725, 726.5, 728.85, 728.87, 729.0, 729.1, 730.08, 730.18, 730.28, 730.38, 730.78, 730.88, 730.98, 732.8, 732.9, *733.0, 733.13, 738.6, 739.4, 739.5, 781.92, *808, *839.4, *839.5, 839.8, 848.5, 848.8, 848.9, 922.32, 922.8, 926.8, 926.12, 926.19, 926.8, 926.9, 996.49, *V54.8, V54.09, V54.17, V54.27, V58.49

* Use of an asterisk is to include all codes in the category

Please refer to the Letter of Intent submitted to NQF under separate cover (email) to complete ICD10 Mapping for this measure by end of February 2015.

EXCLUSIONS

- Patients who are not being treated for a lumbar impairment
- <18 years of age

EXCLUSION DETAILS

- Patients who are not being treated for a lumbar impairment conditions
- Age under 18 years old.

RISK ADJUSTMENT

Statistical risk model

The change in functional status assessed using FOTO (lumbar) PROM is risk adjusted using a multivariate linear regression model that includes the following independent variables: intake functional status, age, symptom acuity, lumbar surgical history, payer source, gender, fear-

avoidance beliefs of physical activities and number of functional comorbidities. The public domain short form and internet CAT produce a measure that can be risk adjusted.

Available in attached Excel or csv file at S.2b

Risk adjusted - not stratified

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

STEPS TAKEN TO PRODUCE THIS MEASURE:

Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO (lumbar) PROM administered by internet or a paper and pencil survey.. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co morbidities, payer type, and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and predicted change scores (after risk adjustment) is the residual score and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient. Risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were less than predicted given the risk-adjustment variables of the patient.

Aggregated risk-adjusted residual scores: The average of residual scores of functional status (actual change - predicted change after risk adjustment) from a provider (clinician or clinic). The aggregated scores are used to make comparisons between clinicians or clinics.

STEPS:

Patient, level measures use steps 1-5

Clinician and clinic level measures use steps 1-6.

1) the patient completes FOTO's functional status survey for the lumbar impairment at Admission, which generates the Patient's Functional Status Score at Admission

2) the patient completes FOTO's functional status survey at or near Discharge, which generates the Patient's Functional Status Score at Discharge

3) the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

4) a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

5) a Risk-adjusted Functional Status Change Residual Score is generated for each patient.

6.) the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance. No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: N/A

5b.1 If competing, why superior or rationale for additive value: N/A

0426 Functional Status Change for Patients with Shoulder Impairments

STATUS

Endorsed

STEWARD

Focus on Therapeutic Outcomes, Inc

DESCRIPTION

A self-report outcome measure of change in functional status for patients 18 years+ with shoulder impairments. The change in functional status assess using FOTO's (shoulder) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

TYPE

Outcome

DATA SOURCE

Patient Reported Data/Survey Focus On Therapeutic Outcomes, Inc. maintains the database. Information on the instrument, risk-adjustment procedures etc. is available at http://www.fotoinc.com/science-of-foto/NQF0425.html

Available at measure-specific web page URL identified in S.1 Attachment 1a_Data_Dictionary_1b_Risk_Adjusted_Coefficients__092714-635500168095858344.xlsx

Facility, Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Home Health, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation Hospital Outpatient

TIME WINDOW

Both Numerator and denominator aggregate the past 12 months of data

NUMERATOR STATEMENT

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for shoulder impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for shoulder impairment.

NUMERATOR DETAILS

Patient Level: The residual score for the individual patients with shoulder impairments is derived by applying the statistical risk adjustment model described in S.14 and S.15 and applying steps 1-5 as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1j of this application.

Individual Clinician Level: The average residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for shoulder impairment. Average scores are calculated for all clinicians, however performance is evaluated only for those clinicians that had a minimum of 10 patients in the previous 12 months. To maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinician regardless of clinic size, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18.

Clinic Level: The average of residuals in functional status scores in patients who were treated within a clinic in a 12 month time period for shoulder impairment. Average scores are calculated for all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10 patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18.

Both comparative benchmark reports (i.e., scale ranging from 0 to 100 with higher scores meaning higher functional abilities) at the clinician or clinic level include patients with shoulder impairments, who were treated in therapy and had their functional status assessed at admission and at the end of their episode of therapy and were discharged from therapy.

DENOMINATOR STATEMENT

All patients 18 years and older with shoulder impairments who have initiated rehabilitation treatment and completed the FOTO shoulder FS outcome instrument at admission and discharge.

DENOMINATOR DETAILS

The established ICD-9-CM codes for the shoulder include: soft tissue disorders of muscle, synovium, tendon, bursa, or enthesopathies (ICD-9 codes 725-729); sprains and strains of the shoulder (ICD-9 code 840 including unspecified sprain or strain); fractures (ICD-9 codes 810-819 including clavicle, scapula, humerus); arthropathies (ICD-9 codes 710-719, including osteoarthoses, rheumatoid arthritis); disorders of the bone and cartilage (ICD-9 codes 730-739); dislocations of shoulder (ICD-9 codes 831); post-surgical (CPT codes including 23107 arthrotomy, 23405 tenotomy).

Please refer to the Letter of Intent submitted to NQF under separate cover (email) to complete ICD10 Mapping for this measure by end of February 2015.

EXCLUSIONS

- Patients who are not being treated for a Shoulder impairment
- <18 years of age

EXCLUSION DETAILS

- Patients who are not being treated for a shoulder impairment
- Age under 18 years old.

RISK ADJUSTMENT

Statistical risk model

The change in functional status assess using FOTO (shoulder) PROM is risk adjusted using a multivariate linear regression model that includes the following independent variables: intake functional status, age, symptom acuity, surgical Shoulder history, payer source, gender, fear-avoidance beliefs of physical activities and number of functional comorbidities. The public domain short form and internet CAT produce a measure that can be risk adjusted.

Available in attached Excel or csv file at S.2b

STRATIFICATION

Risk adjusted - not stratified

TYPE SCORE

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

ALGORITHM

STEPS TAKEN TO PRODUCE THIS MEASURE:

Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO (shoulder) PROM administered by internet or paper and pencil. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co morbidities, payer type, and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and the predicted change scores (after risk adjustment) is the residual score and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient, and risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were less than predicted given the risk-adjustment variables of the patient.

Aggregated risk-adjusted residual scores: The average of residual scores of functional status (actual change - predicted change after risk adjustment) from a provider (clinician or clinic). The aggregated scores are used to make comparisons between clinicians or clinics.

STEPS:

First, the patient completes FOTO's functional status survey for the Shoulder at Admission, which generates the Patient's Functional Status Score at Admission

Second, patient completes FOTO's functional status survey at or near Discharge, which generates the Patient's Functional Status Score at Discharge

Third, the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

Fourth, a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

Fifth, a Risk-adjusted Functional Status Change Residual Score is generated for each patient.

Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance. No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: NA

5b.1 If competing, why superior or rationale for additive value: NA

0427 Functional Status Change for Patients with Elbow, Wrist and Hand Impairments

STATUS

Endorsed

STEWARD

Focus on Therapeutic Outcomes, Inc

DESCRIPTION

A self-report outcome measure of functional status for patients 18 years+ with elbow, wrist, hand impairments. The change in functional status assessed using FOTO (elbow, wrist and hand) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.

TYPE

Outcome

DATA SOURCE

Patient Reported Data/Survey Focus On Therapeutic Outcomes, Inc maintains the database. Information on the instrument, risk-adjustment procedures etc. is available at http://www.fotoinc.com/science-of-foto/NQF0425.html

Available at measure-specific web page URL identified in S.1 Attachment 1a_Data_Dictionary_1b_Risk_Model_Specifications_Elbow__Wrist_Hand_103014.xls

LEVEL

Facility, Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation Hospital Outpatient

TIME WINDOW

Both Numerator and denominator aggregate the past 12 months of data

NUMERATOR STATEMENT

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for elbow, wrist and hand impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for elbow, wrist and hand impairments.

NUMERATOR DETAILS

Patient Level: The residual score for the individual patients with elbow, wrist and hand impairments is derived by applying the statistical risk adjustment model described in S.14 and

S.15 and applying steps 1-5 as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1j of this application.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for elbow, wrist and hand impairment. Average scores are calculated using data from all clinicians, however performance is evaluated only for those clinicians that had a minimum of 10 patients in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinician regardless of clinic size, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for elbow, wrist and hand impairment. Average scores are calculated using data from all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10 patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Both comparative benchmark reports (clinician or clinic level) include patients with elbow, wrist and hand impairments, who were treated in therapy and had their functional status assessed at admission and at the end of their episode of therapy and were discharged from therapy.

DENOMINATOR STATEMENT

All patients 18 years and older with elbow, wrist or hand impairments who have initiated rehabilitation treatment and completed the FOTO (elbow, wrist and hand) PROM.

DENOMINATOR DETAILS

The established ICD-9-CM codes for measure include soft tissue disorders of muscle, synovium, tendon, bursa, or enthesopathies (ICD-9 codes 725-729); sprains and strains of the elbow, wrist or hand (ICD-9 codes 841-842 including unspecified sprain or strain); fractures (ICD-9 813-819 including humerus, ulna, radius, carpal bones, metacarpals); arthropathies (ICD-9 codes 710-719, including osteoarthoses, rheumatoid arthritis); disorders of the bone and cartilage (ICD-9 codes 730-739); dislocations of elbow, wrist or fingers (ICD-9 codes 832-834); post-surgical (CPT codes including 24301 elbow muscle or tendon transfer, 64721 carpal tunnel decompression).

Please refer to the Letter of Intent submitted to NQF under separate cover (email) to complete ICD10 Mapping for this measure by end of February 2015.

EXCLUSIONS

- Patients who are not being treated for an elbow, wrist and/or hand impairment
- <18 years of age

EXCLUSION DETAILS

- Patients who are not being treated for an elbow, wrist and/or hand impairment
- Age under 18 years old.

Statistical risk model

The change in functional status assessed using FOTO (elbow, wrist and hand) PROM is risk adjusted using a multivariate linear regression model that include the following independent variables: intake functional status, age, symptom acuity, surgical history, payer source, gender, fear-avoidance beliefs of physical activities and number of functional comorbidities. The public domain short form and internet CAT produce a measure that can be risk adjusted.

Available in attached Excel or csv file at S.2b

STRATIFICATION

Risk adjusted - not stratified

TYPE SCORE

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

ALGORITHM

STEPS TAKEN TO PRODUCE THIS MEASURE:

Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO (elbow, wrist and hand) PROM administered by internet or a paper and pencil survey. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co morbidities, payer type, and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and predicted change scores (after risk adjustment) is the residual score and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient, and risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were less than predicted given the risk-adjustment variables of the patient. Aggregated risk-adjusted residual scores allow meaningful comparisons amongst clinicians or clinics.

Aggregated risk-adjusted residual scores: The average of residual scores of functional status (actual change - predicted change after risk adjustment) from a provider (clinician or clinic). The aggregated scores are used to make comparisons between clinicians or clinics.

STEPS:

First, the patient completes FOTO (elbow, wrist and hand) PROM at Admission, which generates the Patient's Functional Status Score at Admission

Second, patient completes FOTO (elbow, wrist and hand) PROM at or near Discharge, which generates the Patient's Functional Status Score at Discharge

Third, the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

Fourth, a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

Fifth, a Risk-adjusted Functional Status Change Residual Score is generated for each patient.

Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (4 or more clinicians) in order to obtain stable estimates of provider performance. No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: NA

0428 Functional Status Change for Patients with General Orthopaedic Impairments

STATUS

Endorsed

STEWARD

Focus on Therapeutic Outcomes, Inc

DESCRIPTION

A self-report outcome measure of functional status for patients 18 years+ with general orthopaedic impairments. The change in functional status assessed using FOTO (general orthopedic) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level by to assess quality.

TYPE

Outcome

DATA SOURCE

Paper Medical Records Focus On Therapeutic Outcomes, Inc maintains the database. Information on the instrument, risk-adjustment procedures etc. is available at http://www.fotoinc.com/science-of-foto/NQF0425.html

Available at measure-specific web page URL identified in S.1 Attachment 1.a_Data_dictionary_General_1.b_General_Risk_Adj_Coefficients_100514.xlsx

LEVEL

Facility, Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Other, Ambulatory Care : Outpatient Rehabilitation Hospital Outpatient

TIME WINDOW

Both Numerator and denominator aggregate the past 12 months of data

NUMERATOR STATEMENT

Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for general orthopaedic impairment.

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for general orthopaedic impairment.

NUMERATOR DETAILS

Patient Level: The residual score for the individual patients with general orthopaedic impairments is derived by applying the statistical risk adjustment model described in S.14 and S.15 and applying steps 1-5 as described in S.18. The risk-adjusted scores can be applied to evaluate performance at the patient level using the methods described in section 2b5.1j of this application.

Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for general orthopaedic impairment. Average scores are calculated using data from all clinicians, however performance is evaluated only for those clinicians that had a minimum of 10 patients in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinician regardless of clinic size, but has recently changed its procedure to enable participation by clinicians that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for general orthopaedic impairment. Average scores are calculated using data from all clinics, however performance is evaluated only for large clinics (5 or more clinicians) that had a minimum of 40 patients, and small clinics (1-4 clinicians) that had a minimum of 10 patients per clinician, in the previous 12 months to maximize stability of the benchmarking estimates. In 2011-2013, FOTO used a standard threshold of 40 patients/clinics regardless of clinic size, but has recently changed its procedure to enable participation by

smaller clinics that do not have a sufficient volume of patients. The score is derived by applying steps 1-6 as described in S.18

Both comparative benchmark reports (i.e., scale ranging from 0 to 100 with higher scores meaning higher functional abilities) at the clinician or clinic level include patients with general orthopaedic impairments, who were treated in therapy and had their functional status assessed at the end of their episode of therapy and were discharged from therapy.

DENOMINATOR STATEMENT

All patients 18 years and older with general orthopaedic impairments who have initiated rehabilitation treatment and completed the FOTO (general orthopaedic) PROM.

DENOMINATOR DETAILS

The established ICD-9-CM codes for the neck, cranium, mandible, thoracic spine, ribs or other general orthopedic impairment include:

Diagnosis specific to the cervical spine:

333.83, 353.2, 716.58, 718.88, 718.98, 719.08, 719.18, 719.48, 719.58, 719.68, 721.0, 721.1, 722.0, 722.4, 722.71, 722.81, 722.91, *723, 730.08, 730.09, 730.18, 739.1, 741.01, 741.91, 754.1, *805.0, *805.1, *806.0, *806.1, 847.0, *952.0, 953.0

* Use of an asterisk is to include all codes in the category

Diagnosis specific to the thoracic spine:

353.3, 721.2, 721.41, 722.11, 722.31, 722.51, 722.72, 722.82, 722.92, 724.01, 724.1, 724.4, 724.5, 730.08, 730.09, 730.18, 739.2, 741.02, 741.92, 805.2, 805.3, *806.2, *806.3, 847.1, *952.1, 953.1

* Use of an asterisk is to include all codes in the category

Diagnosis specific to the Cranium and Mandible

307.81, *346, *350.2, *351, *524.6, 754.0, 784.0, *830, 848.1

* Use of an asterisk is to include all codes in the category

Diagnosis specific to the Ribs

733.6, 739.8, 756.2, 756.3, *786.5, *807.0, *807.1, 807.2, 807.3, 839.61, 848.3, *848.4, 922.1, 922.3

* Use of an asterisk is to include all codes in the category

Diagnosis not specific to the cervical or thoracic spine, cranium/mandible or ribs, but effect the function of the cervical or thoracic spine, cranium/mandible, ribs or other general impairment:

338.29, 353.0, 353.8, 710.0, 711.98, 714.0, 715.09, 715.18, 715.19, 715.28, 715.38, 715.88, 715.89, 715.98, 716.98, 716.99, 716.59, 716.98, 716.99, 718.08, 718.09, 718.19, 718.28, 718.29, 718.38, 718.39, 719.49, 719.59, 718.89, 718.99, 720.0, 720.9, *721.9, 722.2, 722.6, 724.00, 724.09, 724.08, 724.5, 724.9, 728.2, 728.85, 728.87, 730.19, 732.0, *733.0, 733.13, 733.90, *737, 754.2, 756.19, 759.79, 781.92, 847.9, 952.8, V54.17, V54.89, V57.1, V59.49, V67.0

* Use of an asterisk is to include all codes in the category

Please refer to the Letter of Intent submitted to NQF under separate cover (email) to complete ICD10 Mapping for this measure by end of February 2015.

EXCLUSIONS

- Patients who are not being treated for a General orthopaedic impairment

- <18 years of age

- Patients who are not being treated for a general orthopaedic impairment
- Age under 18 years old.

RISK ADJUSTMENT

Statistical risk model

The change in functional status assessed using FOTO (general orthopaedic) PROM is risk adjusted using a multivariate linear regression model that includes the following independent variables: intake functional status, age, symptom acuity, surgical history, payer source, gender, fear-avoidance beliefs of physical activities and number of functional comorbidities. The public domain short form and internet CAT produce a measure that can be risk adjusted.

Available in attached Excel or csv file at S.2b

STRATIFICATION

Risk adjusted - not stratified

TYPE SCORE

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

ALGORITHM

STEPS TAKEN TO PRODUCE THIS MEASURE:

Definitions:

Patient's Functional Status Score. A functional status score is produced when the patient completes the FOTO (general orthopaedic) PROM administered by internet or a paper and pencil survey. The functional status score is continuous and linear. Scores range from 0 (low function) to 100 (high function). The survey is standardized, and the scores are validated for the measurement of function for this population.

Patient's Functional Status Change Score. A functional status change score is calculated by subtracting the Patient's Functional Status Score at Admission from the Patient's Functional Status Score at Discharge.

Predicted Functional Status Change Score. Functional Status Change Scores for patients are risk adjusted using multiple linear regression methods that include the following independent variables: Patient's Functional Status Score at Admission, patient age, symptom acuity, surgical history, gender, number of co morbidities, payer type, and level of fear-avoidance. The Patient's Functional Status Change Score is the dependent variable. The statistical regression produces a Risk-Adjusted Predicted Functional Status Change Score.

Risk-adjusted Functional Status Change Residual Score. The difference between the actual change and predicted change scores (after risk adjustment) is the residual score and should be interpreted as the unit of functional status change different than predicted given the risk-adjustment variables of the patient being treated. As such, the risk-adjusted residual change score represents risk-adjusted change corrected for patient characteristics. Risk-adjusted residual change scores of zero (0) or greater (>0) should be interpreted as functional status change scores that were predicted or better than predicted given the risk-adjustment variables of the patient, and risk-adjusted residual change scores less than zero (<0) should be interpreted as functional status change scores that were less than predicted given the risk-adjustment

variables of the patient. Aggregated risk-adjusted residual scores allow meaningful comparisons amongst clinicians or clinics.

STEPS:

First, the patient completes FOTO (general orthopaedic) PROM at Admission, which generates the Patient's Functional Status Score at Admission.

Second, patient completes FOTO FOTO (general orthopaedic) PROM at or near Discharge, which generates the Patient's Functional Status Score at Discharge

Third, the Patient's Functional Status Change Score (raw, non-risk-adjusted) is generated

Fourth, a Risk-adjusted Predicted Functional Status Change Score is generated using a regression equation

Fifth, a Functional Status Change Residual Score after risk adjustment is generated for each patient.

Sixth, the average residual scores per clinician and/or clinic are calculated, and scores for all clinicians/clinics in the database are ranked. The quality score is the percentile of the clinician and/or clinic ranking. The quality scores and its 95% CI can be compared to the benchmark (a score of zero) to determine if the performance is below, at, or above the predicted average. FOTO recommends that clinicians have a minimum of 10 patients/year and clinics have a minimum of 10 patients/therapist per year for small clinics or 40 patients per year for larger clinics (5 or more clinicians) in order to obtain stable estimates of provider performance. No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

0688 Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (long stay)

STATUS

Endorsed

STEWARD

Centers for Medicare & Medicaid Services

DESCRIPTION

This measure, based on data from the Minimum Data Set (MDS) 3.0 assessment of long-stay nursing facility residents, estimates the percentage of long-stay residents in a nursing facility whose need for assistance with late-loss Activities of Daily Living (ADLs), as reported in the target assessment, increased when compared with a prior assessment. The four late-loss ADLs are: bed mobility, transfer, eating, and toilet use. This measure is calculated by comparing the change in each ADL item between the target assessment (OBRA, PPS or discharge) and a prior assessment (OBRA, PPS or discharge). Long-stay nursing facility residents are those with a nursing facility stay of 101 cumulative days or more.

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data The data set is the Nursing Home Minimum Data Set (MDS) 3.0, a standard individual assessment tool. The item set is located in the "Downloads" section at the following link: http://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/nursinghomequalityinits/nhqimds30technicalinformation.html

Available at measure-specific web page URL identified in S.1 Attachment NQF_0688_NH_ADL_Codebook.xlsx

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

TIME WINDOW

The numerator is defined using the resident's target MDS 3.0 assessment for a given quarter and looking back in time for the prior assessment to identify if a resident's need for assistance on ADLs has increased. The look-back period to identify the prior assessment is between 45 and 165 days, but is typically 90 days.(1) Residents are included in the measure denominator, and eligible for inclusion in the numerator, if they have a qualifying target assessment for a given quarter, except those excluded based on the exclusion criteria. A target assessment is defined as the latest assessment that meets the following criteria: (a) it is contained within the resident's selected episode, (b) it has a qualifying reason for assessment, and (c) its target date is no more than 120 days before the end of the episode. An episode is defined as a period of time spanning one or more stays. An episode begins with an admission and ends with either (a) a discharge, or (b) the end of the target period, whichever comes first.

1.SOURCE: RTI Analysis of Q3, 2013 MDS 3.0 Data (programming reference: quarter_11_12\db316).

NUMERATOR STATEMENT

The numerator is the number of long-stay residents who have a selected target MDS assessment (OBRA, PPS, or discharge) reporting a defined amount of decline in ADL function when compared with a prior assessment (OBRA, PPS, or discharge). This decline in function is captured as an increase in the resident's need for assistance with late-loss ADLs, when compared with the resident's prior assessment, indicated by a higher score on the applicable MDS items on the more recent assessment (which are coded such that a higher score indicates the need for more assistance with an ADL task). Late-loss ADL items are bed mobility, transfer, eating, and toilet use. The threshold increase in need for assistance (suggesting decline in function) that results in a resident being counted in the numerator is met if the score for at least one late-loss ADL item increases by two or more points or if the score for two or more of the late-loss ADLs items increase by one point. The typical interval between the target and prior assessment dates is approximately 90 days.

Long-stay residents with selected target and prior assessments that indicate an increase in need for assistance with late-loss Activities of Daily Living (ADLs) on the target assessment, compared to the prior assessment. The four late-loss ADL Assistance items included in this measure are self-performance bed mobility (G0110A1), self-performance transfer (G0110B1), self-performance eating (G0110H1), and self-performance toilet use (G0110I1). These items have the same scale values:

When an activity occurred three or more times: 0 = Independent, 1 = Supervision, 2 = Limited assistance, 3 = Extensive assistance, 4 = Total dependence.

When an activity occurred two or fewer times: 7 = Activity occurred only once or twice, 8 = Activity did not occur.

Note that for each of these four self-performance ADL Assistance items, if the value is equal to 7 or 8 on either the target or prior assessment, then the item is recoded to 4 to allow comparison. An increase in the need for assistance with late-loss ADLs is defined as an increase in two or more coding points in one late-loss ADL item or a one point increase in two or more late-loss ADL items.

Residents meet the definition of increased need for assistance with late-loss ADLs if either of the following is true:

1. At least two of the following are true (note that in the notation below, [t] refers to the target assessment and [t-1] refers to the prior assessment):

a. Self-Performance Bed mobility: [Level at target assessment (G0110A1[t])] - [Level at prior assessment (G0110A1[t-1])] > [0], or

b. Self-Performance Transfer: [Level at target assessment (G0110B1[t])] - [Level at prior assessment (G0110B1[t-1])] > [0], or

c. Self-Performance Eating: [Level at target assessment (G0110H1[t])] - [Level at prior assessment (G0110H1[t-1])] > [0], or

d. Self-Performance Toilet Use: [Level at target assessment (G0110I1[t])] - [Level at prior assessment (G0110I1[t-1])] > [0].

or

2. At least one of the following is true:

a. Self-Performance Bed mobility: [Level at target assessment (G0110A1[t])] - [Level at prior assessment (G0110A1[t-1])] > [1], or

b. Self-Performance Transfer: [Level at target assessment (G0110B1[t])] - [Level at prior assessment (G0110B1[t-1])] > [1], or

c. Self-Performance Eating: [Level at target assessment (G0110H1[t])] - [Level at prior assessment (G0110H1[t-1])] > [1], or

d. Self-Performance Toilet Use: [Level at target assessment (G0110I1[t])] - [Level at prior assessment (G0110I1[t-1])] > [1].

The denominator includes all long-stay residents with a selected target MDS assessment (OBRA, PPS, or discharge) during the quarter and a prior assessment who did not meet the exclusion criteria. Long-stay residents are defined as residents who have stayed in the nursing home for 101 cumulative days or more.

Residents are counted if they are long-stay, defined as residents whose cumulative length of stay in the facility is 101 days or more. Residents who return to the nursing home following a hospital discharge will not have their day count within the episode of care reset to zero. The target population includes all long-stay residents with a target MDS assessment (OBRA, PPS, or discharge) for the selected quarter and a prior assessment (45 to 165 days before the target assessment), except those with exclusions (specified in S.10 and S.11).

EXCLUSIONS

There are six exclusions applied to the denominator: (1) self-performance total dependence on all four late-loss ADL items during the prior assessment (and therefore it is not possible for the resident to decline sufficiently to be counted in the numerator), (2) self-performance total dependence on three late-loss ADL items during the prior assessment and self-performance extensive assistance on the fourth late-loss ADL item (and therefore it is not possible for the resident to decline sufficiently to be counted in the numerator), (3) comatose status on the target assessment, (4) prognosis of life expectancy of less than six months on the target assessment, (5) receiving hospice care on the target assessment, or/and (6) the resident is not in the numerator and has missing values for any of the four ADL items on the target or prior assessment.

Nursing facilities are excluded from public reporting if their denominator size is less than 30 residents.

EXCLUSION DETAILS

The six ADL measure denominator exclusions are detailed as follows:

1. All four of the late-loss ADL items indicate total dependence on the prior assessment, as indicated by:

Self-Performance Bed Mobility (G0110A1) = [04, 07, 08] AND

Self-Performance Transfer (G0110B1) = [04, 07, 08] AND

Self-Performance Eating (G0110H1) = [04, 07, 08] AND

Self-Performance Toilet Use (G0110I1) = [04, 07, 08].

2. Three of the late-loss ADLs indicate total dependence on the prior assessment, as in #1 AND the fourth late-loss ADL indicates extensive assistance (value 03) on the prior assessment.

3. If resident is comatose (B0100 = [01, -]) on the target assessment.

4. Prognosis of life expectancy is less than 6 months (J1400 = [01, -]) on the target assessment.

5. Receiving hospice care (O0100K2 = [01, -]) on the target assessment.

6. The resident is not in the numerator AND

Self-Performance Bed Mobility (G0110A1) = [-] on the prior or target assessment, OR

Self-Performance Transfer (G0110B1) = [-] on the prior or target assessment, OR

Self-Performance Eating (G0110H1) = [-] on the prior or target assessment, OR

Self-Performance Toilet Use (G0110I1) = [-] on the prior or target assessment].

Nursing facilities are excluded from public reporting if their denominator size is less than 30 residents.

RISK ADJUSTMENT

No risk adjustment or risk stratification

No risk adjustment or risk stratification.

Provided in response box S.15a

This measure is not stratified.

TYPE SCORE

Rate/proportion better quality = lower score

ALGORITHM

Step 1: Identify the total number of long-stay residents who have a target assessment (OBRA, PPS, or discharge) during the quarter, have a prior assessment (45 to 165 days before the target assessment), and who did not meet the exclusion criteria. Step 2: Determine the number of long-stay residents who have a target MDS assessment (OBRA, PPS, or discharge) reporting a defined amount of decline when compared with a prior assessment (OBRA, PPS, or discharge). Step 3: Divide the result of Step 2 by the result of Step 1. No diagram provided

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5.1 Identified measures: 0427 : Functional status change for patients with elbow, wrist and hand impairments

0429 : Change in Basic Mobility as Measured by the AM-PAC:

0430 : Change in Daily Activity Function as Measured by the AM-PAC:

0428 : Functional status change for patients

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The specifications are not harmonized completely for three key reasons. First, there are no measures with the same focus, as the measures identified tend to target functional ability or improvement, while this measure focuses on functional decline. Second, none have the same target population. Third, the measures are based on different data sources.5b.1 If competing, why superior or rationale for additive value: There are no competing measures, as none of the measures listed above includes the same measure focus and same target population. This method is the most valid and efficient for capturing ADL decline among long-stay nursing home residents.

0701 Functional Capacity in COPD Patients Before and After Pulmonary Rehabilitation

STATUS

Endorsed

STEWARD

American Association of Cardiovascular and Pulmonary Rehabilitation

DESCRIPTION

The percentage of patients with COPD who are found to increase their functional capacity by at least 25 meters (82 feet), as measured by a standardized 6 minute walk test (6MWT) after participating in pulmonary rehabilitation (PR).

TYPE

Outcome

DATA SOURCE

Management Data, Electronic Clinical Data : Registry The measure can be submitted to the AACVPR Outpatient Pulmonary Rehabilitation Registry or another data base for quality improvement on a standardized data collection form, as recommended in the American Thoracic Society (ATS) guidelines for administration of the 6MWT. The guidelines for administration are provided to all programs in the AACVPR PR Outcomes Resource Guide (included in Appendix), as well as published in ATS guidelines.

Available in attached appendix at A.1 Attachment PR_Registry_definitions_and_comments.pdf

LEVEL

Facility, Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Outpatient Rehabilitation

TIME WINDOW

The measurement period is one quarter (3 months). All patients completing PR during the measurement period should be included in the denominator, if they completed at least 10 PR sessions in the 3 months after program entry. Depending on PR completion date, the look back period may extend up to 3 months prior to the start of the measurement period in order to capture the 6MWT distance at program entry and to confirm the number of sessions completed since program entry.Numerator Statement

Number of patients who are found to increase their functional capacity by at least 25 meters (82 feet), as measured by 6MWT distance at PR program entry and completion.

NUMERATOR DETAILS

Assessments of 6MWT are to be performed within one week of PR program entry and again within one week of PR program completion. The time period between tests should be no more than 3 months.

To perform the 6MWT the patient is instructed to walk as fast and as far as they can in 6 minutes, but they are allowed to stop and rest during the test, if needed. The total distance covered in 6 minutes is measured (in meters or feet). All patients who increase the distance walked by at least 25 meters (82 feet), as measured by the 6MWT performed at PR entry and again at PR completion, should be included in the numerator.

The 6 minute walk test (6MWT) is a practical, simple, standardized, and validated test that measures the distance that a patient can quickly walk on a flat, hard surface in a period of 6 minutes (6MWD). It evaluates the global and integrated responses of all the systems involved during exercise, including the pulmonary and cardiovascular systems, systemic circulation, peripheral circulation, blood, neuromuscular units, and muscle metabolism. The 6MWT provides specific testing related to the activity of daily living, walking. (Guyatt, G.H., et al., 1984. Guyatt, G.H., et al., 1985, Sciurba, F.C. and W.A. Slivka, Steele, B). In performing the 6MWT, it has been reported that a 54 meter (176 feet) difference in 6MW difference is clinically significant (identified as clear change in clinical status) when compared to differences in self-rating of

walking ability (Redelmeier, D.A., et al). The strongest indication for the 6MWT is for measuring the response to medical interventions in patients with moderate to severe heart or lung disease.

Specific instructions regarding the administration of the 6MWT have been developed and published by the American Thoracic Society (ATS, 2002).

American Thoracic Society: Statement Guidelines for the Six-Minute Walk Test. Am J Resp Crit Care med, 2002;155:111-117.

Guyatt, G.H., et al., Effect of encouragement on walking test performance. Thorax,1984. 39(11): p. 818-22.

Guyatt, G.H., et al., The 6-minute walk: a new measure of exercise capacity in patients with chronic heart failure. Canadian Medical Association Journal, 1985. 132(8): p. 919-23.

Redelmeier, D.A., et al., Interpreting small differences in functional status: the six minute walk test in chronic lung disease patients. American Journal of Respiratory and Critical Care Medicine, 1997. 155: p. 1278-1282.

Sciurba, F.C. and W.A. Slivka, Six minute walk testing. Seminars in Respiratory and Critical Care Medicine, 1998. 19(4): p. 383-392.

Steele, B., Timed walking tests of exercise capacity in chronic cardiopulmonary illness. Journal of Cardiopulmonary Rehabilitation, 1996. 16: p. 25-33.

Additional information added 12/4/14 as requested - ICD9 & ICD10 CODES:

Chronic Bronchitis ICD-9 codes 490, 491 = ICD-10 code J42

Emphysema ICD-9 code 492 = ICD-10 code J43.9

Bronchiectasis ICD-9 code 494 = ICD-10 code J47.9

Chronic Airway Obstruction ICD-9 code 496 = COPD ICD-10 code J44.9

DENOMINATOR STATEMENT

All patients with clinician diagnosed COPD at PR program entry who completed PR during the measurement period and who completed at least 10 PR sessions within 3 months of PR program entry.

DENOMINATOR DETAILS

COPD (chronic obstructive pulmonary disease includes a clinician diagnosis of COPD, chronic bronchitis and / or emphysema (ICD-9 Codes include 490-492, 494, 496: Chronic obstructive pulmonary disease (COPD) includes chronic bronchitis (ICD-9 codes 490-491), emphysema (ICD-9 code 492)), and chronic airway obstruction (ICD-9 code 496). These diseases are commonly characterized by irreversible airflow limitation.

Patients for whom no 6MWT is recorded at either PR program entry or PR program completion who would otherwise qualify for the denominator, and for whom no exclusions apply, should be included in the denominator.

Additional information added 12/4/14 as requested - ICD9 & ICD10 CODES:

Chronic Bronchitis ICD-9 codes 490, 491 = ICD-10 code J42

Emphysema ICD-9 code 492 = ICD-10 code J43.9

Bronchiectasis ICD-9 code 494 = ICD-10 code J47.9

Chronic Airway Obstruction ICD-9 code 496 = COPD ICD-10 code J44.9

EXCLUSIONS

Patients for whom a 6MWT would be contraindicated due to acute or unstable medical conditions

Patients who are unable to perform a 6MWT due to orthopedic, neurological, cognitive or psychiatric impairments and/or safety reasons.

Patients who have not completed at least 10 PR sessions within 3 months of program entry.

EXCLUSION DETAILS

Acute myocardial infarction (3–5 days), unstable angina, uncontrolled arrhythmias, syncope, active endocarditis or pericarditis, symptomatic severe aortic stenosis, uncontrolled heart failure, acute pulmonary embolus or pulmonary infarction, thrombosis of lower extremities, suspected dissecting aneurysm, uncontrolled asthma, pulmonary edema, room air desaturation at rest < 85% (requires oxygen titration), respiratory failure, acute noncardiopulmonary disorder that may affect exercise performance or be aggravated by exercise (i.e. infection, renal failure, thyrotoxicosis), and / or mental impairment leading to inability to cooperate.

RISK ADJUSTMENT

No risk adjustment or risk stratification

Not applicable

STRATIFICATION

Data are to be assessed by individual and group outcomes, can be reported as aggregate group data, and can also be stratified and reported for the group by age (by decade of life), race and sex (male, female).

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

1) Identify the initial patient population: (All patients who completed PR during the measurement period).

2) Identify patients within the initial patient population who qualify for the Denominator: (All pa-tients > age 40 with clinician diagnosed COPD at PR program entry who completed at least 10 PR sessions in the 3 months after program entry).

3) From the patients within the denominator, identify the patients who qualify for the Numerator (All patients in the denominator who increased their functional capacity by at least 25 meters (82 feet), as measured by 6MWT distance at PR program entry and completion).

4) From the patients in the denominator who did not meet the numerator criteria, determine if the physician or clinician has documented that the patient meets any criteria for exclusion and remove these patients from the denominator.

If the patient does not meet the numerator and a valid exclusion is not present, this case represents a quality failure.

To calculate performance rate:

Number of patients in the Numerator ÷ Number of patients in the Denominator after all exclusions are applied × 100 No diagram provided

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact: Not applicable

5b.1 If competing, why superior or rationale for additive value: Not applicable

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2286 Functional Change: Change in Self Care Score

STATUS

Final Disposition Pending

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 at an inpatient rehabilitation facility who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 8 items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory.

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data : Electronic Health Record, Other The collection instrument is the Functional Change: Change in Motor Score form attached as an appendix to this application. The items for the change in Self-Care score are within this measure.

Available in attached appendix at A.1 Attachment NQF_Submission_Self_Care-635507770592714533.xlsx

LEVEL

Facility

SETTING

Home Health, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

TIME WINDOW

12 months

NUMERATOR STATEMENT

Average change in rasch derived self-care functional score from admission to discharge at the facility level, including items: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. Average is calculated as: (sum of change at the

patient level for all items (Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory) / total number of patients).

For Inpatient Rehabilitation Facilities (IRFs) data collection currently occurs as required by the Centers for Medicare and Medicaid Services (CMS)reimbursement using the mandated payment document, the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). Embedded in the IRF-PAI is the FIM® Instrument. The FIM® Instrument is a criterion referenced tool with 18

items that measures burden of care or level of dependence among individuals for those 18 items. Each item is rated on a scale of 1(most dependent) to 7(completely independent). For the purposes of this measure, a subset of 8 FIM® items has been tested and validated. Those items are: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, and Memory. Rasch analysis was performed on the 12 items and the difference in the rasch derived values (defined in S.2b) from admission to discharge reflect the change at the patient level. The numerator of the measure is the facility´s average change.

While the IRF-PAI is specific to inpatient rehabilitation facilities, the measure can be used in all post-acute care venues. The FIM® instrument can be assessed in all venues of care and has been tested and validated in both LTACs and SNFs. In fact, there are a subset of LTACs and SNFs utilizing the FIM® instrument currently (www.udsmr.org), and therefore this measure does not have to be specific to IRFs.

DENOMINATOR STATEMENT

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

DENOMINATOR DETAILS

To calculate the facility´s adjusted expected change in rasch derived values, indirect standarization is used, which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission or in essence, patient severity. Patients within the same CMG are expected to have similar resource utilization needs and similar outcomes. There are three steps to classifying a patient into a CMG at admission:

1. Identify the patient's impairment group code (IGC).

2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM® items.

3. Calculate the cognitive FIM® rating and the age at admission. (This step is not required for all CMGs.)

See file uploaded in S.15 for calculations.

While CMGs are only present for patients seen in an IRF, the same procedure can be used for LTAC and SNF patients, with groupings specific to those venues of care.

EXCLUSIONS

National values used in the CMG-adjustment procedure will not include cases who died in the IRF (or other venue) or cases less than 18 years old. Cases who died during rehabilitation are not typical patients and are typically omitted in the literature when looking at rehabilitation

outcomes. In addition, the FIM instrument is meant for an adult population (Ottenbacher et al. 1996).Exclusion details

Patient´s date of birth (DOB) and discharge setting are both variables collected in the IRF-PAI document. Age can be calculated from DOB, and there is a specific discharge setting of died, value ´11´. Date of birth and discharge setting are also documented in both LTACs and SNFs.

RISK ADJUSTMENT

Stratification by risk category/subgroup

To calculate the facility´s adjusted expected change in rasch derived values, we use indirect standarization which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission or patient severity. Patients within the same CMG are expected to have similar resource utilization needs and similar outcomes. There are three steps to classifying a patient into a CMG at admission:

1.   Identify the patient's impairment group code (IGC).

2.   Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM® items.

3.   Calculate the cognitive FIM® rating and the age at admission. (This step is not required for all CMGs.)

Impairment group codes are the code that best describes the primary reason for admission to the rehabilitation program. Each Impairment Group Code (IGC) consists of a two-digit number (indicating the major Impairment Group) followed by a decimal point and 1 to 4 additional digits identifying the subgroup.

See file uploaded in S.2b for calculations.

Available in attached Excel or csv file at S.2b

STRATIFICATION

While the measure can be stratified by specific impairment type, the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

TYPE SCORE

Ratio better quality = higher score

ALGORITHM

1. Target population: Inpatient rehabilitation facility patients, skilled nursing facility short term patients, long term acute care facility patients, and home health patients.

2. Exclusions: Age less than 18 and cases who died during the episode of care.

3. Cases meeting target process: All remaining cases.

4. Outcome: Ratio of facility level average motor change (rasch derived values) to facility CMG adjusted expected motor change.

5. Risk adjustment: CMG adjustment using indirect standardization of the proportion of cases at the facility by CMG, and CMG specific national average of rasch derived value of motor change. No diagram provided

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:

2287 Functional Change: Change in Motor Score

STATUS

Endorsed

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 inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 12 FIM® 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

Administrative claims, Other The collection instrument is the Functional Change: Change in Motor Score form attached as an appendix to this application.

Attachment NQF_Submission.xlsx

LEVEL

Facility

SETTING

Home Health, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

TIME WINDOW

12 months

NUMERATOR STATEMENT

Average change in rasch derived motor functional score from admission to discharge at the facility level. Average is calculated as (sum of change at the patient level/total number of patients). Cases aged less than 18 years at admission to the IRF or patients who died within the IRF are excluded.

NUMERATOR DETAILS

For Inpatient Rehabilitation Facilities (IRFs) data collection currently occurs as required by the Centers for Medicare and Medicaid Services (CMS) reimbursement using the mandated payment document, the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). Embedded in the IRF-PAI is the FIM® Instrument. The FIM® Instrument is a criterion referenced tool with 18 items that measures burden of care or level of dependence among individuals for those 18 items. Each item is rated on a scale of 1 (most dependent) to 7 (completely independent). For the purposes of this measure, a subset of 12 FIM® items has been tested and validated. Those items are: Feeding, Grooming, Dressing Upper Body, Dressing Lower Body, Toileting, Bowel, Expression, Memory, Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Rasch analysis was performed on the 12 items and the difference in the rasch derived values (defined in S.2b) from admission to discharge reflect the change at the patient level. The numerator of the measure is the facility's average change.

While the IRF-PAI is specific to inpatient rehabilitation facilities, the measure can be used in all post-acute care venues. The FIM® instrument can be assessed in all venues of care and has been tested and validated in both LTACs and SNFs. In fact, there are a subset of LTACs and SNFs utilizing the FIM® instrument currently (www.udsmr.org), and therefore this measure does not have to be specific to IRFs.

DENOMINATOR STATEMENT

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

DENOMINATOR DETAILS

To calculate the facility's adjusted expected change in rasch derived values, indirect standarization is used, which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission or in essence, patient severity. Patients within the same CMG are expected to have similar resource utilization needs and similar outcomes. There are three steps to classifying a patient into a CMG at admission:

1.   Identify the patient's impairment group code (IGC).

2.   Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM® items.

3.   Calculate the cognitive FIM® rating and the age at admission. (This step is not required for all CMGs.)

See file uploaded in S.15 for calculations.

While CMGs are only present for patients seen in an IRF, the same procedure can be used for LTAC and SNF patients, with groupings specific to those venues of care.

EXCLUSIONS

National values used in the CMG-adjustment procedure will not include cases who died in the IRF (or other venue) or cases less than 18 years old. Cases who died during rehabilitation are not typical patients and are typically omitted in the literature when looking at rehabilitation outcomes. In addition, the FIM instrument is meant for an adult population (Ottenbacher et al. 1996).

Patient's date of birth (DOB) and discharge setting are both variables collected in the IRF-PAI document. Age can be calculated from DOB, and there is a specific discharge setting of died, value '11'. Date of birth and discharge setting are also documented in both LTACs and SNFs.

RISK ADJUSTMENT

Stratification by risk category/subgroup

To calculate the facility's adjusted expected change in rasch derived values, we use indirect standarization which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission or patient severity. Patients within the same CMG are expected to have similar resource utilization needs and similar outcomes. There are three steps to classifying a patient into a CMG at admission:

1. Identify the patient's impairment group code (IGC).

2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM® items.

3. Calculate the cognitive FIM® rating and the age at admission. (This step is not required for all CMGs.)

Impairment group codes are the code that best describes the primary reason for admission to the rehabilitation program. Each Impairment Group Code (IGC) consists of a two-digit number (indicating the major Impairment Group) followed by a decimal point and 1 to 4 additional digits identifying the subgroup.

See file uploaded in S.2b for calculations.

STRATIFICATION

While the measure can be stratified by specific impairment type, the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

TYPE SCORE

Ratio better quality = higher score

ALGORITHM

1. Target population: Inpatient rehabilitation facility patients, skilled nursing facility short term patients, long term acute care facility patients, and home health patients.

2. Exclusions: Age less than 18 and cases who died during the episode of care.

3. Cases meeting target process: All remaining cases.

4. Outcome: Ratio of facility level average motor change (rasch derived values) to facility CMG adjusted expected motor change.

5. Risk adjustment: CMG adjustment using indirect standardization of the proportion of cases at the facility by CMG, and CMG specific national average of rasch derived value of motor change. No diagram provided

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5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

2321 Functional Change: Change in Mobility Score

STATUS

Final Disposition Pending

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 inpatient rehabilitation facility patients aged 18 years and older who were discharged alive. The timeframe for the measure is 12 months. The measure includes the following 4 mobility FIM® items:Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs.

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data : Electronic Health Record The collection instrument is the Functional Change: Change in Motor Score form attached as an appendix to this application. The items for this measure are part of that form.

Attachment NQF_Submission_Mobility-635533914241373843.xlsx

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

TIME WINDOW

12 months

NUMERATOR STATEMENT

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

For Inpatient Rehabilitation Facilities (IRFs) data collection currently occurs as required by the Centers for Medicare and Medicaid Services (CMS) reimbursement using the mandated payment document, the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). Embedded in the IRF-PAI is the FIM® Instrument. The FIM® Instrument is a criterion referenced tool with 18 items that measures burden of care or level of dependence among individuals for those 18 items. Each item is rated on a scale of 1 (most dependent) to 7 (completely independent). For the purposes of this measure, a subset of 4 FIM® items has been tested and validated. Those items are: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. Rasch analysis was performed on the 12 items and the difference in the rasch derived values (defined in S.2b) from admission to discharge reflect the change at the patient level. The numerator of the measure is the facility´s average change.

While the IRF-PAI is specific to inpatient rehabilitation facilities, the measure can be used in all post-acute care venues. The FIM® instrument can be assessed in all venues of care and has been tested and validated in both LTACs and SNFs. In fact, there are a subset of LTACs and SNFs utilizing the FIM® instrument currently (www.udsmr.org), and therefore this measure does not have to be specific to IRFs.

DENOMINATOR STATEMENT

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

DENOMINATOR DETAILS

To calculate the facility´s adjusted expected change in rasch derived values, indirect standarization is used, which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission or in essence, patient severity. Patients within the same CMG are expected to have similar resource utilization needs and similar outcomes. There are three steps to classifying a patient into a CMG at admission:

1. Identify the patient's impairment group code (IGC).

2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM® items.

3. Calculate the cognitive FIM® rating and the age at admission. (This step is not required for all CMGs.)

See file uploaded in S.2b for calculations.

EXCLUSIONS

National values used in the CMG-adjustment procedure will not include cases who died in the IRF (or other venue) or cases less than 18 years old. Cases who died during rehabilitation are not typical patients and are typically omitted in the literature when looking at rehabilitation outcomes. In addition, the FIM instrument is meant for an adult population (Ottenbacher et al. 1996).

Patient´s date of birth (DOB) and discharge setting are both variables collected in the IRF-PAI document. Age can be calculated from DOB, and there is a specific discharge setting of died, value ´11´. Date of birth and discharge setting are also documented in both LTACs and SNFs.

RISK ADJUSTMENT

Stratification by risk category/subgroup

To calculate the facility´s adjusted expected change in rasch derived values, we use indirect standarization which weights national CMG-specific values by facility-specific CMG proportions. CMG-adjustment derives the expected value based on the case mix and severity mix of each facility. The case-mix group (CMG) classification system groups similarly impaired patients based on functional status at admission or patient severity. Patients within the same CMG are expected to have similar resource utilization needs and similar outcomes. There are three steps to classifying a patient into a CMG at admission:

1. Identify the patient's impairment group code (IGC).

2. Calculate the patient's weighted motor index score, calculated from 12 of the 13 motor FIM® items.

3. Calculate the cognitive FIM® rating and the age at admission. (This step is not required for all CMGs.)

Impairment group codes are the code that best describes the primary reason for admission to the rehabilitation program. Each Impairment Group Code (IGC) consists of a two-digit number (indicating the major Impairment Group) followed by a decimal point and 1 to 4 additional digits identifying the subgroup.

See file uploaded in S.2b for calculations.

Available in attached Excel or csv file at S.2b

STRATIFICATION

While the measure can be stratified by specific impairment type, the CMG adjustment procedure allows for the measure to be complete, accurate, and valid for all patients within the facility, excluding died cases and ages less than 18.

TYPE SCORE

Ratio better quality = higher score

ALGORITHM

1. Target population: Inpatient rehabilitation facility patients, skilled nursing facility short term patients, long term acute care facility patients, and home health patients.

2. Exclusions: Age less than 18 and cases who died during the episode of care.

3. Cases meeting target process: All remaining cases.

4. Outcome: Ratio of facility level average motor change (rasch derived values) to facility CMG adjusted expected motor change.

5. Risk adjustment: CMG adjustment using indirect standardization of the proportion of cases at the facility by CMG, and CMG specific national average of rasch derived value of mobility change. No diagram provided

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:

2612 CARE: Improvement in Mobility

STATUS

Endorsed

STEWARD

American Health Care Association

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.

TYPE

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

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

TIME WINDOW

Rolling 12 month average, updated quarterly.

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.

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.

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

DENOMINATOR DETAILS

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).

EXCLUSIONS

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

EXCLUSION DETAILS

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.

RISK ADJUSTMENT

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 individuals 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

STRATIFICATION

Not Applicable

TYPE SCORE

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

ALGORITHM

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

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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

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2613 CARE: Improvement in Self Care

STATUS

Endorsed

STEWARD

American Health Care Association

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.

TYPE

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

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

TIME WINDOW

Rolling 12 month average, updated quarterly.

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.

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 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.

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 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

DENOMINATOR DETAILS

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).

EXCLUSIONS

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.

EXCLUSION DETAILS

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.

RISK ADJUSTMENT

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 individuals 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

STRATIFICATION

Not Applicable

TYPE SCORE

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

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" of "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×["preliminary self-care admission score"]-18.8

["transformed self-care discharge score"]=2.475×["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

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

2624 Functional Outcome Assessment

STATUS

Endorsed

STEWARD

Centers for Medicare and Medicaid Services

DESCRIPTION

NOTE: Specification information in this section is from the 2014 Physician Quality Reporting System Manual. Note that Testing Information is based on the specification in the 2012 Physician Quality Reporting System Manual. Both 2012 and 2014 Specifications are included in the attached "NQF Endorsement Measurement Submission Summary Materials"

Percentage of visits for patients aged 18 years and older with documentation of a current functional outcome assessment using a standardized functional outcome assessment tool on the date of the encounter AND documentation of a care plan based on identified functional outcome deficiencies on the date of the identified deficiencies.

TYPE

Process

DATA SOURCE

Administrative claims, Paper Medical Records The source is the medical record, which provides patient information for the encounter. Medicare Part B claims data is provided for test purposes.

No data collection instrument provided Attachment FOA_Data_Dictionary.xlsx

LEVEL

Clinician : Group/Practice, Clinician : Individual

SETTING

Ambulatory Care : Clinician Office/Clinic, Ambulatory Care : Outpatient Rehabilitation

TIME WINDOW

The reporting period represents a 12 month period starting January 1st through December 31 of each year.

NUMERATOR STATEMENT

Patients with a documented current functional outcome assessment using a standardized tool AND a documented care plan based on the identified functional outcome deficiencies.

NUMERATOR DETAILS

G-codes are a defined as Quality Date 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 seven different G-code options for NQF measure #2624.

Functional Outcome Assessment Documented as Positive AND Care Plan Documented

(One quality-data code [G8539 or G8542 or G8942] is required on the claim form to submit this numerator option)

G8539: Functional outcome assessment documented as positive using a standardized tool AND a care plan based, on identified deficiencies on the date of the functional outcome assessment, is documented

OR

Functional Outcome Assessment Documented, No Functional Deficiencies Identified, Care Plan not required

G8542: Functional outcome assessment using a standardized tool is documented; no functional deficiencies identified, care plan not required

OR

Functional Outcome Assessment Documented AND Care Plan Documented, if Indicated, Within the Previous 30 Days

G8942: Functional outcome assessment using a standardized tool is documented within the previous 30 days and care plan, based on identified deficiencies on the date of the functional outcome assessment, is documented

OR

Functional Outcome Assessment not Documented, Patient not Eligible

(One quality-data code [G8540 or G9227] is required on the claim form to submit this numerator option)

G8540: Functional Outcome Assessment NOT documented as being performed, documentation the patient is not eligible for a functional outcome assessment using a standardized tool

OR

Functional Outcome Assessment Documented, Care Plan Not Documented, Patient Not Eligible

G9227: Functional outcome assessment documented, care plan not documented, documentation the patient is not eligible for a care plan

OR

Functional Outcome Assessment not Documented, Reason not Given

(One quality-data code [G8541 or G8543] is required on the claim form to submit this numerator option)

G8541: Functional outcome assessment using a standardized tool not documented, reason not given

OR

Functional Outcome Assessment Documented as Positive, Care Plan not Documented, Reason not Given

G8543: Documentation of a positive functional outcome assessment using a standardized tool; care plan not documented, reason not given

NUMERATOR NOTE: The intent of this measure is for a functional outcome assessment tool to be utilized at a minimum of every 30 days but reporting is required at each visit due to coding limitations. Therefore, for visits occurring within 30 days of a previously documented functional outcome assessment, the numerator quality-data code G8942 should be used for reporting purposes.

Numerator Instructions: Documentation of a current functional outcome assessment must include identification of the standardized tool used.

Definitions:

Standardized Tool – A tool that has been normalized and validated Examples of tools for functional outcome assessment include, but are not limited to: Oswestry Disability Index (ODI),

Roland Morris Disability/Activity Questionnaire (RM), Neck Disability Index (NDI), and Patient-Reported Outcomes Measurement Information System (PROMIS).

Note: A functional outcome assessment is multi-dimensional and quantifies pain and neuromusculoskeletal capacity; therefore the use of a standardized tool assessing pain alone, such as the visual analog scale (VAS), does not meet the criteria of a functional outcome assessment standardized tool.

Functional Outcome Assessment – Patient completed questionnaires designed to measure a patient's limitations in performing the usual human tasks of living and to directly quantify functional and behavioral symptoms.

Current (Functional Outcome Assessment) – A patient having a documented functional outcome assessment utilizing a standardized tool and a care plan if indicated within the previous 30 days.

Functional Outcome Deficiencies – Impairment or loss of physical function related to neuromusculoskeletal capacity, may include but are not limited to: restricted flexion, extension and rotation, back pain, neck pain, pain in the joints of the arms or legs, and headaches.

Care Plan – A care plan is an ordered assembly of expected/planned activities or actionable elements based on identified deficiencies. These may include observations goals, services, appointments and procedures, usually organized in phases or sessions, which have the objective of organizing and managing health care activity for the patient, often focused on one or more of the patient's health care problems. Care plans may also be known as a treatment plan.

DENOMINATOR STATEMENT

All visits for patients aged 18 years and older

DENOMINATOR DETAILS

97001, 97002, 97003, 97004, 98940, 98941, 98942

EXCLUSIONS

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

- Patient refuses to participate
- Patient unable to complete questionnaire
- Patient is in an urgent or emergent medical situation where time is of the essence and to delay treatment would jeopardize the patient's health status

EXCLUSION DETAILS

Functional Outcome Assessment not Documented, Patient not Eligible

G8540: Functional Outcome Assessment NOT documented as being performed, documentation the patient is not eligible for a functional outcome assessment using a standardized tool

OR

Functional Outcome Assessment Documented, Care Plan Not Documented, Patient Not Eligible

G9227: Functional outcome assessment documented, care plan not documented, documentation the patient is not eligible for a care plan

RISK ADJUSTMENT

No risk adjustment or risk stratification

N/A

Provided in response box S.15a

No 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 seven 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) CALCUATION & PERFORMANCE DENOMINATOR (PD) CALCULATION.

NUMERATOR (A): HCPCS Clinical Quality Codes G8539, G8542, G8942

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 G8539, G8542, G8942, G8540, G9227, G8541, G8543

DENONINATOR EXCLUSION (B): HCPCS Clinical Quality Code G8540, G9227

DENOMINATOR EXCLUSION CALCULATION: Denominator Exclusion (B): # of patients with valid exclusions # G8540+G9227/ # TDP

PERFORMANCE DENOMINATOR CALCULATION: Performance Denominator (B): Patients meeting criteria for performance denominator calculation # A / (# TDP - # B) Available in attached appendix at A.1

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5.1 Identified measures: 0050 : Osteoarthritis: Function and Pain Assessment

0423 : Functional status change for patients with Hip impairments

0425 : Functional status change for patients with lumbar impairments

0426 : Functional status change for patients with Shoulder impairmen

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: There are 9 partially related measures (having partial measure focus or partial target populations). The differences between the related measure and the submitted measure #2624 are listed below: 0422 - Func

5b.1 If competing, why superior or rationale for additive value: N/A

2631 Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function

STATUS

Final Disposition Pending

Centers for Medicare & Medicaid Services (CMS)

DESCRIPTION

This quality measure reports the percentage of all Long-Term Care Hospital (LTCH) patients with an admission and discharge functional assessment and a care plan that addresses function.

TYPE

Process

DATA SOURCE

Electronic Clinical Data The Long-Term Care Hospital Continuity Assessment Record and Evaluation Data Set Version 3.00 (LTCH CARE Data Set v3.00)

No data collection instrument provided

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Long Term Acute Care Hospital

TIME WINDOW

12 months

NUMERATOR STATEMENT

The numerator for this quality measure is the number of Long-Term Care Hospital (LTCH) patients with complete functional assessment data and at least one self-care or mobility goal.

For patients with a complete stay, all three of the following are required for the patient to be counted in the numerator: (1) a valid numeric score indicating the patient's status or response, or a valid code indicating the activity was not attempted or could not be assessed, for each of the functional assessment items on the admission assessment; (2) a valid numeric score, which is a discharge goal indicating the patient's expected level of independence, for at least one self-care or mobility item on the admission assessment; and (3) a valid numeric score indicating the patient's status or response, or a valid code indicating the activity was not attempted or could not be assessed, for each of the functional assessment items on the discharge assessment.

For patients who have an incomplete stay, discharge data are not required. The following are required for the patients who have an incomplete stay to be counted in the numerator: (1) a valid numeric score indicating the patient's status or response, or a valid code indicating the activity was not attempted or could not be assessed, for each of the functional assessment items on the admission assessment; and (2) a valid numeric score, which is a discharge goal indicating the patient's expected level of independence, for at least one self-care or mobility item on the admission assessment.

Patients who have incomplete stays are defined as those patients (1) with incomplete stays due to a medical emergency, (2) who leave the LTCH against medical advice, or (3) who die while in the LTCH. Discharge functional status data are not required for these patients because these data may be difficult to collect at the time of the medical emergency, if the patient dies or if the patient leaves against medical advice.

For patients with a complete stay, each functional assessment item listed below must have a valid score or code at admission and discharge and at least one of the self-care or mobility items must have a valid numeric code as a goal.

For patients with an incomplete stay, each functional assessment item listed below must have a valid score or code at admission and at least one of the self-care or mobility items must have a valid numeric code as a goal. No discharge data are required for patients with incomplete stays.

The self-care functional assessment items are:

GG 0130A. Eating

GG 0130B. Oral hygiene

GG 0130C. Toileting hygiene

GG 0130D. Wash upper body

Valid scores/codes for the self-care items are:

06 - Independent

05 - Setup or clean-up assistance

04 - Supervision or touching assistance

03 - Partial/moderate assistance

02 - Substantial/maximal assistance

01 - Dependent

07 - Patient Refused

09 - Not applicable

88 - Not attempted due to medical condition or safety concerns

The mobility functional assessment items are:

GG 0170A. Roll left and right

GG 0170B. Sit to lying

GG 0170C. Lying to sitting on side of bed

GG 0170D. Sit to stand

GG 0170E. Chair/bed-to-chair transfer

GG 0170F. Toilet transfer

For patients who are walking:

GG 0170I. Walk 10 feet

GG 0170J. Walk 50 feet with two turns

GG 0170K. Walk 150 feet

For patients who use a wheelchair, complete the following items:

GG 0170R. Wheel 50 feet with two turns

GG 0170S. Wheel 150 feet

Valid scores/codes for the mobility items are:

06 - Independent

05 - Setup or clean-up assistance

04 - Supervision or touching assistance

03 - Partial/moderate assistance

02 - Substantial/maximal assistance

01 - Dependent

07 - Patient Refused

09 - Not applicable

88 - Not attempted due to medical condition or safety concerns

Cognitive Function

C1610A-E2. Signs and Symptoms of Delirium (CAM © [Confusion Assessment Method]):

C1610A. and C1610B. Acute Onset and Fluctuating Course

C1610C. Inattention

C1610D. Disorganized Thinking

C1610E1 and C160E2. Altered Level of Consciousness

Valid codes for C1610-Signs and Symptoms of Delirium are:

1 - Yes

0 - No

Communication: Understanding and Expression

BB0700. Expression of Ideas and Wants

Valid codes are:

4 - Expresses without difficulty

3 - Expresses with some difficulty

2 - Frequently exhibits difficulty with expressing needs and ideas

1 - Rarely/Never expresses or is very difficult to understand

BB0800. Understanding Verbal Content:

Valid codes are:

4 - Understands

3 - Usually understands

2 - Sometimes understands

1 - Rarely/Never understands

Bladder Continence

H0350. Bladder Continence

Valid codes are:

0 - Always continent

1 - Stress incontinence only

2 - Incontinent less than daily

3 - Incontinent daily

4 - Always incontinent

5 - No urine output

9 - No applicable

For patients with incomplete stays, admission data and at least one goal are required for the patient to be counted in the numerator. No discharge data are required. Patients with incomplete stays are identified based on the following data elements:

1) Patients with incomplete stays due to a medical emergency. These patients are excluded if:

a) Item A0250. Reason for Assessment is coded 11 = Unplanned discharge OR

b) The length of stay is less than 3 days based on item A0220. Admission Date and A0270: Discharge Date OR

c) Item A2110. Discharge Location is coded 04 = Hospital emergency department OR 05 = short-stay acute care hospital OR 06 = Long-term care hospital OR 08 = Psychiatric hospital or unit.

2) Patients who leave the LTCH against medical advice. These patients are identified based on the reason for the assessment:

a) Item A0250. Reason for Assessment is coded as 11 = Unplanned discharge

3) No discharge functional status data are required if a patient dies while in the LTCH.

These patients are identified based on the reason for the assessment:

a) Item A0250. Reason for Assessment is coded 12 = Expired.

DENOMINATOR STATEMENT

The denominator is the number of LTCH patients discharged during the targeted 12 month (i.e., 4 quarters) time period.

DENOMINATOR DETAILS

The denominator includes all LTCH patients discharged during the targeted 12 month (i.e., 4 quarters) time period, including patients of all ages and patients with all payer sources. Patients are selected based on submitted LTCH CARE Data Set Admission and Discharge forms.

EXCLUSIONS

There are no denominator exclusions for this measure.

EXCLUSION DETAILS

There are no denominator exclusions for this measure.

RISK ADJUSTMENT

No risk adjustment or risk stratification

This measure is not risk adjusted. It is a process measure that focuses on the clinical process of completing functional assessments and the inclusion of function in a patient's care plan. This process measure does not warrant risk adjustment, because completion of the functional assessment items, including indicating that an activity was not attempted or did not occur, should not vary based on the clinical complexity of the patient.

STRATIFICATION

This measure does not use stratification.

TYPE SCORE

Rate/proportion better quality = higher score

1) For each LTCH, the stay records of patients discharged during the 12 month target time period are identified and counted. This count is the denominator.

2) The records of patients with complete stays are identified and the number of these patient stays with complete admission functional assessment data AND at least one self-care or mobility goal AND complete discharge functional assessment data is counted.

3) The records of patients with incomplete stays are identified, and the number of these patient records with complete admission functional status data AND at least one self-care or mobility goal is counted.

4) The counts from step 3 (complete LTCH stays) and step 4 (incomplete LTCH stays) are summed. The sum is the numerator count.

5) The numerator count is divided by the denominator count to calculate this quality measure.

For the numerator, complete data are defined as:

1. a valid numeric score indicating the patient's status, or a valid code indicating the activity did not occur or could not be assessed, for each of the functional assessment items on the admission assessment; and

2. a valid numeric score for one or more of the self-care or mobility items that is a goal;

3. a valid numeric score indicating the patient's status, or a valid code indicating the activity did not occur or could not be assessed, for each of the functional assessment items on the discharge assessment. (Note: Discharge data are not required for patients with incomplete LTCH stays.)

Denominator: The denominator for this quality measure is the number of LTCH patients discharged during the targeted 12 month (i.e., 4 quarters) time period. No diagram provided

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5.1 Identified measures: 0686 : Percent of Residents Who Have/Had a Catheter Inserted and Left in Their Bladder (long stay)

0685 : Percent of Low Risk Residents Who Lose Control of Their Bowels or Bladder (Long-Stay)

0423 : Functional status change for patients with Hip impairmen

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The quality measures listed above focus on functional activities and impairments but do not apply to the same patient population (patients who are chronically critically ill)

5b.1 If competing, why superior or rationale for additive value: There are no competing measures that are NQF endorsed.

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

STATUS

Endorsed

STEWARD

Centers for Medicare & Medicaid Services (CMS)

DESCRIPTION

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

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data Data will be collected using the LTCH CARE Data Set Version 3.0.

No data collection instrument provided Attachment Attach_1_LTCH_Mobility_Risk_Adj_FINAL-635509044562501727.xlsx

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Long Term Acute Care Hospital

TIME WINDOW

The time period for this quality measure is 24 months.

NUMERATOR STATEMENT

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

NUMERATOR DETAILS

Eight mobility activities (listed below) are each scored by a clinician based on a patient´s ability to complete the activity. The scores for the 8 mobility activities are summed to obtain a mobility score at the time of admission and discharge. The change in mobility is the difference between the discharge mobility score and the admission mobility score.

Each patient´s ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 8 mobility items are:

GG0170A. Roll left and right

GG0170B. Sit to lying

GG0170C. Lying to sitting on side of bed

GG0170D. Sit to stand

GG0170E. Chair/bed-to-chair transfer

GG0170F. Toilet transfer

GG0170J. Walk 50 feet with two turns

GG0170K. Walk 150 feet

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

88 = Not attempted due to medical condition or safety concerns.

DENOMINATOR STATEMENT

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

DENOMINATOR DETAILS

The denominator includes all LTCH patients discharged during the target time period, including patients age 21 and older with all payer sources. Patients are selected based on submitted LTCH Care Data Set Admission and Discharge assessment forms.

EXCLUSIONS

1) Patients with incomplete stays:

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

2) Patients discharged to hospice:

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

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

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

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

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

5) Patients younger than age 21:

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

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

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

For each of the following exclusion criteria, we provide the data collection items used to identify patient records to be excluded. These items will be on the LTCH CARE Data Set Version 3.00.

1) Patients with incomplete stays include patients who are un unexpectedly discharged to an acute-care setting (Inpatient Prospective Payment System or Inpatient Psychiatric Hospital) because of a medical emergency or psychiatric condition; patients transferred to another LTCH facility; patients who leave the LTCH against medical advice; patients who die; and patients with a length of stay less than 3 days.

Items used to identify these patient records:

A2110: Discharge Location

 04 = Hospital emergency department

 05 = Short-stay acute hospital (IPPS)

 06 = Long-term care hospital (LTCH)

 08 = Psychiatric hospital or unit

A0250. Reason for Assessment

 11 = Unplanned discharge

 12 = Expired

Patients with a length of stay less than 3 days:

We will calculate length of stay using the following items on the LTCH CARE Data Set.

A0220. Admission Date

A0270: Discharge Date

Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay less than 3 days are excluded.

2) Patients discharged to hospice

Items used to identify these patient records:

A2110: Discharge Location

 10 = Hospice

3) Patients with progressive neurological conditions, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, and Huntington's chorea are excluded because these patients may have less predictable mobility recovery or functional decline may be expected.

Items used to identify these patient records:

I5450 Amyotrophic Lateral Sclerosis = 1

I5200 Multiple Sclerosis = 1, or

I5300 Parkinson's Disease = 1, or

I5250 Huntington´s Disease = 1.

4) Patients in coma, persistent vegetative state, complete tetraplegia, and locked-in syndrome are excluded, because they may have limited or less predictable mobility recovery.

Items used to identify these patient records:

B0100 Comatose = 1, or;

I5101 Complete Tetraplegia = 1, or;

I5460 Locked-In State - 1.

5) Patients younger than 21 at the time of admission

Items used to identify these patient records:

A0900 Birth Date.

A0220. Admission Date

6) Patients who are coded as independent (score = 6) on all the CARE mobility items at admission

Items used to identify these patient records:

GG0170A: Roll left and right = 6, and;

GG0170B: Sit to lying = 6, and;

GG0170C: Lying to sitting on side of bed = 6, and;

GG0170D: Sit to stand, = 6 and ,

GG0170E: Chair/bed-to-chair transfer, = 6, and;

GG0170F: Toilet transfer, =6, and;

GG0170J: Walk 50 feet with two turns = 6, and;

GG0170K: Walk 150 feet = 6.

RISK ADJUSTMENT

Statistical risk model

We used ordinary least squares multiple linear regression to determine the risk adjustors, and then ran a generalized linear model using generalized estimation equations (GEE) as the estimation method to account for clustering of data within each LTCH. The GEE method accounted for potentially correlated outcomes of patients within the same LTCH, in addition to risk-adjusting the change in mobility outcome using the final set of risk adjustors.

The dependent variable in our models was the change in mobility score for each patient, calculated as the difference between the discharge mobility score and admission mobility score. We made decisions to retain or drop each covariate based on its sample size, coefficient size, statistical significance, and clinical relevance to mobility outcomes. To strengthen sample sizes, when appropriate, we combined clinically similar risk adjustors or risk adjustor categories that had low prevalence. In general, a p-value of 0.10 was used to determine statistical significance. However, we retained variables that approached significance or those that did not reach significance if they were clinically important to mobility outcomes, or had large regression coefficients. Final risk adjustor selection was based on a combination of clinical reasoning and statistical findings.

We used the following model:

[SEE EQUATION 1 In the LTCH Mobility QM Testing Form]

The risk adjustment variables include:

Age categories: < 55 years, 55-64 years, 75-84 years, and >= 85 years

Prior Function: Indoor ambulation

Prior Mobility Devices: Wheelchair/Scooter; Mechanical Lift

Communication Impairment: includes both expression (expression of ideas and wants) and comprehension (understanding verbal content) abilities.

Underlying Condition/Primary Diagnoses: Chronic Respiratory Condition, Acute Onset Chronic Respiratory Condition, Acute and Chronic Respiratory Conditions, Congestive Heart Failure/Chronic cardiac condition, and Other Underlying Conditions

Comorbidities defined based on the Hierarchical Condition Categories:

Metastatic, Lung, Colorectal, Bladder, and Other Severe Cancers

Dialysis and Chronic Kidney Disease – Stage 5

Acute Renal Failure

Infections: Central Nervous System Infections, Opportunistic Infections, Bone/Joint/Muscle Infections, Septicemia, Sepsis, Systematic Inflammatory Response Syndrome Shock.

Diabetes Mellitus

Major Limb Amputation

Stroke

Dementia

Paraplegia, Incomplete Tetraplegia, Other Spinal Cord Disorder/Injury

Protein-Calorie Malnutrition

Total Parenteral Nutrition

Presence of severe pressure ulcer

Available in attached Excel or csv file at S.2b

STRATIFICATION

This measure does not use stratification.

TYPE SCORE

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

ALGORITHM

1) Sum the scores of the admission mobility items to create an admission mobility score for each patient, after 'activity not attempted' values are recoded. (range: 8 to 48).

2) Sum the scores of the discharge mobility items to create a discharge mobility score for each patient, after 'activity not attempted' values are recoded. (range: 8 to 48).

3) Identify the records of patients who meet the exclusion criteria and exclude these patient records from analyses.

4) Calculate the difference between the admission mobility score (from step 1) and the discharge mobility score (from step 2) for each patient to create a change in mobility score for each patient.

5) Calculate an expected change in mobility score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).

6) Calculate an average change in mobility score for each LTCH. This is the facility-level observed change in mobility score.

7) Calculate an average expected change in mobility score for each LTCH. This is the facility-level expected change in mobility score.

8) Divide the facility-level observed change score by the facility-level expected change score to create an observed to expected ratio. A ratio value that is 1 indicates the observed and expected scores are equal. A ratio value that is higher than 1 indicates that the observed change scores are higher (better) than expected. A ratio value that is less than 1 indicates that the observed change scores less (worse) than expected.

9) Multiply each LTCH´s ratio by the national average change in mobility score. This is the risk-adjusted mean mobility score.

Each patient´s ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 8 mobility items are:

GG0170A. Roll left and right

GG0170B. Sit to lying

GG0170C. Lying to sitting on side of bed

GG0170D. Sit to stand

GG0170E. Chair/bed-to-chair transfer

GG0170F. Toilet transfer

GG0170J. Walk 50 feet with two turns

GG0170K. Walk 150 feet Available at measure-specific web page URL identified in S.1

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5.1 Identified measures: 0423 : Functional status change for patients with Hip impairments

0425 : Functional status change for patients with lumbar impairments

0429 : Change in Basic Mobility as Measured by the AM-PAC:

0422 : Functional status change for patients with Knee impair

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Quality measures NQF # 0167, NQF # 0175, and NQF # 0174 use a single function activity to indicate whether patients have made functional improvement. These measures apply to home health patients, which is a different target population than LTCH patients.

5b.1 If competing, why superior or rationale for additive value: Not applicable

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

STATUS

Final Disposition Pending

STEWARD

Centers for Medicare & Medicaid Services (CMS)

DESCRIPTION

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

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI).

No data collection instrument provided Attachment Attch_1_IRF_Self-Care_Change_Risk_Adj_Final-635509510587367841.xlsx

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility

TIME WINDOW

12 months

NUMERATOR STATEMENT

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

NUMERATOR DETAILS

Seven self-care activities are each scored based on a patient's ability to complete the activity. The scores for the 7 activities are summed to obtain a self-care score at the time of admission and discharge. The change in self-care is the difference between the discharge self-care score and the admission self-care score.

Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 7 self-care items are:

GG 0130A. Eating

GG 0130B. Oral hygiene

GG 0130C. Toilet hygiene

GG 0130D. Shower/bathe self

GG 0130E. Upper body dressing

GG 0130F. Lower body dressing

GG 0130G. Putting on/taking off footwear

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

88 = Not attempted due to medical condition or safety concerns.

DENOMINATOR STATEMENT

Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare beneficiaries, are not independent on all of the self-care activities at the time of admission, and have complete stays.

DENOMINATOR DETAILS

The denominator is Inpatient Rehabilitation Facility Medicare patients, age 21 and older, Medicare beneficiaries who have complete stays.

EXCLUSIONS

This quality measure has 6 exclusion criteria:

1) Patients with incomplete stays.

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

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

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

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

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

4) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for children.

5) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay.

6) Patients who are not Medicare beneficiaries.

Patients not covered by the Medicare program.

The following data elements are used to identify which patients are excluded from the quality measure calculation.

1) Patients with incomplete stays.

Item 12. Admission Date.

Item 40. Discharge Date.

These items are used to calculate length of stay. Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of leas than 3 days are excluded.

Item 41. Patient discharged against medical advice. This item will be used to identify patients discharged against medical advice.

Yes = 1.

Item 44C. Was the patient discharged alive? This item will be used to identify patients who died during the IRF stay.

No=0.

44D. Patient's discharge destination/living setting. This item will be used to identify patients with an incomplete stay.

Short-term General Hospital = 02

Inpatient Rehabilitation Facility = 62

Long-Term Care Hospital = 63

Inpatient Psychiatric Facility = 65

Critical Access Hospital = 66.

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

Self-care items

GG 0130A. Eating = 6, and

GG 0130B. Oral hygiene = 6, and

GG 0130C. Toilet hygiene = 6, and

GG 0130D. Shower/bathe self = 6, and

GG 0130E. Upper body dressing = 6, and

GG 0130F. Lower body dressing = 6, and

GG 0130G. Putting on/taking off footwear = 6.

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

21. Impairment Group.

The records of patients with the following impairment group codes are excluded:

4.1221 - Spinal Cord Dysfunction, Non-Traumatic: Tetraplegia Complete, C1-C4

4.1221 - Spinal Cord Dysfunction, Non-Traumatic: Tetraplegia Complete, C5-C8

4.1221 - Spinal Cord Dysfunction, Traumatic: Tetraplegia Complete, C1-C4

4.1221 - Spinal Cord Dysfunction, Traumatic: Tetraplegia Complete, C5-C8

22. Etiologic Diagnosis.

This item will be used to determine a patient´s etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following ICD-9-CM codes will be used to identify and exclude patient records with these conditions:

Patients in coma, persistent vegetative state, severe brain damage: ICD-9-CM = 348.1, 348.4, 348.5, 780.01, 780.03.

Complete quadriplegia: ICD-9-CM = 344.01, 344.03

Locked-in syndrome: ICD-9-CM = 344.81

Severe anoxic brain damage, edema or compression = 348.1, 348.4, 348.5

24. Comorbid Conditions.

This item will be used to identify and exclude the records of patients with the following comorbidities.

Patients in coma, persistent vegetative state, severe brain damage= ICD-9-CM = 348.1, 348.4, 348.5, 780.01, 780.03.

Complete quadriplegia = ICD-9CM: 344.01, 344.03

Locked-in syndrome = ICD-9-CM 344.81

Severe anoxic brain damage, edema or compression = 348.1, 348.4, 348.5,

4) Patients younger than age 21.

These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

5) Patients discharged to hospice

44D. Patient's discharge destination/living setting.

This item will be used to identify patients discharged to hospice. The following response will be used:

Hospice (institutional facility) = 51

6) Patients who are not Medicare beneficiaries.

The following items are used to identify and exclude the records of patients who are not Medicare beneficiaries:

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

RISK ADJUSTMENT

Statistical risk model

We developed the risk adjustment model by conducting multiple linear regression analyses on the Post-Acute Care Payment Reform Demonstration data. The dependent variable was the change in self-care score, calculated for each patient as the difference between the discharge self-care score and admission self-care score. We made decisions to retain or drop each risk adjustor based on its sample size, coefficient value, statistical significance, and expected clinical

relationship with self-care improvement. When appropriate, we increased sample sizes by combining clinically similar medical conditions that were risk adjustors. In general, a p-value of 0.10 was used to determine statistical significance. However, we retained risk adjustors that approached statistical significance or did not reach statistical significance if they were clinically important to self-care improvement, or had large regression coefficients. The final selection or risk adjustors was based on a combination of clinical reasoning and statistical findings.

Once we determined the final set of risk adjustors using ordinary least squares multiple linear regression, we ran a repeated measures analysis to account for potentially correlated outcomes of patients within the same IRF. The repeated measures analysis controlled for clustered outcomes within each IRF, in addition to risk-adjusting the change in self-care outcome using the final set of risk adjustors.

We used the following model:

[SEE EQUATION 1 in the IRF Self-care Measure Testing Form.]

The risk adjustment variables include:

Age categories: <35, 35-44, 45-54, 55-64, 75-84, 85-90, 90+

Primary Diagnosis Groups: Stroke, other orthopedic, cardiorespiratory/debility, medically complex, non-traumatic brain dysfunction, traumatic brain dysfunction, non-traumatic spinal cord dysfunction, traumatic spinal cord dysfunction, progressive neurological, other neurological, other neurological, fractures and other multiple trauma, amputation.

Interaction of admission self-care function and primary diagnosis

Surgical prior acute or long-term care hospital diagnosis

Prior Functioning: Indoor ambulation

Prior Functioning: Self-care

Prior Mobility Devices: Wheelchair/Scooter Full time/Part time; Mechanical Lift, orthotics/prosthetics, walker.

Communication Impairment: includes both expression (expression of ideas and wants) and comprehension (understanding verbal content) abilities.

Brief Interview for Mental Status

Bladder incontinence

Bowel incontinence

Presence of one or more severe pressure ulcers

Presence of one or more Stage 2 pressure ulcers

Septicemia and other infections

Metastatic Cancer and Acute Leukemia

Diabetes

Other Significant Endocrine and Metabolic Disorders

Intestinal Obstruction/Perforation

Delirium and Encephalopathy

Dementia

Tetraplegia

Paraplegia

Multiple Sclerosis

Parkinson's and Huntington's Diseases

Mononeuropathy, Other Neurological Conditions/Injuries

Angina Pectoris

Coronary Atherosclerosis/Other Chronic Ischemic Heart Disease

Hypertensive Heart Disease

Hemiplegia

Kidney Transplant status

Dialysis and Chronic Kidney Disease - Stage 5

Urinary Obstruction and Retention

Chronic Ulcer of Skin, Except Pressure

Amputations

Available in attached Excel or csv file at S.2b

STRATIFICATION

Not applicable

TYPE SCORE

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

ALGORITHM

The following steps are used to calculate the measure:

1) Sum the scores of the admission self-care items to create an admission self-care score for each patient, after 'activity not attempted' values are recoded. (range: 7 to 42).

2) Sum the scores of the discharge self-care items to create a discharge self-care score for each patient, after 'activity not attempted' values are recoded. (range: 7 to 42).

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Calculate the difference between the admission self-care score (from step 1) and the discharge self-care score (from step 2) for each patient to create a change in self-care score for each patient.

5) Calculate an expected change in self-care score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).

6) Calculate an average change in self-care score for each IRF. This is the facility-level observed change in self-care score.

7) Calculate an average expected change in self-care score for each IRF. This is the facility-level expected change in self-care score.

8) Divide the facility-level observed change score by the facility-level expected change score to create an observed to expected ratio. A ratio value that is 1 indicates the observed and expected scores are equal. A ratio value that is higher than 1 indicates that the observed change scores are higher (better) than expected. A ratio value that is less than 1 indicates that the observed change scores less (worse) than expected.

9) Multiply each IRF's ratio by the national average change in self-care score. This is the risk-adjusted mean self-care score.

Each patient's ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 7 self-care items are:

GG 0130A. Eating

GG 0130B. Oral hygiene

GG 0130C. Toilet hygiene

GG 0130D. Shower/bathe self

GG 0130E. Upper body dressing

GG 0130F. Lower body dressing

GG 0130G. Putting on/taking off footwear No diagram provided

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5.1 Identified measures: 0050 : Osteoarthritis: Function and Pain Assessment

0426 : Functional status change for patients with Shoulder impairments

0427 : Functional status change for patients with elbow, wrist and hand impairments

0430 : Change in Daily Activity Function as Meas

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The listed measures conceptually address the same topic, function, but the target populations for these measures are different. Several measures are for use in outpatient settings and 2 measures apply to home health agency patients.

5b.1 If competing, why superior or rationale for additive value: Not applicable

2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients

STATUS

Final Disposition Pending

STEWARD

Centers for Medicare & Medicaid Services (CMS)

DESCRIPTION

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

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI).
No data collection instrument provided Attachment Attch_1__IRF_Mobility_Change_RAdj.xlsx

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility

TIME WINDOW

12 months

NUMERATOR STATEMENT

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

NUMERATOR DETAILS

Fifteen mobility activities are each scored based on a patient´s ability to complete the activity. The scores for the 15 activities are summed to obtain a mobility score at the time of admission and discharge. The change in mobility is the difference between the discharge mobility score and the admission score.

Each patient´s ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 15 mobility items are:

GG 0170A. Roll left and right

GG 0170B. Sit to lying

GG 0170C. Lying to sitting on side of bed

GG 0170D. Sit to stand

GG 0170E. Chair/bed-to-chair transfer

GG 0170F. Toilet transfer

GG 0170G. Car transfer

GG 0170I. Walk 10 feet

GG 0170J. Walk 50 feet with 2 turns

GG 0170K. Walk 150 feet

GG 0170L. Walking 10 feet on uneven surfaces

GG 1070M. 1 step

GG 0170N. 4 steps

GG 0170O. 12 steps

GG 0170P. Pick up object

If the patient did not attempt the activity, the reason that activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

88 = Not attempted due to medical condition or safety concerns.

99 = Not a patient goal at Discharge (may only be used for item GG0170O, 12 steps)

DENOMINATOR STATEMENT

Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare beneficiaries, are not independent with all of the mobility activities at the time of admission, and have complete stays.

DENOMINATOR DETAILS

The denominator is Inpatient Rehabilitation Facility Medicare patients, age 21 and over, at the time of admission to the IRF.

EXCLUSIONS

This quality measure has 5 exclusion criteria:

1) Patients with incomplete stays.

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

2) Patients who are independent with all mobility activities at the time of admission.
Rationale: Patients who are independent with CARE mobility items at the time of admission are assigned the highest score on all the mobility items, and thus, would not be able to show functional improvement on this same set of items at discharge.
3) Patients with the following medical conditions: coma, persistent vegetative state; complete tetraplegia; locked-in syndrome or severe anoxic brain damage, cerebral edema or compression of brain.
Rationale: These patients are excluded because they may have limited or less predictable mobility improvement with the selected mobility items.
4) Patients younger than age 21.
Rationale: There is only limited evidence published about functional outcomes for individuals younger than 21.
5) Patients discharged to hospice.
Rationale: Patient goals may change during the IRF stay.

6) Patients not covered by the Medicare program.

The following data elements are used to identify which patients are excluded from the quality measure calculation.

1) Patients with incomplete stays.

These items are used to calculate length of stay. Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of leas than 3 days are excluded.
Item 12. Admission Date.
Item 40. Discharge Date.
Item 41. Patient discharged against medical advice. This item will be used to identify patients discharged against medical advice.
Patient records with a response of "Yes = 1" are excluded.
Item 44C. Was the patient discharged alive? This item will be used to identify patients who died during the IRF stay.
Patient records with a response of "No = 0" are excluded.
44D. Patient's discharge destination/living setting.
This item will be used to identify an incomplete stay. Specifically, the following responses will be used to identity patients with incomplete stays:
Short-term General Hospital = 02
Inpatient Rehabilitation Facility = 62
Long-Term Care Hospital = 63
Inpatient Psychiatric Facility = 65
Critical Access Hospital = 66.
2) Patients who are independent with all mobility activities at the time of admission.
Patients who are independent with all the mobility items at the time of admission are assigned the highest score on all the mobility items, thus, would not be able to show functional improvement (i.e., a higher score)on this same set of items at discharge. The following items and scores are used to identify and exclude patient records:
Mobility items
GG0170A. Roll left and right = 6, and
GG0170B. Sit to lying = 6, and
GG0170C. Lying to sitting on side of bed = 6, and
GG0170D. Sit to stand = 6, and
GG0170E. Chair/bed-to-chair transfer = 6, and
GG0170F. Toilet transfer = 6, and
GG0170G. Car transfer = 6, and
GG0170I. Walk 10 feet = 6, and
GG0170J. Walk 50 feet with 2 turns = 6, and
GG0170K. Walk 150 feet = 6, and
GG0170L. Walking 10 feet on uneven surfaces = 6, and
GG0170M. 1 step = 6, and
GG0170N. 4 steps = 6, and
GG0170O. 12 steps = 6, and
GG0170P. Pick up object = 6.
3) Patients with the following medical conditions: coma; persistent vegetative state; complete tetraplegia; locked-in syndrome; and severe anoxic brain damage edema or compression.

21. Impairment Group.

The records of patients with the following impairment group codes are excluded:

4.1221 - Spinal Cord Dysfunction, Non-Traumatic: Tetraplegia Complete, C1-C4

4.1221 - Spinal Cord Dysfunction, Non-Traumatic: Tetraplegia Complete, C5-C8

4.1221 - Spinal Cord Dysfunction, Traumatic: Tetraplegia Complete, C1-C4

4.1221 - Spinal Cord Dysfunction, Traumatic: Tetraplegia Complete, C5-C8

22. Etiologic Diagnosis.

This item will be used to determine a patient´s etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following ICD-9-CM codes will be used to identify and exclude patient records with these conditions:

Patients in coma, persistent vegetative state, severe brain damage = 348.1, 348.4, 348.5, 780.01, 780.03.

Complete quadriplegia = 344.01, 344.03

Locked-in syndrome = 344.81

Severe anoxic brain damage, cerebral edema or compression of the brain = 348.1, 348.4, 348.5

24. Comorbid Conditions. This item will be used to exclude patients with selected comorbidities (ICD-9-CM codes):

Patients in coma, persistent vegetative state, severe brain damage = 348.1, 348.4, 348.5, 780.01, 780.03.

Complete quadriplegia = 344.01, 344.03

Locked-in syndrome = 344.81

Severe anoxic brain damage, cerebral edema or compression of the brain = 348.1, 348.4, 348.5

4) Patients younger than age 21. These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

6. Birth Date

12. Admission Date

5) Patients discharged to hospice.

44D. Patient's discharge destination/living setting.

This following response will be used to identity patients discharged to hospice:

Hospice (institutional facility) = 51

Patients who are not Medicare beneficiaries

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

RISK ADJUSTMENT

Statistical risk model

We developed the risk adjustment model by conducting multiple linear regression analyses on the Post-Acute Care Payment Reform Demonstration data. The dependent variable was the change in mobility score calculated for each patient, as the difference between the discharge mobility score and admission mobility score. We made decisions to retain or drop each risk adjustor based on its sample size, coefficient value, statistical significance, and expected clinical relationship with mobility improvement. When appropriate, we increased sample sizes by combining clinically similar medical conditions that were risk adjustors. In general, a p-value of 0.10 was used to determine statistical significance. However, we retained risk factors that

approached statistical significance or those that did not reach statistical significance if they were clinically important to mobility improvement, or had large regression coefficients. The final selection of risk adjustors was based on a combination of clinical reasoning and statistical findings.

Once we determined the final set of risk adjustors using ordinary least squares multiple linear regression, we ran a generalized linear model using generalized estimation equations as the estimation method to account for clustering of data within each IRF. The generalized estimation equations method accounted for potentially correlated outcomes of patients within the same IRF, in addition to risk-adjusting the discharge mobility score using the final set of risk adjustors.

We used the following model:

[SEE EQUATION 1 in the IRF Mobility Measure Testing Form]

The risk adjustors are:

Age categories: <35, 35-44, 45-54, 55-64, 75-84, 85-90, 90+

Primary Diagnosis Groups: Stroke, other orthopedic, cardiorespiratory/debility, medically complex, non-traumatic brain dysfunction, traumatic brain dysfunction, non-traumatic spinal cord dysfunction, traumatic spinal cord dysfunction, progressive neurological, other neurological, other neurological, fractures and other multiple trauma, amputation.

Interaction of admission mobility function and primary diagnosis

Surgical prior acute or Long-Term Care Hospital diagnosis

Prior Functioning: Indoor ambulation

Prior Functioning: Stairs

Prior functioning: functional cognition

Prior Mobility Devices: Wheelchair/Scooter Full time/Part time; Mechanical Lift, orthotics/prosthetics, walker.

Communication Impairment: includes both expression (expression of ideas and wants) and comprehension (understanding verbal content) abilities.

Brief Interview for Mental Status

Mild Communication Impairment

Moderate to Severe Communication Impairment

Presence of Severe Pressure Ulcer

Stage 2 Pressure Ulcer

Bladder Incontinence

Bowel Incontinence

Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock

Central nervous system (CNS) Infections

Other Infectious Diseases

Metastatic Cancer and Acute Leukemia

Lymphoma and Other Cancers

Lung and Other Severe Cancers

Major cancer excluding breast cancers, prostate cancers, or skin cancers.

Diabetes

Severe Hematological Disorders

Delirium and Encephalopathy

Dementia

Mental Health Disorders: Schizophrenia Disease

Tetraplegia

Paraplegia

Multiple Sclerosis

Mononeuropathy, other Neurological Conditions/Injuries

Angina Pectoris

Coronary Atherosclerosis/Other Chronic Ischemic Heart Disease

Hypertensive Heart Disease

Hemiplegia

Atherosclerosis of the Extremities with Ulceration or Gangrene

Aspiration, Bacterial, and Other Pneumonias

Legally Blind

Dialysis and Chronic Kidney Disease - Stage 5

Chronic Kidney Disease - Stages 1-4, Unspecified

Chronic Ulcer of Skin, Except Pressure

Hip Fracture/Dislocation

Major Fracture, Except of Skull, Vertebrae, or Hip

Amputations

Transplant Status

History of Falls in Past Year

Usual Swallowing Ability: Tube Feeding

Total Parenteral Nutrition

Available in attached Excel or csv file at S.2b

STRATIFICATION

Not applicable

TYPE SCORE

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

ALGORITHM

The following steps are used to calculate the measure:

1) Sum the scores of the admission mobility items to create an admission mobility score for each patient, after 'activity not attempted' values are recoded. (range: 15 to 90).

2) Sum the scores of the discharge mobility items to create a discharge mobility score for each patient, after 'activity not attempted' values are recoded. (range: 15 to 90).

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Calculate the difference between the admission mobility score (from step 1) and the discharge mobility score (from step 2) for each patient to create a change in mobility score for each patient.

5) Calculate an expected change in mobility score for each patient using regression coefficients from national data and each patient's admission characteristics (risk adjustors).

6) Calculate an average change in mobility score for each IRF (using the patient data calculated in step 4). This is the facility-level observed change in mobility score.

7) Calculate an average expected change in mobility score for each IRF (using the patient data from step 5). This is the facility-level expected change in mobility score.

8) Divide the facility-level observed change score by the facility-level expected change score to create an observed to expected ratio. A ratio value that is 1 indicates the observed and expected scores are equal. A ratio value that is higher than 1 indicates that the observed change scores are higher (better) than expected. A ratio value that is less than 1 indicates that the observed change scores less (worse) than expected.

9) Multiply each IRF´s ratio by the national average change in mobility score. This is the risk-adjusted mean mobility score.

Each patient´s ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 15 mobility items are:

GG 0170A. Roll left and right

GG 0170B. Sit to lying

GG 0170C. Lying to sitting on side of bed

GG 0170D. Sit to stand

GG 0170E. Chair/bed-to-chair transfer

GG 0170F. Toilet transfer

GG 0170G. Car transfer

GG 0170I. Walk 10 feet

GG 0170J. Walk 50 feet with 2 turns

GG 0170K. Walk 150 feet

GG 0170L. Walking 10 feet on uneven surfaces

GG 1070M. 1 step

GG 0170N. 4 steps

GG 0170O. 12 steps

GG 0170P. Pick up object No diagram provided

5.1 Identified measures: 0423 : Functional status change for patients with Hip impairments

0425 : Functional status change for patients with lumbar impairments

0426 : Functional status change for patients with Shoulder impairments

0427 : Functional status change for patients with

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The listed measures conceptually address the same topic, function, but the target populations for these measures are different. Several measures are used in outpatients and home health care settings.

5b.1 If competing, why superior or rationale for additive value: Not applicable

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

STATUS

Final Disposition Pending

STEWARD

Centers for Medicare & Medicaid Services (CMS)

DESCRIPTION

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

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI).

No data collection instrument provided Attachment Attch_1_IRF__Self-Care_Discharge_Risk_Adj.xlsx

LEVEL

Facility

SETTING

Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility

TIME WINDOW

12 months

NUMERATOR STATEMENT

The numerator is the number of patients in an IRF with a discharge score that is equal to or higher than the calculated expected discharge score.

NUMERATOR DETAILS

Seven self-care activities are each scored based on a patient´s ability to complete the activity. The scores for the 7 activities are summed to obtain a self-care score at the time discharge.

Each patient´s ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 7 self-care items are:

GG 0130A. Eating

GG 0130B. Oral hygiene

GG 0130C. Toilet hygiene

GG 0130D. Shower/bathe self

GG 0130E. Upper body dressing

GG 0130F. Lower body dressing

GG 0130G. Putting on/taking off footwear

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

88 = Not attempted due to medical condition or safety concerns.

DENOMINATOR STATEMENT

Inpatient Rehabilitation Facility patients included in this measure are at least 21 years of age, Medicare beneficiaries, and are not independent on all of the self-care activities at the time of admission, and have complete stays.

DENOMINATOR DETAILS

The denominator is Inpatient Rehabilitation Facility patients are at least age 21 of age, Medicare beneficiaries, and have complete stays.

EXCLUSIONS

This quality measure has 5 exclusion criteria:

1) Patients with incomplete stays.

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

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

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

3) Patients younger than age 21.

Rationale: There is only limited evidence published about functional outcomes for children.

4) Patients discharged to Hospice.

Rationale: Patient goals may change during the IRF stay.

5) Patients not covered by the Medicare program.

The following data elements are used to identify which patients are excluded from the quality measure calculation. These data elements are included on the current version of the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI), which is available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientRehabFacPPS/IRFPAI.html

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

Items used to identify these patient records:

Patients with a length of stay less than 3 days: We will calculate length of stay using the following items on the IRF-PAI.

Item 12. Admission Date.

Item 40. Discharge Date.

Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of leas than 3 days are excluded.

Item 41. Patient discharged against medical advice. This item will be used to identify patients discharged against medical advice.

Yes = 1.

Item 44C. Was the patient discharged alive? This item will be used to identify patients who died during the IRF stay.

No=0.

44D. Patient's discharge destination/living setting. This item will be used to identify patients with an incomplete stay. Specifically, the following responses will be used to identify incomplete stays:

Short-term General Hospital = 02.

Home = 06.

Inpatient Rehabilitation Facility = 62

Long-term Care Hospital = 63.

Inpatient Psychiatric Facility = 65.

Critical Access Hospital = 66.

2) Patients with the following medical conditions: coma; persistent vegetative state; complete

tetraplegia; and locked-in syndrome; and severe anoxic brain damage, cerebral edema or compression of the brain.

The following items will be used to identify patients with these conditions:

21. Impairment Group

4.1221 - Spinal Cord Dysfunction, Non-Traumatic: Tetraplegia Complete, C1-C4

4.1221 - Spinal Cord Dysfunction, Non-Traumatic: Tetraplegia Complete, C5-C8

4.1221 - Spinal Cord Dysfunction, Traumatic: Tetraplegia Complete, C1-C4

4.1221 - Spinal Cord Dysfunction, Traumatic: Tetraplegia Complete, C5-C8

22. Etiologic Diagnosis. This current item will be used to determine a patient's etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following ICD-9-CM codes will be used to identify and exclude patient records with these conditions:

Patients in coma, persistent vegetative state, severe brain damage = 348.1, 348.4, 348.5, 780.01, 780.03.

Complete tetraplegia = 344.01, 344.03

Locked-in syndrome = 344.81

Severe anoxic brain damage, edema or compression = 348.1, 348.4, 348.5

24. Comorbid Conditions. This item will be used to exclude selected comorbidities. The following ICD-9-CM codes will be used to identify and exclude patient records with these conditions:

Patients in coma, persistent vegetative state, severe brain damage: 348.1, 348.4, 348.5, 780.01, 780.03

Complete tetraplegia = 344.01, 344.03

Locked-in syndrome = 344.81

Severe anoxic brain damage, cerebral edema or compression of the brain = 348.1, 348.4, 348.5

3) Patients younger than age 21.

These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date).

Patients younger than 21 are excluded.

4) Patients discharged to hospice

44D. Patient's discharge destination/living setting.

This item will be used to identify patients discharged to hospice. The following response will be used:

Hospice (institutional facility) = 51

5) Patients who are not Medicare beneficiaries.

The following items are used to identify and exclude the records of patients who are not Medicare beneficiaries:

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

RISK ADJUSTMENT

Statistical risk model

We developed the risk adjustment model by conducting multiple linear regression analyses on the Post-Acute Care Payment Reform Demonstration data. The dependent variable was the discharge self-care score. We made decisions to retain or drop each risk adjustor based on its sample size, coefficient value, statistical significance, and expected clinical relationship with self-care improvement. When appropriate, we increased sample sizes by combining clinically similar

medical conditions that were risk adjustors. In general, a p-value of 0.10 was used to determine statistical significance. However, we retained risk adjustors that approached statistical significance or did not reach statistical significance if they were clinically important to self-care improvement, or had large regression coefficients. The final selection of risk adjustors was based on a combination of clinical reasoning and statistical findings.

Once we determined the final set of risk adjustors using ordinary least squares multiple linear regression, we ran a generalized linear model using generalized estimation equations (GEE) as the estimation method to account for clustering of data within each IRF. The generalized estimation equations method accounted for potentially correlated outcomes of patients within the same IRF, in addition to risk-adjusting the discharge self-care score using the final set of risk adjustors.

We used the following model:

[SEE EQUATION 1 in the IRF Self-care Discharge Measure Testing Form.]

The risk adjustment variables include:

Age categories: <35, 35-44, 45-54, 55-64, 75-84, 85-90, 90+

Primary Diagnosis Groups: Stroke, other orthopedic, cardiorespiratory/debility, medically complex, non-traumatic brain dysfunction, traumatic brain dysfunction, non-traumatic spinal cord dysfunction, traumatic spinal cord dysfunction, progressive neurological, other neurological, other neurological, fractures and other multiple trauma, amputation.

Interaction of admission self-care function and primary diagnosis

Surgical prior acute or long-term care hospital diagnosis

Prior Functioning: Indoor ambulation

Prior Functioning: Self-care

Prior Mobility Devices: Wheelchair/Scooter Full time/Part time; Mechanical Lift, orthotics/prosthetics, walker.

Communication Impairment: includes both expression (expression of ideas and wants) and comprehension (understanding verbal content) abilities.

Brief Interview for Mental Status

Bladder incontinence

Bowel incontinence

Presence of one or more severe pressure ulcers

Presence of one or more Stage 2 pressure ulcers

Septicemia and other infections

Metastatic Cancer and Acute Leukemia

Diabetes

Other Significant Endocrine and Metabolic Disorders

Intestinal Obstruction/Perforation

Delirium and Encephalopathy

Dementia

Tettraplegia

Paraplegia

Multiple Sclerosis

Parkinson's and Huntington's Diseases

Mononeuropathy, Other Neurological Conditions/Injuries

Angina Pectoris

Coronary Atherosclerosis/Other Chronic Ischemic Heart Disease

Hypertensive Heart Disease

Hemiplegia

Kidney Transplant status

Dialysis and Chronic Kidney Disease - Stage 5

Urinary Obstruction and Retention

Chronic Ulcer of Skin, Except Pressure

Amputations

Available in attached Excel or csv file at S.2b

STRATIFICATION

Not applicable

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

The following steps are used to calculate the measure:

1) Sum the scores of the discharge self-care items to create a discharge self-care score for each patient, after 'activity not attempted' codes are recoded. (range: 7 to 42). This is the patient's observed discharge score.

2) Calculate an expected discharge self-care score for each IRF patient using a statistical model that estimates the average effect of the risk factors (patient demographic and admission clinical characteristics) across all IRFs.

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Compare each patient's observed and expected discharge self-care score and classify the difference as

 a) Observed discharge score is equal to or higher than the expected discharge score, or

 b) observed discharge score is lower than the expected discharge score.

5) Sum the number of patients with observed discharge scores that are the same as or higher than the expected discharge score. This is the numerator.

6) The denominator is the total number of patients in the IRF who do not meet the exclusion criteria.

7) The percent is calculated as the numerator divided by the denominator and then multiplied by 100.

Each patient´s ability to complete each self-care activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 7 self-care items are:

GG 0130A. Eating

GG 0130B. Oral hygiene

GG 0130C. Toilet hygiene

GG 0130D. Shower/bathe self

GG 0130E. Upper body dressing

GG 0130F. Lower body dressing

GG 0130G. Putting on/taking off footwear No diagram provided

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5.1 Identified measures: 0050 : Osteoarthritis: Function and Pain Assessment

0426 : Functional status change for patients with Shoulder impairments

0427 : Functional status change for patients with elbow, wrist and hand impairments

0430 : Change in Daily Activity Function as Meas

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The listed measures conceptually address the same topic, function, but the target populations for these measures are different. Several measures are for use in outpatient settings and 1 measure applies to home health agency patients. The listed quality me

5b.1 If competing, why superior or rationale for additive value: Not applicable

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

STATUS

Final Disposition Pending

STEWARD

Centers for Medicare & Medicaid Services (CMS)

DESCRIPTION

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

TYPE

Outcome

DATA SOURCE

Electronic Clinical Data Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI).

No data collection instrument provided Attachment
Attch_1_IRF_Mobility_Discharge_Risk_Adj.xlsx

Facility

Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility

12 months

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

Fifteen mobility activities are each scored based on a patient´s ability to complete the activity. The scores for the 15 activities are summed to obtain a mobility score at the time of discharge.

Each patient´s ability to complete each mobility activity (item) is rated by a clinician using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 15 mobility items are:

GG 0170A. Roll left and right

GG 0170B. Sit to lying

GG 0170C. Lying to sitting on side of bed

GG 0170D. Sit to stand

GG 0170E. Chair/bed-to-chair transfer

GG 0170F. Toilet transfer

GG 0170G. Car transfer

GG 0170I. Walk 10 feet

GG 0170J. Walk 50 feet with 2 turns

GG 0170K. Walk 150 feet

GG 0170L. Walking 10 feet on uneven surfaces

GG 1070M. 1 step

GG 0170N. 4 steps

GG 0170O. 12 steps

GG 0170P. Pick up object

If the patient did not attempt the activity, the reason that the activity did not occur is reported as:

07 = Patient refused

09 = Not applicable

88 = Not attempted due to medical condition or safety concerns.

99 = Not a patient goal at Discharge (may only be used for item GG0170O, 12 steps)

DENOMINATOR STATEMENT

IRF patients included in this measure are at least 21 years of age, Medicare beneficiaries, and have complete stays.

DENOMINATOR DETAILS

The denominator is IRF patients who are age 21 and older, Medicare beneficiaries, and have complete stays.

EXCLUSIONS

This quality measure has 4 exclusion criteria:

1) Patients with incomplete stays.

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

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

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

3) Patients younger than age 21.

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

4) Patients discharged to hospice.

Rationale: Patient goals may change during the IRF stay.

5) Patients who are not Medicare beneficiaries.

EXCLUSION DETAILS

The following items are used to identify which patients are excluded from the quality measure calculation:

1) Patients with incomplete stays.

Item 12. Admission Date.

Item 40. Discharge Date.

These items are used to calculate length of stay. Length of stay is calculated as the Discharge Date minus the Admission Date (Discharge Date - Admission Date). Patient records with a length of stay of leas than 3 days are excluded.

Item 41. Patient discharged against medical advice.

This item will be used to identify patients discharged against medical advice.

Patient records with a response of "Yes = 1" are excluded.

Item 44C. Was the patient discharged alive?

This item will be used to identify patients who died during the IRF stay.

Patient records with a response of "No = 0" are excluded.

44D. Patient's discharge destination/living setting.

This item will be used to identify an incomplete stay. Specifically, the following responses will be used to identity patients with incomplete stays:

Short-term General Hospital = 02

Inpatient Rehabilitation Facility = 62

Long-Term Care Hospital = 63

Inpatient Psychiatric Facility = 65

Critical Access Hospital = 66.

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

21. Impairment Group.

The records of patients with the following impairment group codes are excluded:

4.1221 - Spinal Cord Dysfunction, Non-Traumatic: Tetraplegia Complete, C1-C4

4.1221 - Spinal Cord Dysfunction, Non-Traumatic: Tetraplegia Complete, C5-C8

4.1221 - Spinal Cord Dysfunction, Traumatic: Tetraplegia Complete, C1-C4

4.1221 - Spinal Cord Dysfunction, Traumatic: Tetraplegia Complete, C5-C8

22. Etiologic Diagnosis.

This item will be used to determine a patient's etiologic problem that led to the condition for which the patient is receiving rehabilitation. The following ICD-9-CM codes will be used to identify and exclude patient records with these conditions:

Patients in coma, persistent vegetative state, severe brain damage: ICD-9-CM = 348.1, 348.4, 348.5, 780.01, 780.03.

Complete quadriplegia: ICD-9-CM = 344.01, 344.03

Locked-in syndrome: ICD-9-CM = 344.81

Severe anoxic brain damage, edema or compression = 348.1, 348.4, 348.5

24. Comorbid Conditions.

This item will be used to identify and exclude the records of patients with the following comorbidities.

Patients in coma, persistent vegetative state, severe brain damage= ICD-9-CM = 348.1, 348.4, 348.5, 780.01, 780.03.

Complete quadriplegia = ICD-9CM: 344.01, 344.03

Locked-in syndrome = ICD-9-CM 344.81

Severe anoxic brain damage, edema or compression = 348.1, 348.4, 348.5,

3) Patients younger than age 21.

These items are used to calculate age, and patients who are younger than 21 years of age at the time of admission are excluded.

6. Birth Date

12. Admission Date

Age is calculated as the Admission Date minus the Birth Date (Admission Date - Birth Date). Patients younger than 21 are excluded.

4) Patients discharged to hospice

44D. Patient's discharge destination/living setting.

This item will be used to identify patients discharged to hospice. The following response will be used:

Hospice (institutional facility) = 51

5) Patients who are not Medicare beneficiaries.

The following items are used to identify and exclude the records of patients who are not Medicare beneficiaries:

20A. Primary Source = 99 - Not Listed AND

20B. Secondary Source = 99 - Not Listed

RISK ADJUSTMENT

Statistical risk model

We developed the risk adjustment model by conducting multiple linear regression analyses on the Post-Acute Care Payment Reform Demonstration data. The dependent variable was the discharge self-care score. We made decisions to retain or drop each risk adjustor based on its sample size, coefficient value, statistical significance, and expected clinical relationship with self-care improvement. When appropriate, we increased sample sizes by combining clinically similar medical conditions that were risk adjustors. In general, a p-value of 0.10 was used to determine statistical significance. However, we retained risk adjustors that approached statistical significance or did not reach statistical significance if they were clinically important to self-care improvement, or had large regression coefficients. The final selection of risk adjustors was based on a combination of clinical reasoning and statistical findings.

Once we determined the final set of risk adjustors using ordinary least squares multiple linear regression, we ran a generalized linear model using generalized estimation equations (GEE) as the estimation method to account for clustering of data within each IRF. The generalized estimation equations method accounted for potentially correlated outcomes of patients within the same IRF, in addition to risk-adjusting the discharge self-care score using the final set of risk adjustors.

We used the following model:

[SEE EQUATION 1 in the IRF Mobility Discharge Measure Testing Form]

The risk adjustors are:

Age categories: <35, 35-44, 45-54, 55-64, 75-84, 85-90, 90+

Primary Diagnosis Groups: Stroke, other orthopedic, cardiorespiratory/debility, medically complex, non-traumatic brain dysfunction, traumatic brain dysfunction, non-traumatic spinal cord dysfunction, traumatic spinal cord dysfunction, progressive neurological, other neurological, other neurological, fractures and other multiple trauma, amputation.

Interaction of admission mobility function and primary diagnosis

Surgical prior acute or IRF diagnosis

Prior Functioning: Indoor ambulation

Prior Functioning: Stairs

History of falls in past year

Prior functioning: functional cognition

Prior Mobility Devices: Wheelchair/Scooter Full time/Part time; Mechanical Lift, orthotics/prosthetics, walker.

Communication Impairment: includes both expression (expression of ideas and wants) and comprehension (understanding verbal content) abilities.

Brief Interview for Mental Status (BIMS): Mild Communication Impairment, Moderate to Severe Communication Impairment

Presence of a stage 2, 3, 4, or unstageable pressure ulcer

Usual Swallowing Ability: Tube Feeding

Total Parenteral Nutrition

Bladder Incontinence

Bowel Incontinence

Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock

Central nervous system (CNS) Infections

Other Infectious Diseases

Metastatic Cancer and Acute Leukemia

Lymphoma and Other Cancers

Lung and Other Severe Cancers

Major cancer excluding breast cancers, prostate cancers, or skin cancers.

Diabetes: with and without chronic complications

Severe Hematological Disorders

Delirium and Encephalopathy

Dementia

Mental Health Disorders: Schizophrenia , Personality Disorders, Reactive and Unspecified Psychosis, Major Depressive, Bipolar, and Paranoid Disorders.

Tetraplegia

Paraplegia

Multiple Sclerosis

Mononeuropathy, other Neurological Conditions/Injuries

Angina Pectoris

Coronary Atherosclerosis/Other Chronic Ischemic Heart Disease

Hypertensive Heart Disease

Hemiplegia

Atherosclerosis of the Extremities with Ulceration or Gangrene

Aspiration, Bacterial, and Other Pneumonias

Legally Blind

Dialysis and Chronic Kidney Disease - Stage 5

Chronic Kidney Disease - Stages 1-4, Unspecified

Chronic Ulcer of Skin, Except Pressure

Hip Fracture/Dislocation

Major Fracture, Except of Skull, Vertebrae, or Hip

Amputations

Transplant Status: Kidney, major organ or replacement status or other organ transplant

Not applicable

Rate/proportion better quality = higher score

The following steps are used to calculate the measure:

1) Sum the scores of the discharge mobility items to create a discharge mobility score for each patient, after 'activity did not occur' values are recoded. (range: 15 to 90). This is the patient's observed discharge score.

2) Calculate an expected discharge mobility score for each IRF patient using a statistical model that estimates the average predictive effect of the patient demographic and admission clinical characteristics across all IRFs.

3) Identify the records of patients who meet the exclusion criteria and exclude them from analyses.

4) Compare each patient's observed and expected discharge mobility score and classify the difference as

 a) Observed discharge score is equal to or higher than the expected discharge score, or

 b) observed discharge score is lower than the expected discharge score.

5) Sum the number of patients with observed discharge scores that are the same as or higher than the expected discharge score. This is the numerator.

6) The denominator is the total number of patients in the IRF who do not meet the exclusion criteria.

7) The percent is calculated as the numerator divided by the denominator and then multiplied by 100.

Each patient´s ability to complete each mobility activity item is rated by clinicians using the following 6-level rating scale:

level 6 - Independent

level 5 - Setup or clean up

level 4 - Supervision or touching assistance

level 3 - Partial/moderate assistance

level 2 - Substantial/maximal assistance

level 1 - Dependent

The 15 mobility items are:

GG 0170A. Roll left and right

GG 0170B. Sit to lying

GG 0170C. Lying to sitting on side of bed

GG 0170D. Sit to stand

GG 0170E. Chair/bed-to-chair transfer

GG 0170F. Toilet transfer

GG 0170G. Car transfer

GG 0170I. Walk 10 feet

GG 0170J. Walk 50 feet with 2 turns

GG 0170K. Walk 150 feet

GG 0170L. Walking 10 feet on uneven surfaces

GG 1070M. 1 step

GG 0170N. 4 steps

GG 0170O. 12 steps

GG 0170P. Pick up object No diagram provided

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5.1 Identified measures: 0423 : Functional status change for patients with Hip impairments

0425 : Functional status change for patients with lumbar impairments

0426 : Functional status change for patients with Shoulder impairments

0427 : Functional status change for patients with

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The listed measures conceptually address the same topic, function, but the target populations for these measures are different. Several measures are for use in outpatient settings and several measure applies to home health agency patients.. The listed mea

5b.1 If competing, why superior or rationale for additive value: Not applicable

2643 Average Change in Functional Status Following Lumbar Spine Fusion Surgery

STATUS

Endorsed

STEWARD

MN Community Measurement

DESCRIPTION

For patients age 18 and older undergoing lumbar spine fusion surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oswestry Disability Index (ODI version 2.1a) patient reported outcome tool.

TYPE

PRO

Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Patient Reported Data/Survey Oswestry Disability Index (ODI) version 2.1a

A ten item self-administered questionnaire with a six point Likert response scale. Items are scored on a 0 to 5 scale with 0 indicating no limitation of function due to pain and 5 indicating major functional disability due to back pain. Time for patient completion is 3 to 5 minutes. Languages available are English and Spanish. The tool is available for use in clinical practice at no cost and can be obtained by completing a user agreement with MAPI Trust, Inc.

The ODI is a valid, reliable, and responsive condition-specific assessment tool that is suited for use in clinical practice. It is easy to administer and score, objectifies client's complaints, and monitors effects of therapy.

The ODI shows good construct validity; internal consistency is rated as acceptable; test-retest reliability and responsiveness have been shown to be high; and burden of administration is low. Internal consistency with Cronbach's alpha in ranges from .17 to .87 with test re-test reliability ranges of r = 0.83 to 0.99 and intraclass correlation coefficient values from 0.84 to 0.94. (Vinanin Psychometric properties and clinical usefulness of the Oswestry Disability Index Journal of Chiropractic Medicine 2008).

Available in attached appendix at A.1 Attachment MNCM_Data_Dictionary_Lumbar_Spine-635490746124015022.xlsx

LEVEL

Clinician : Group/Practice

SETTING

Ambulatory Care : Clinician Office/Clinic

TIME WINDOW

Patients undergoing a lumbar spine fusion procedure with date of procedure during a calendar year performance period (e.g. dates of procedure occurring between 1/1/2013 and 12/31/2013) followed by a measurement period of fifteen months to allow for a one year (9 to 15 months) assessment to occur for all patients in the denominator which is dependent on their procedure date (e.g. assessment dates between 1/1/2014 to 3/31/2015).

NUMERATOR STATEMENT

There is not a traditional numerator for this measure; the measure is calculating the average change in functional status score from pre-operative to post-operative functional status score. The measure is NOT aiming for a numerator target value for a post-operative ODI score.

For example:

The average change in low back function was an increase in 17.2 points one year post-operatively on a 100 point scale.

NUMERATOR DETAILS

There is not a traditional numerator for this measure; the measure is calculating the average change in functional status score from pre-operative to post-operative functional status score. The measure is NOT aiming for a numerator target value for a post-operative ODI score.

The average change is calculated as follows:

Change is first calculated for each patient and then changed scores are summed and then an average is determined. Measure calculation takes into account those patients that have an improvement and those patients whose function decreases post-operatively. Example below:

Patient	Pre-op ODI	Post-op ODI	Change in ODI
Patient A	47	18	29
Patient B	45	52	-7
Patient C	56	12	44
Patient D	62	25	37
Patient E	42	57	-15
Patient F	51	10	41
Patient G	62	25	37
Patient H	43	20	23
Patient I	74	35	39
Patient J	59	23	36

Average change in ODI one year post-op26.4 points on a 100 point scale

DENOMINATOR STATEMENT

Adult patients age and older (no upper age limit) who undergo a lumbar spine fusion procedure during a calendar year performance period (e.g. dates of procedure occurring between 1/1/2013 and 12/31/2013) AND have a completed pre-operative and post-operative ODI patient reported outcome assessments.

DENOMINATOR DETAILS

The initial patient population is adult patients age 18 and older (no upper age limit) who undergo a lumbar spine fusion procedure during a calendar year performance period (e.g. dates of procedure occurring between 1/1/2013 and 12/31/2013).

CPT procedure codes: 22533, 22534, 22558, 22586 22612, 22630, and 22633.

If any portion of the lumbar spine is fused (L1 to L5), the patient is to be included. If the fusion of the lumbar spine also incorporates thoracic vertebrae, the patient is to be included.

Inclusion in the denominator that measures the average change between pre-operative and post-operative functional status requires completion of a patient reported outcome assessment tool (ODI) BOTH pre-operatively (within three months prior to the procedure) AND one year post-operatively (nine to fifteen months after the procedure)

The denominator for calculating the average change in function at a practice level is those patients included in the initial patient population who have both a completed pre-operative and post-operative Oswestry Disability Index patient reported outcome tool (ODI version 2.1a)

EXCLUSIONS

Exclusions are for patients with spine related cancer, fracture and infection and idiopathic or congenital scoliosis.

EXCLUSION DETAILS

Patients who are undergoing a lumbar spine fusion procedure for an acute fracture (trauma), metastatic or bone cancer, infection or scoliosis are not included in this patient population because their expected course of care and outcomes could be significantly different from the population of patients undergoing the procedure for relief of back and/or leg pain (degenerative disc disease, disc herniation, stenosis or spondylolisthesis). ICD-9/ ICD-10 diagnosis codes for exclusions are provided in the data dictionary at S.2.b

RISK ADJUSTMENT

Statistical risk model

During the measure development process, the expert panel discusses potential variables for risk adjustment that are important to consider for the measured population, in this case patients with undergoing lumbar spine fusion procedures. The group decides what clinical variables in addition to the MNCM standard demographic data (gender, age, zip, race/ethnicity, country of origin, primary language and insurance product) to collect through the data collection and submission process. Risk adjustment variables selected for this measure additionally include: history of prior back surgery, clinical condition reason for procedure, pre-op functional status score (ODI), pre-op VAS pain scale scores, pre-operative quality of life (PROMIS Global-10) general mental health subscale and general physical health subscale, BMI and tobacco use.

The potential risk adjustment variables are then evaluated for appropriate inclusion in the model based on a t value outside the range of -2.0 and +2.0.

This is a new measure; recently completed pilot testing. Risk adjustment model testing will commence mid 2015 following wide spread (state-wide) implementation of this measure.

MN Community Measurement's Board of Directors has reviewed and discussed the issues surrounding risk adjustment of outcome data that is currently reported on our consumer facing public website at www.mnhealthscores.org and used in many health plan and state contracts for demonstrating excellence in outcomes. Historically, the Board has favored the public reporting of unadjusted rates determining that the wide variation in results for chronic disease measures were the result of variation in care process, rather than patient risk factors. As the breadth and complexity of the measures we are reporting have expanded and care processes and tools used by the community have become more standardized, the Board has convened a Risk Adjustment Task Force to evaluate methodologies for public reporting. Their preliminary recommendations indicate that publicly reported data should be risk adjusted using the "Actual to Expected" methodology, which would allow the unadjusted rate to be simultaneously preserved and displayed.

The effect of risk adjustment on clinic ranking is examined in three ways. First, the clinic's unadjusted and adjusted quality measures are compared using correlation analysis. Two types of correlation are used, Pearson and Kendall. Pearson's correlation examines the correlation when the measures are treated as continuous measures. A high correlation (close to 1) means

that the two measures strongly co-vary, when one is high the other is high. Kendall's correlation examines the similarity between the unadjusted and adjusted quality measure in terms of the similarity in the way clinics are ranked by the measures. Because of the focus of Kendall's correlation on comparing ranks and the interest in the use of clinic quality scores for clinic comparison, Kendall's correlation is likely to be the most useful correlation measure.

The second comparison ranks the clinics into performance rank deciles based on the unadjusted and adjusted scores and then examines how decile rankings based on unadjusted measures compare to decile rankings based on adjusted measures. The third comparison ranks clinics into Poor, Below Average, Average, Above Average, and Excellent categories using statistical methods that take into account the quality measure's confidence interval which is calculated based on the number of patients each clinic reports(11, 12). These two methods are compared directly in our accompanying report on the quality deviations ranking approach.

Provided in response box S.15a

STRATIFICATION

Clinical Condition Reason for Procedure field is collected for purposes of stratification (potential) or use in a risk adjustment model (more likely). The choices for this variable are: 1 = Degenerative Disc Disease, 2 = Disc Herniation, 3 = Spinal Stenosis, 4 = Spondylolisthesis. These conditions are definable by ICD-9/ ICD-10 codes and are provided in the data dictionary at S.2.b.

The use of this variable for stratification of outcomes is dependent on procedure volume at the practice level; it has been our experience so far that the volumes at a practice level do not support reliable stratification by four variables as they may result in volumes that do not meet our standards for public reporting at the practice level. These variables, however, are important for several reasons. The may prove appropriate for inclusion in a future risk adjustment model. They also serve analytical purposes for further understanding of the patient reported outcome rates as some of the conditions represent an area of controversy in terms of appropriateness of procedures and successful outcomes for the patient.

TYPE SCORE

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

ALGORITHM

Please also refer to measure flow logic in the data dictionary in S.2.b and flow chart in Appendix A-1

Initial patient population:

Was the patient born on or prior to 01/01/xxxx?

Did the patient undergo a lumbar fusion (any portion of the lumbar spine) procedure between 01/01/2013 to 12/31/2013? Patients who had fusion of the lumbar spine which incorporate the thoracic vertebrae are included.

Does the patient have one of the following CPT codes?

22533, 22534, 22558, 22586, 22612, 22630, 22633

Inclusion in Denominator (has pre-op and post-op ODI)

Valid date in the Pre-op ODI Date field? No = remove from denominator; Yes continue

Is the Pre-op ODI Date field within 3 months prior to the procedure? No = remove from denominator; Yes continue

Is there a value in the Pre-op ODI Summary Score field? Yes = Pre-op ODI Hold this score for calculation if postop score is present, if No evaluate if individual responses submitted for score calculation.

Are there at least 8 completed value (valid 0 to 5) responses in the following fields? Pre-op ODI, Pain Pre-op ODI Care, Pre-op ODI Lifting, Pre-op ODI Walking, Pre-op ODI Sitting, Pre-op ODI Standing, Pre-op ODI Sleeping, Pre-op ODI Sex, Pre-op ODI Social, Pre-op ODI Travelling. If Yes = Pre-op ODI Hold this score for calculation if postop score is present, if No remove from the denominator.

Is the 1 Yr Post-op ODI Date field within nine to fifteen months after the Date of Procedure? No = remove from denominator; Yes continue.

Is there a value in the 1 Yr Post-op ODI Summary Score field ? If Yes 1 Yr Post-op ODI Hold this score for calculation, if No evaluate if individual responses submitted for score calculation.

Are there at least 8 completed value (valid 0 to 5) responses in the following fields? 1 Yr Post-op ODI Pain, 1 Yr Post-op Care, 1 Yr Post-op Lifting, 1 Yr Post-op Walking, 1 Yr Post-op Sitting, 1 Yr Post-op Standing, 1 Yr Post-op Sleeping, 1 Yr Post-op ODI Sex, 1 Yr Post-op ODI Social, 1 Yr Post-op ODI Travelling. If Yes = Hold this score for calculation, if No remove from denominator.

For each patient remaining in the denominator calculate the change in function by taking the pre-op ODI score and subtracting the one year post-op ODI score. Save this change score.

To calculate the rate of average change in functional status for the practice; average the change in function score.

Example:

Patient	Pre-op ODI	Post-op ODI	Change in ODI
Patient A	47	18	29
Patient B	45	52	-7
Patient C	56	12	44
Patient D	62	25	37
Patient E	42	57	-15
Patient F	51	10	41
Patient G	62	25	37
Patient H	43	20	23
Patient I	74	35	39
Patient J	59	23	36

Average change in ODI one year post-op26.4 Available in attached appendix at A.1

5.1 Identified measures: 0425 : Functional status change for patients with lumbar impairments

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Significant differences in these two measures; related but not competing. Only commonality is the desire to measure change in functional status. Target populations, settings of care and provider types are completely different as are the mechanisms for m

5b.1 If competing, why superior or rationale for additive value: Measures do not address the same target population, providers or setting of care. They are related but not competing.

2653 Average Change in Functional Status Following Total Knee Replacement Surgery

STATUS

Endorsed

STEWARD

MN Community Measurement

DESCRIPTION

For patients age 18 and older undergoing total knee replacement surgery, the average change from pre-operative functional status to one year (nine to fifteen months) post-operative functional status using the Oxford Knee Score (OKS) patient reported outcome tool.

TYPE

PRO

DATA SOURCE

Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Patient Reported Data/Survey Oxford Knee Score Version 1.0 (User Guide August 2010)

A twelve item patient-reported questionnaire originally developed and validated specifically to assess function and pain in patients undergoing total knee replacement. It is short, reproducible, valid and sensitive to clinically important changes (Dawson et al, 1998).

Items are scored on a 0 to 4 ordered scale with 4 indicating the best outcome (least amount of symptoms). One example of a question: During the past four weeks … Have you had any trouble getting in and out of a car or using public transportation because of your knee? 4 = no trouble at all, 3 = very little trouble, 2 = moderate trouble, 1 = extreme difficulty and 0 = impossible to do. The tool is scored by simply summing all of the responses to the individual questions. Summary scores range from 0 (worst possible outcome) to 48 (best possible outcome) Time for patient completion is 5 to 10 minutes.

Internal consistency: Cronbach's alpha for the study questionnaire was 0.87 before the operation (n=117) and 0.93 at the six-month follow-up (n=85). All but three items correlated with the total score at r=0.53 (items 6, 8 and 10 r=0.45) at the preoperative assessment (Table 1). After surgery all 12 items correlated with the total score at r=0.51. Cronbach's alpha was not markedly improved by removal of any item from the score. (Dawson et al, 1998

Reproducibility: In the test-retest sample, the correlation (r=0.92) between the total scores for the questionnaire was high (p<0.0001). No significant change occurred in the distribution of scores between the two assessments for reliability (paired t-test >0.05). (Dawson et al, 1998).

Construct validity: The study questionnaire correlated moderately with both components of the AKS clinical scores before operation (Table 2). There was also significant agreement (r>0.5 to r=0.71, p<0.01) between the OKS questionnaire and relevant domains of the SF 36 (physical function, role physical, pain and social function), and with both components of the HAQ, (pain VAS and the disability index). (Dawson et al, 1998).

Sensitivity to change: Patients reported a substantial improvement at the six-month follow-up assessment. The effect size (2.19) was larger for the OKS questionnaire than for any of the individual subscales of the SF-36 questionnaire (Table 3), indicating that it could be particularly sensitive to improvements obtained by TKR. The change scores for the TKR questionnaire were significantly greater (p<0.0001) for patients who reported the most improvement in their condition. (Dawson et al, 1998).

Available in attached appendix at A.1 Attachment
MNCM_Data_Dictionary_Total_Knee_Replacement-635502003683217232.xlsx

LEVEL

Clinician : Group/Practice

SETTING

Ambulatory Care : Clinician Office/Clinic

TIME WINDOW

Patients undergoing a total knee replacement procedure with date of procedure during a calendar year performance period (e.g. dates of procedure occurring between 1/1/2013 and 12/31/2013) followed by a measurement period of fifteen months to allow for a one year (9 to 15 months) assessment to occur for all patients in the denominator which is dependent on their procedure date (e.g. assessment dates between 1/1/2014 to 3/31/2015).

NUMERATOR STATEMENT

There is not a traditional numerator for this measure; the measure is calculating the average change in functional status score from pre-operative to post-operative functional status score. The measure is NOT aiming for a numerator target value for a post-operative OKS score.

For example:

The average change in knee function was an increase of 15.9 points one year post-operatively on a 48 point scale.

NUMERATOR DETAILS

There is not a traditional numerator for this measure; the measure is calculating the average change in functional status score from pre-operative to post-operative functional status score. The measure is NOT aiming for a numerator target value for a post-operative OKS score.

The average change is calculated as follows:

Change is first calculated for each patient and then changed scores are summed and then an average is determined. Measure calculation takes into account those patients that have an improvement and those patients whose function decreases post-operatively. Example below:

Patient	Preop OKS Score	1 Year Postop OKS Score	Change in OKS Score at 1 Year
Patient A	33	45	12
Patient B	17	39	22
Patient C	16	31	15
Patient D	23	40	17
Patient E	34	42	8
Patient F	10	42	32
Patient G	14	44	30
Patient H	32	44	12
Patient I	19	45	26
Patient J	26	19	-7
Patient K	24	43	19
Patient L	29	34	5
Patient M	23	39	16
Patient N	29	45	16
Patient O	29	45	16
Patient P	34	41	7
Patient Q	11	14	3
Patient R	13	39	26
Patient S	18	45	27

15.9   increase in points on a 48 point scale

DENOMINATOR STATEMENT

Adult patients age and older (no upper age limit) who undergo a primary or revision total knee replacement procedure during a calendar year performance period (e.g. dates of procedure occurring between 1/1/2013 and 12/31/2013) AND have a completed pre-operative OKS patient reported outcome assessments.

The initial patient population is adult patients age 18 and older (no upper age limit) who undergo a primary or revision total knee replacement procedure during a calendar year performance period (e.g. dates of procedure occurring between 1/1/2013 and 12/31/2013).

CPT procedure codes: 27445-27447, 27486, 27487

- Primary total knee replacement is defined as the first total knee replacement for this particular knee joint.

- Revision total knee replacement is defined as the replacement of the previous failed total knee prosthesis with a new prosthesis. Some of the reasons for failure include wear, loosening, infection, fracture, instability, and patient related factors.

- Patients with either a primary a revision total knee replacement are included, however the functional status outcome rates will be reported separately (stratified).

- Patients with bilateral knee replacements (both knees replaced on the same day, during the same procedure) are included. This would be one procedure based record for submission.

- Patients with sequential knee replacements (each knee replaced on a separate day, during a separate procedure) are included. This patient would have two procedure based records, one for each procedure.

Inclusion in the denominator that measures the average change between pre-operative and post-operative functional status requires completion of a patient reported outcome assessment tool (OKS) BOTH pre-operatively (within three months prior to the procedure) AND one year post-operatively (nine to fifteen months after the procedure)

The denominator for calculating the average change in function at a practice level is those patients included in the initial patient population who have both a completed pre-operative and post-operative Oxford Knee Score (OKS) patient reported outcome tool.

EXCLUSIONS

There are no denominator exclusions from the initial patient population for this measure.

EXCLUSION DETAILS

RISK ADJUSTMENT

Statistical risk model

During the measure development process, the expert panel discusses potential variables for risk adjustment that are important to consider for the measured population, in this case patients with undergoing total knee replacement procedures. The group decides what clinical variables in addition to the MNCM standard demographic data (gender, age, zip, race/ethnicity, country of origin, primary language and insurance product) to collect through the data collection and submission process. Risk adjustment variables selected for this measure additionally include: pre-op functional status score (OKS), pre-operative quality of life (PROMIS Global-10) general mental health subscale and general physical health subscale, primary diagnosis, BMI, diabetes and tobacco use.

The potential risk adjustment variables are then evaluated for appropriate inclusion in the model based on a t value outside the range of -2.0 and +2.0.

This is a new measure; recently completed multi-phase pilot testing. Risk adjustment model testing is planned for mid-2016.

MN Community Measurement's Board of Directors has reviewed and discussed the issues surrounding risk adjustment of outcome data that is currently reported on our consumer facing public website at www.mnhealthscores.org and used in many health plan and state contracts for demonstrating excellence in outcomes. Historically, the Board has favored the public reporting of unadjusted rates determining that the wide variation in results for chronic disease measures were the result of variation in care process, rather than patient risk factors. As the breadth and complexity of the measures we are reporting have expanded and care processes and tools used by the community have become more standardized, the Board has convened a Risk Adjustment Task Force to evaluate methodologies for public reporting. Their preliminary recommendations indicate that publicly reported data should be risk adjusted using the "Actual to Expected" methodology, which would allow the unadjusted rate to be simultaneously preserved and displayed.

The effect of risk adjustment on clinic ranking is examined in three ways. First, the clinic's unadjusted and adjusted quality measures are compared using correlation analysis. Two types of correlation are used, Pearson and Kendall. Pearson's correlation examines the correlation when the measures are treated as continuous measures. A high correlation (close to 1) means that the two measures strongly co-vary, when one is high the other is high. Kendall's correlation examines the similarity between the unadjusted and adjusted quality measure in terms of the similarity in the way clinics are ranked by the measures. Because of the focus of Kendall's correlation on comparing ranks and the interest in the use of clinic quality scores for clinic comparison, Kendall's correlation is likely to be the most useful correlation measure.

The second comparison ranks the clinics into performance rank deciles based on the unadjusted and adjusted scores and then examines how decile rankings based on unadjusted measures compare to decile rankings based on adjusted measures. The third comparison ranks clinics into Poor, Below Average, Average, Above Average, and Excellent categories using statistical methods that take into account the quality measure's confidence interval which is calculated based on the number of patients each clinic reports(11, 12). These two methods are compared directly in our accompanying report on the quality deviations ranking approach.

STRATIFICATION

Primary versus revision total knee replacement is the stratification variable for this measure; it is the intent of the measure development group that the outcome rates for this variable are always used and reported separately.

As part of the patient level submission of demographic data and PRO tool scores that are submitted to MNCM's HIPAA secure data portal, a field called Procedure Type is included. Definitions and directions for this field include the following:

Procedure Type:

Enter the type of total knee replacement for this procedure date:

1 = Primary Total Knee Replacement

2 = Revision Total Knee Replacement

This field will be used to stratify results by primary or revision patients.

May use the primary CPT codes to determine the status of primary or revision.

This variable is defined by CPT codes as follows:

Primary Total Knee Replacement Procedures:

CPT Code CPT Procedure Code Description

27445 Arthroplasty, knee hinge prosthesis

27446 Arthroplasty, knee condyle and plateau, medial OR lateral compartment

27447 Arthroplasty, knee condyle and plateau, medial AND lateral compartment with or without patellar resurfacing (total knee arthroplasty)

Revision Total Knee Replacement Procedures:

CPT Code CPT Procedure Code Description

27486 Revision of total knee arthroplasty, with or without allograft, 1 component

27487 Revision of total knee arthroplasty, with or without allograft, femoral and entire tibial component

TYPE SCORE

Continuous variable, e.g. average better quality = score within a defined interval

ALGORITHM

Please also refer to measure flow logic in the data dictionary in S.2.b and flow chart in Appendix A-1

Initial patient population:

Was the patient born on or prior to 01/01/xxxx?

Did the patient undergo a primary or revision total knee replacement procedure between 01/01/2012 to 12/31/2012?

Does the patient have one of the following CPT codes?

27445, 27446, 27447, 27486, 27487

Inclusion in Denominator (has pre-op and post-op OKS)

Valid date in the Preop OKS Date field? No = remove from denominator; Yes continue

Is the Preop OKS Date field within 3 months prior to the procedure? No = remove from denominator; Yes continue

Is there a value in the Preop OKS Score field? Yes = Preop OKS Hold this score for calculation if postop score is present, if No remove from denominator.

Is the 1 Yr Postop OKS Date field within nine to fifteen months after the Date of Procedure? No = remove from denominator; Yes continue.

Is there a value in the 1 Yr Postop OKS Score field? If Yes 1 Yr Post-op OKS Hold this score for calculation, if No remove from denominator. .

For each patient remaining in the denominator calculate the change in function by taking the one year post-op OKS score and subtracting pre-op OKS score. Save this change score.

To calculate the rate of average change in functional status for the practice; average the change in function score.

Example:

Patient	Preop OKS Score	1 Year Postop OKS Score	Change in OKS Score at 1 Year
Patient A	33	45	12
Patient B	17	39	22
Patient C	16	31	15
Patient D	23	40	17
Patient E	34	42	8
Patient F	10	42	32
Patient G	14	44	30
Patient H	32	44	12
Patient I	19	45	26
Patient J	26	19	-7
Patient K	24	43	19
Patient L	29	34	5
Patient M	23	39	16
Patient N	29	45	16
Patient O	29	45	16
Patient P	34	41	7
Patient Q	11	14	3
Patient R	13	39	26
Patient S	18	45	27

15.9 increase in points on a 48 point scale Available in attached appendix at A.1

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: Related and Competing Measures

The following tables identify the sets of measures that the Committee reviewed and determined which should be assigned related or competing status. For full measure descriptions, please refer to Appendix F.

NQF Number and Title	Decisions
• 0422 Functional Status Change for Patients with Knee Impairments (specifications) • 2653 Average Change in Functional Status Following Total Knee Replacement Surgery (specifications)	Related
• 0167 Improvement in Ambulation/Locomotion (specifications); 0174 Improvement in Bathing (specifications); 0175 Improvement in Bed Transferring (specifications) • 2287 Functional Change: Change in Motor Score (specifications)	Related
• 0422 Functional Status Change For Patients With Knee Impairments (specifications); 0423 Functional Status Change For Patients With Hip Impairments (specifications); 0424 Functional Status Change For Patients With Foot And Ankle Impairments (specifications); 0425 Functional Status Change For Patients With Lumbar Impairments (specifications); 0426 Functional Status Change For Patients With Shoulder Impairments (specifications); 0427 Functional Status Change For Patients With Elbow, Wrist And Hand Impairments (specifications); 0428 Functional Status Change For Patients With General Orthopaedic Impairments (specifications) • 2624 Functional Outcome Assessment (specifications)	Related
• 2635 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Self-Care Score for Medical Rehabilitation Patients (specifications) • 2633 IRF Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients (specifications) • 2286 Functional Change: Change in Self-Care Score (specifications)	Related
• 2613 CARE: Improvement in Self Care (specifications) • 2286 Functional Change: Change in Self-Care Score (specifications)	Related
• 2612 CARE: Improvement in Mobility (specifications) • 2321 Functional Change: Change in Mobility Score (specifications) • 2632 Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (specifications)	Related
• 2636 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Discharge Mobility Score for Medical Rehabilitation Patients (specifications) • 2321 Functional Change: Change in Mobility Score (specifications) • 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients (specifications)	Related

NQF Number and Title	Decisions
• 2633 IRF Functional Outcome Measure: Change in Self-Care Score for Medical Rehabilitation Patients (specifications) • 2286 Functional Change: Change in Self-Care Score (specifications)	Competing
• 2321 Functional Change: Change in Mobility Score (specifications) • 2634 Inpatient Rehabilitation Facility (IRF) Functional Outcome Measure: Change in Mobility Score for Medical Rehabilitation Patients (specifications)	Competing