

Serious Illness Strategy Session #2 – Measuring Function in Serious Illness

As part of the National Quality Forum's (NQF) Serious Illness Initiative, NQF is hosting a series of strategy sessions aiming to develop and disseminate recommendations for overcoming specific challenges impeding the advancement of serious illness quality measurement. For these sessions, serious illness is defined as "...a health condition that carries a high risk of mortality AND either negatively impacts a person's daily function or quality of life, OR excessively strains their caregivers."¹ The first strategy session of this series occurred in July of 2018 and focused on bringing clarity and consistency to approaches used to identify individuals with serious illness. The recommendations from this first strategy session are included in [Strategy Session Brief #1](#), which describes a set of guiding principles for approaches to identifying individuals with serious illness.

In February of 2019, NQF hosted a second strategy session focused on a quality measure gap area prioritized by the Serious Illness Quality Alignment Hub's Quality Measurement Committee – functional assessment. The Committee's rationale for prioritizing this gap centered on two points. First, function is a component of the definition of serious illness and data on function is key to identifying individuals with serious illness. However, functional assessments are not routinely completed in practice, particularly community-based practices. When functional assessments are completed, there is wide variation in the tools used and the approaches implemented to record and track function-related data. Second, functional assessments can reveal significant unmet needs in an individual and can inform the development of a robust and comprehensive care plan. Without function-related data, care plans may not address all of an individual's needs, which may result in poor symptom management, continued declines in function and quality of life, and increases in caregiver strain. To address this measure gap area, NQF assembled a technical expert panel (TEP) consisting of individuals with expertise in serious illness, palliative care, functional assessment, geriatrics, pediatrics, and quality measurement. [Appendix A](#) contains the TEP roster and the strategy session objectives are listed below.

Strategy Session #2 Objectives

- (1) Identify a preferred set of functional assessment tools for serious illness; and
- (2) Develop an action plan detailing the immediate next steps for developing and/or adapting function-related quality measures for serious illness.

Background - Environmental Scan

In preparation for the strategy session, NQF staff conducted an environmental scan of existing functional assessment tools and function-related quality measures. To be included in the scan, identified tools and quality measures had to address cognitive, mental, social, and/or physical function. The Serious Illness Quality Alignment Hub's Quality Measurement Committee favored this broad conceptualization, because serious illness can have an impact on multiple areas of functioning. For the purposes of this scan, tools were defined as a measurement device (e.g., survey, test, questionnaire, scale) used for consistently obtaining (or presenting) data from respondents that can be used in the calculation of a measure. Quality measures were defined as, "...a measure used to quantify healthcare processes, outcomes, patient (or other respondent) perceptions, and organizational structures and/or systems associated with the ability to provide high-quality care."^{2,3} A full description of the scan methods and results are shown in [Appendix B](#).

Functional Assessment Tools Key Take-Aways

The majority of identified tools were developed for the geriatric population and focused on physical function. Notably, the PROMIS® tools were the only tools to have validated versions for both pediatric and adult patient populations. In response to the limited number of pediatric functional assessment tools identified, panelists suggested additional tools including the Lansky Play Performance Scale, the Pediatric Quality of Life Inventory™ (PedsQL™), and the Pediatric Functional Independent Measure (WeeFIM). For physical functioning, assessments of all or some combination of basic activities of daily living (BADLs) – walking, feeding, dressing and grooming, toileting, bathing, and transferring – were frequently used. Physical function was also a major focus in all of the functional assessment tools used in post-acute care settings. A few tools addressed multiple types of functioning; these multi-dimensional tools included RAND 36-Item Health Survey and the Patient-Reported Outcomes Measure Information System (PROMIS)®-29 Profile, which captured data on cognitive, social, and/or physical function.

Function-Related Quality Measures Key Take-Aways

The scan of quality measures identified both process and outcome focused measures; the NQF team did not identify structural quality measures related to function. The identified process measures focused on whether a functional assessment was completed and whether identified functional issues were addressed in the patient’s corresponding care plan. The majority of identified quality measures were outcome measures, often capturing whether an individual experienced an improvement in some aspect of function over a given period of time or episode of care. In response to these findings, the panel noted any new measures related to function and serious illness should take into consideration that changes in function, improvements or declines, may not be appropriate quality measures for this population. Such quality measures are likely inappropriate because individuals with serious illness may not experience functional improvement or may even experience functional decline as a result of disease progression, not poor-quality care.

Preferred Functional Assessment Tools

The TEP considered a variety of factors when discussing and identifying a potential set of preferred functional assessment tools for serious illness. First, the selected tools must demonstrate psychometric soundness and be applicable to a broad population of individuals given the many conditions or combinations of conditions that may be labeled a “serious illness”. Second, the current practice environment must be taken into consideration, particularly in terms of the tools used by providers and the technology available to collect, analyze, and store patient data. Provider and patient measurement burden is a serious concern and tools currently in use should be considered for selection. Such tools have a demonstrated ability for successful incorporation into clinical workflows and providers’ familiarity with the tools may enhance the likelihood of the field adopting the Panel’s recommendations. With respect to technology, tools that are available in different modes of administration (e.g., over the telephone, via videoconference) would be more appealing given the growing use of telehealth services by healthcare systems and providers. Such tools may also be more amenable to continued evolutions in the use of technology to obtain patient data and inform the delivery of care.

With these factors in mind, the Panel focused on first clarifying what the use of the functional assessment tools should aim to accomplish in practice. Ultimately, the collection of function-related data should help to identify individuals who have a serious illness and help inform providers about the types of supports and services an individual requires. The Panel agreed it would be challenging to identify a set of tools that could both identify *and* inform. Instead, the Panel proposed a stepped

screening and assessment approach to integrating functional assessments into care with a set of tools recommended for the screening portion and a set of tools for the assessment portion of the approach. Tools that can identify individuals with serious illness will likely need to be applied to a large group of patients and must therefore be short and relatively easy to implement. Tools meeting this requirement do not provide adequate information to help providers understand the underlying causes of a functional impairment or help providers determine the types of supports and services an individual needs. Tools providing detailed enough information to help inform care would need to be longer and require more time to administer. Given these competing demands, different sets of tools are required for different portions of the approach. To whom the approach would be applied was another question considered by the group. Given the heterogeneous nature of serious illness, the approach should identify individuals along the continuum of serious illness and identify individuals with different levels of risk for further decline in function and quality of life. Figure 1 demonstrates this continuum of risk and provides a helpful framework for who would be identified at each step of the screening and assessment approach.⁴ The initial screening could be applied to a large patient group, such as a primary care clinic's patient panel, and could help identify those who are either not seriously ill or those in group A. The assessment approach could help differentiate the individuals belonging to group A, B, or C. Ultimately, the application of the screening and assessment approach would identify individuals along this continuum and help providers identify different levels of risk and inform the delivery of care to different groups.

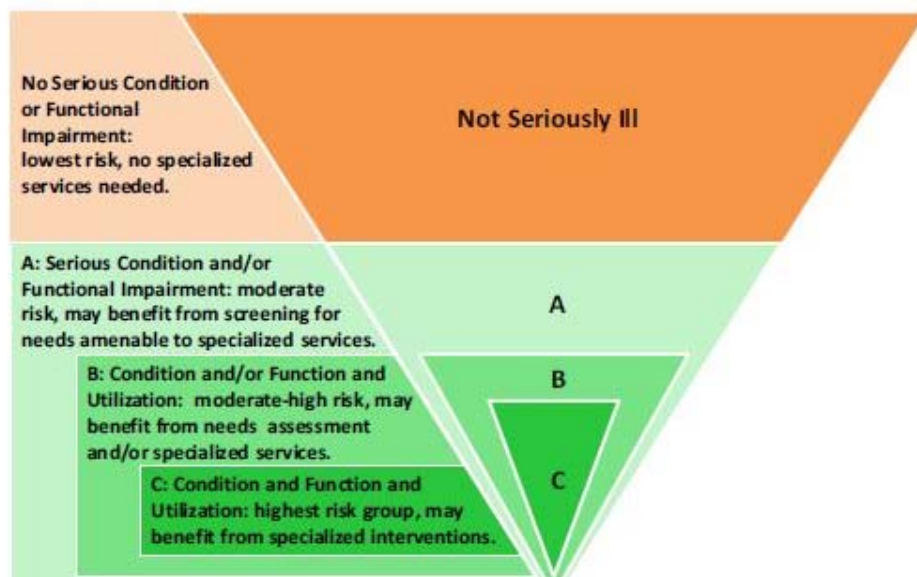


Figure 1. Three Definitions of Serious Illness, Ranging from Broad to Restrictive from Kelley, AS, Covinsky, KE, Gorge RJ, et al. Identifying older adults with serious illness: A critical step toward improving the value of health care. *Health Serv Res.* 2017; 52(1).

The screening and assessment approach devised by the Panel is shown in Figure 2. The table portion of the figure describes the purpose of each stage and identifies the specific tools identified by the Panel as appropriate for use in a given phase. To highlight that serious illness can occur across the lifespan, the Panel included tools for both the adult and pediatric populations. For the screening phase, the group agreed it was important to identify short tools that could be implemented on a large patient population easily and quickly. This screening step aims to identify individuals who may need a more-depth assessment by a provider, likely a primary care provider (e.g., internist, geriatric, pediatrician). This screening could be done annually, at the time of health event (e.g., hospitalization), or at the discretion of the provider. For the first level assessment, the identified tools are longer in length and aim to

provide a general understanding of the functional impairment's cause, severity, and impact on the patient and caregiver(s). With this information, the primary care provider can determine whether referral to a specialist or higher-level of support is needed. The second level assessment is geared towards assessments completed by specialists (e.g., palliative care providers, cardiologists, rheumatologists) that facilitate a detailed and in-depth understanding of the impairment and can inform the delivery of even more specialized services. The flow diagram portion of the Figure illustrates the process of implementing this approach in practice and how the information from the selected tool is used to make decisions about additional assessments and care delivery.

| | Purpose: Identify individuals in group A who may benefit from additional, more in-depth functional assessments. | Purpose: Identify individuals in Group B who may have a higher-risk for unmet needs and may benefit from specialized services or interventions. Specific goals of the assessment include obtaining a general understanding of the impairment's cause, severity, and impact on the patient and their caregiver(s). | Purpose: Identify individuals in Group C who may be at highest risk for unmet needs and may need to be prioritized for specialized services or interventions. Specific goals of the assessment include obtaining an in-depth understanding of the impairment's cause, severity, and impact on the patient and their caregiver(s). |
|------------------|--|---|---|
| Age | Screening Tools | 1st Level Assessment Tools | 2nd Level Assessment Tools |
| Pediatric | <ul style="list-style-type: none"> PROMIS® 2-item Short Form: <ul style="list-style-type: none"> - Global Health Mental - Global Health Physical | <ul style="list-style-type: none"> Lansky Play Performance Scale Peds-Quality of Life Pediatric FIM Tool PROMIS® Longer Forms | <ul style="list-style-type: none"> Tools Recommended in each of the NCP Palliative Care Guidelines Disease-specific assessment tools |
| Adults | <ul style="list-style-type: none"> PROMIS® 2-item Short Form: <ul style="list-style-type: none"> - Global Health Mental - Global Health Physical Life Space Constriction (1 item version) | <ul style="list-style-type: none"> Palliative Performance Scale Karnofsky Performance Scale PROMIS®- Physical, Cognitive, Social Short Forms Barthel Index of Activities of Daily Living | <ul style="list-style-type: none"> Tools Recommended in each of the NCP Palliative Care Guidelines Disease-specific assessment tools |

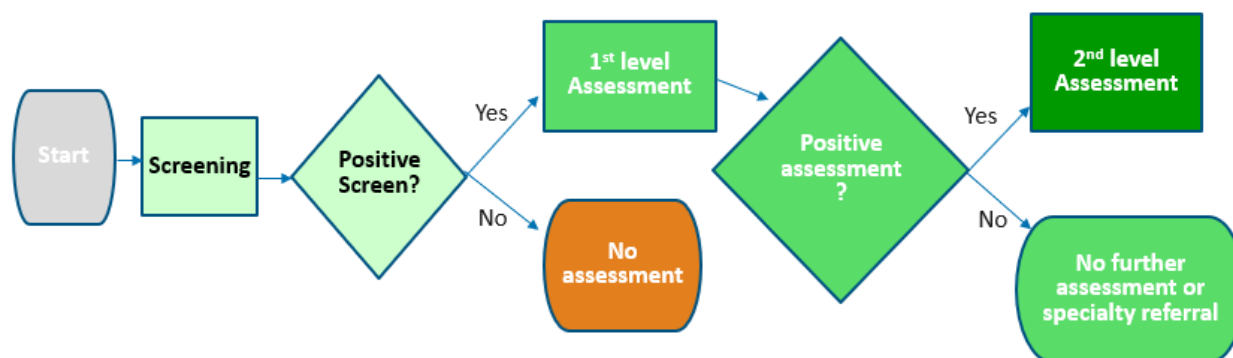


Figure 2. Proposed screen and assessment approach for implementing functional assessments into care.

Function-Related Quality Measures

Having mapped out the process of incorporating functional assessments for serious illness into practice, the Panel turned to how quality measurement could be leveraged to promote and track the collection of this data in practice. The Panel discussed the potential structures, processes, and outcomes that could be captured with the data obtained from these functional assessments. Table 1 lists the draft measure concepts suggested by the Panel during this discussion. The group again emphasized a lack of functional improvement is not necessarily an indicator of poor quality and also highlighted that intervention may or may not be appropriate for this population. It is important to capture how the impairment impacts the individual and their caregiver(s) and that any identified impairments are addressed within the care plan. Capturing all those factors into a single measure is difficult. The Panel suggested taking a bundling approach instead, combining quality measures that capture the screening, assessment, and appropriate follow-up or intervention. This approach would provide a comprehensive view of whether function was assessed and whether the provider responded appropriately. An existing measure from the Merit-based Incentive Payment System (MIPS) was cited as an example starter measure - MIPS Measure 182 captures the documentation of a current functional outcome assessment using a standardized functional outcome assessment tool AND documentation of a care plan based on identified functional outcome deficiencies on the date of the identified deficiencies. A similar measure could be developed for function in serious illness, starting with a measure focused on screening and whether an appropriate follow-up assessment was completed and moving on to capture the 1st Level and 2nd Level assessment and whether the appropriate follow-up was taken. This approach would provide a more comprehensive approach to determining whether function was assessed and addressed appropriately and be a better option for determining quality than a single process or outcome focused measure.

Table 1. Draft Quality Measure Concepts

| Top Three Measure Concepts | |
|----------------------------------|---|
| 1. | Functional Assessment and Care Plan: Functional assessments with an appropriate action plan in place to address identified functional needs. |
| 2. | Social Function and Needs: Assessment of social function and a documentation of a care plan that addresses identified social function needs. |
| 3. | Addressing Changes in Functional Status: Documentation of a plan for what to do when a change in functional status occurs. Co-creation of Care Plan: Evidence of patient and/or caregiver involvement in the development of the care plan. |
| Other Suggested Measure Concepts | |
| • | Functional Screening: Annual functional screening of individuals with a risk of serious illness using one of the preferred functional screening tools. |
| • | Sequential Functional Screenings: Functional screening of individuals with a risk for serious illness AND completion of a specialized functional screening if the initial screen is positive. |
| • | Functional Status score: A combination of functional assessments that result in a score. A cutoff score identifies a person with a serious illness and is flag for palliative care referral. |
| • | Appropriate Training: Staff appropriately trained to administer functional assessments to individuals who are or are at risk for being seriously ill. |

- **Use of Functional Tools:** Staff appropriately use functional tools to assess function and plan care.
- **Caregiver Assessment:** Caregivers receive a caregiver assessment that identifies the caregiver's capacity and specific support needs.
- **Medication Management:** Completion of a medication management process that includes medication justification, simplification and reconciliation and assessment of the patient or caregiver's ability to manage medications.
- **Portability of the Care Plan:** Accessibility of the care plan across providers, sites, health systems, etc.
- **Timely Entry into Specialized Services:** Timely and appropriate referral to specialty services.

Areas for Further Research

In a follow-up review and discussion of Strategy Session #2, the Serious Illness Quality Alignment Hub's Quality Measurement Committee proposed a few areas for further research and potential revisions regarding the placement of specific tools or addition of new tools in the screening and assessment approach. The Committee recommended exploration of a tool to capture impairment in cognitive function in the screening phase, noting that the Global Health Mental PROMIS 2-item Short Form may not be appropriate for this purpose. The Committee also proposed exploration of a generic or combined ADL question for use in the screening phase. It was noted that research may be needed to explore the correlation between those who score poorly on the PROMIS short-forms and those who score poorly on ADLs. There was broad agreement that it would be prudent to explore change in functional status during the screening phase, and that the Committee should engage experts in a search for an appropriate tool that captures this information. Additionally, the Committee agreed it will be important to study and understand the downstream effects the implementation of the screening and assessment approach has on clinical workflows and workloads. This is particularly important for the screening portion of the approach because if the screening step identifies a very heterogeneous group in terms of needs to address, that can increase workload and complicate workflows. Identifying the downstream effects will be important as the approach is implemented and refined within clinical practice.

Concerning draft quality measure concepts, the Committee noted the lack of distinction between cognitive function and physical function, reiterating that a general conception of the term "function" often is focused only on the latter.

References

¹ Kelley AS & Bollens-Lund E. Identifying the population with serious illness: The "denominator" challenge. *J Palliat Med*. 2018; 21(S2): S7-S16.

² National Quality Forum (NQF). *Measure Evaluation Criteria and Guidance for Evaluating Measures for Endorsement*. Washington, DC: NQF; 2018. Available at <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=88439>. Last accessed February 2019.

³ National Quality Forum (NQF). *Emergency Department Transitions of Care: A Quality Measurement Framework*. Washington, DC: NQF; 2017. Available at

<http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=85864>. Last accessed February 2019.

⁴ Kelley, AS, Covinsky, KE, Gorge RJ, et al. Identifying older adults with serious illness: A critical step toward improving the value of health care. *Health Serv Res.* 2017; 52(1).



APPENDIX A: Technical Expert Panel

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Appendix B: Environmental Scan Search Strategy

The purpose of the environmental scan was: (a) to compile an inventory of existing functional assessment tools from which the technical expert panel (TEP) could identify a preferred set of tools that can be used for identify individuals with serious illness and inform the delivery of their care; and (b) to compile existing function-related quality measures that could inform and inspire the TEP's development of draft function-related quality measure concepts.

Method

To identify functional assessment tools, the search strategy included a gray literature search (e.g., technical reports, disease-specific and specialty society websites, white papers), and database literature search using the PubMed/Medline and Google Scholar databases. The search terms included: function, serious illness, palliative care, cancer, dementia, heart failure, chronic obstructive pulmonary disease (COPD), kidney disease, and arthritis. The search terms for specific diseases were selected in an attempt to align the scope of our search with the National Consensus Project for Quality Palliative Care's [Clinical Practice Guidelines for Quality Palliative Care, 4th Edition](#). To be included in the scan results, identified resources had to be available in English and include a description of the functional tool's functional focus area, target population, scoring, and/or psychometric.

To identify quality measures, the search strategy included a review of the National Quality Forum's [Quality Positioning System](#) and the Centers for Medicare and Medicaid Services [Measures Inventory](#). To be included in the scan results, measures had to focus on cognitive, mental, social, or physical function. Measures focus on biological function (e.g., evaluation of left ventricular systolic function) were excluded.

Results

Please see next page for a full listing of environmental scan results.

Environmental Scan Results

Functional Assessment Tools

| Tool Name and Description | Population | Scoring |
|---|------------|---|
| <p><u>RAND 36-Item Health Survey 1.0</u></p> <p>Assesses eight dimensions of health: physical functioning, bodily pain, role limitations due to physical health problems, role limitations due to personal or emotional problems, emotional well-being, social functioning, energy/fatigue, & general health perceptions</p> | General | <ul style="list-style-type: none"> Scores range from 0 to 100, with 100 representing the highest level of function possible Sub-scale scores calculated for each dimension; higher scores indicate higher functioning in that dimension |
| <p><u>Katz Index of Independence in Activities of Daily Living (ADL)</u></p> <p>Assesses functional status as a measurement of the client's ability to perform activities of daily living independently.</p> | Geriatrics | <ul style="list-style-type: none"> Each ADL scored as 1 (independent) or 0 (dependent) Overall scores range from 0 (very dependent) to 6 (independent) |
| <p><u>The Karnofsky Performance Scale</u></p> <p>Assess individual's ability to engage in activities of daily living and ability to work and, if necessary, level of assistance required to engage in those activities.</p> | Geriatrics | <ul style="list-style-type: none"> Scores range from 0 (dead) to 100 (normal, no complaints; no evidence of disease) |
| <p><u>Life-Space Assessment (LSA)</u></p> <p>Measures mobility and function by asking respondents: "During the past 4 weeks, have you: 1) been to other rooms in your home besides the room where you sleep; 2) been to an area outside your home such as your porch, deck, or patio, hallway of an apartment building, or garage; 3) been to places in your neighborhood other than your own yard or apartment building; 4) been to places outside your neighborhood, but within your town; and 5) been to places outside your town?"</p> | Geriatrics | <ul style="list-style-type: none"> Scores range from 0–120 with higher scores reflecting greater mobility. |

| Tool Name and Description | Population | • Scoring |
|---|------------|---|
| <u>Frail Elderly Functional Assessment (FEFA)</u> Assesses ADL and IADL functioning via questions related to one's ability to walk, prepare meals, dress and bath oneself, answer the phone, and take medications. | Geriatrics | <ul style="list-style-type: none"> Lower scores on each item indicate better function Summed scores ranged from 0 to 55 with lower scores indicating better function |
| <u>Barthel Index of Activities of Daily Living</u> Assess the extent to which somebody can function independently and has mobility in their activities of daily living (ADLs) | Geriatrics | <ul style="list-style-type: none"> Each ADL scored as 1 (independent) or 0 (dependent) Overall scores range from 0 (very dependent) to 5 (independent) |
| <u>Functional Activities Questionnaire (FAQ)</u> Assesses ability to perform instrumental activities of daily living (e.g., balancing a checkbook, preparing meals). | Geriatrics | <ul style="list-style-type: none"> Each activity scored on a 0 (normal) to 3 (dependent scale) Sum scores range 0-30; score ≥ 9 indicates impaired function and possible cognitive impairment |
| <u>Barthel Index of Activities of Daily Living</u> Assess the extent to which somebody can function independently and has mobility in their activities of daily living (ADLs) | Geriatrics | <ul style="list-style-type: none"> Each ADL scored as 1 (independent) or 0 (dependent) Overall scores range from 0 (very dependent) to 5 (independent) |
| | | • |
| <u>Groningen Frailty Indicator</u> A 15-item tool assessing losses of function and resources in 4 domains: physical, cognitive, social, and psychological. | Geriatrics | <ul style="list-style-type: none"> Each domain scored on a 0 to 2 scale, with higher scores indicating greater impairment in that domain Item scores are summed. Overall scores range from 0 (no frailty) to 15 (highest level of frailty). |

| Tool Name and Description | Population | Scoring |
|--|---|---|
| <u>CSHA Frailty Index</u> A count of 70 deficits including the presence and severity of current disease, ability in ADLs and physical signs from clinical and neurological exams. | Geriatrics | <ul style="list-style-type: none"> Each domain scored on a 0 to 1 scale, with higher scores indicating greater impairment in that domain Item scores are summed and divided by total number of deficits assessed. Overall scores range from 0.0 (no frailty) to 1.0 (highest level of frailty). |
| <u>Physical Self-Maintenance Scale</u> Evaluating functional status within 6 different categories (toilet, feeding, dressing, grooming, physical ambulation, bathing) | Geriatrics | <ul style="list-style-type: none"> Each item scored 0 (requires some level of assistance) to 1 (no assistance required). |
| <u>The Erlangen Test of Activities of Daily Living (E-ADL-Test)</u> Performance-based assessment of the ability of an individual diagnosed with dementia to: pour a drink, cut a piece of bread, open a small cupboard, wash hands and tie a bow. | Dementia | <ul style="list-style-type: none"> Scores summed for a maximum score of 30 Higher scores indicate higher ADL functioning |
| <u>Functional Assessment Staging Test (FAST)</u> Assesses level of ADL functioning related in individuals with cognitive impairment. | Dementia | <ul style="list-style-type: none"> Scores range from 1 (No difficulty w/ ADLs) to 7f (not able to hold head up independently) |
| <u>Eastern Cooperative Oncology Group (ECOG) Performance Status</u> Assesses patient's disease progression, how the disease affects the daily living abilities of the patient and used to determine appropriate treatment/prognosis. | Cancer | <ul style="list-style-type: none"> Scores range from 0 (fully active, able to carry on all pre-disease performance without restriction) to 5 (dead) |
| <u>Functional Independence Measure (FIM)</u> Assesses level of assistance required for tasks related to bowel and bladder control, transfers, locomotion, communication, social cognition, feeding, grooming, bathing, upper body and lower body dressing, and toileting. | Stroke, Traumatic Brain Injury, Spinal cord injury, or Cancer | <ul style="list-style-type: none"> Each activity scored on a 1 (total assistance or not testable) to 7 (complete independence). |

| Tool Name and Description | Population | Scoring |
|---|-----------------------------|---|
| <u>Glittre-ADL Test</u> Assesses the time required to complete a sequence of activities that includes rising from a chair, lifting, carrying, and bending. | Pulmonary Conditions | <ul style="list-style-type: none"> Scores as the length of time to complete 5 laps of the sequence of activities. Longer performance time indicates poorer function. |
| <u>Palliative Performance Scale</u> Assesses performance status and scores indicate how much support a person may need in the home or in hospice. | Palliative care and Hospice | <ul style="list-style-type: none"> Scores range 100% (normal activity & work; no disease) to 0% (dead) Scores decrease by increments of 10% <ul style="list-style-type: none"> 90% normal activity & work; some evidence of disease 80% Normal activity and work with effort; some evidence of disease |
| <u>The Functional Status Scale (FSS)</u> Assesses domains of function in children including mental status, sensory, communication, motor function, feeding and respiratory function. | Pediatrics | <ul style="list-style-type: none"> Each domain scored from 1 (normal) to very severe dysfunction (5). Summary scores range from 6 to 30, with higher scores indicating higher function. |
| <u>Childhood Health Assessment Questionnaire (CHAQ) – Disability Index</u> Assesses a child's functional ability in the areas of dressing & grooming, arising, eating, walking, hygiene, reach, grip and activities. | Pediatrics | <ul style="list-style-type: none"> Each item scored on a 0 (without ANY difficulty) to 3 (UNABLE to do) scale Summary scores range from 0 to 3, higher scores indicating more higher levels of difficulty in function. |

| Tool Name and Description | Population | Scoring |
|---|--|--|
| <u>Juvenile Arthritis Functional Assessment Scale (JAFAS)</u> Assess activities of daily living in children. | Pediatrics | <ul style="list-style-type: none"> Each item score on a 0 (able to perform) to 2 (able to perform almost never) scale Summary scores range from 0 to 2, higher scores indicate greater disability. |
| <u>PROMIS – Physical Function</u> Measures self-reported current capability rather than actual performance of physical activities including functioning of upper extremities (dexterity), lower extremities (walking or mobility), central regions (neck, back), and IADLs. Short form or computerized adaptive testing available. | Adults Adults with Cancer Pediatric self-report (8-17 yrs.) Parent Proxy for children 5-17 yrs. | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |
| <u>PROMIS – Cognitive Function</u> Measures mental acuity, concentration, verbal and nonverbal memory, verbal fluency, and perceived changes in these cognitive functions. The extent to which cognitive impairments interfere with daily functioning, whether other people observe cognitive impairments, and the impact of cognitive dysfunction on quality of life are also assessed. | Adults Pediatric self-report (8-17 yrs.) Parent Proxy for children 5-17 yrs. | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |
| <u>PROMIS – Cognitive Function – Abilities</u> Patient-perceived functional abilities with regard to cognitive tasks, including the perception that one's cognitive ability with regard to the domain of inquiry (e.g., concentration, memory) has not changed. | Adults | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |
| <u>PROMIS – Ability to Participate in Social Roles and Activities</u> Perceived ability to perform one's usual social roles and activities. | Adults | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |

| Tool Name and Description | Population | Scoring |
|--|--|---|
| <u>PROMIS-29 Profile</u> A collection of 4-item short forms assessing anxiety, depression, fatigue, pain interference, physical function, sleep disturbance, and ability to participate in social roles and activities as well as a single pain intensity item. | Adults | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |
| <u>PROMIS-43 Profile</u> A collection of 6-item short forms assessing anxiety, depression, fatigue, pain interference, physical function, sleep disturbance, and ability to participate in social roles and activities as well as a single pain intensity item. | Adults | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |
| <u>PROMIS-57 Profile</u> A collection of 8-item short forms assessing anxiety, depression, fatigue, pain interference, physical function, sleep disturbance, and ability to participate in social roles and activities as well as a single pain intensity item. | Adults | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |
| <u>PROMIS-Pediatric/Parent Proxy Profile 25</u> A collection of 4-item short forms assessing anxiety, depressive symptoms, fatigue, pain interference, physical function-mobility, and peer relationships as well as a single pain intensity item. | Pediatric self-report (8-17 yrs.) Parent Proxy for children 5-17 yrs. | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |
| <u>PROMIS-Pediatric/Parent Proxy Profile 37</u> A collection of 6-item short forms assessing anxiety, depressive symptoms, fatigue, pain interference, physical function-mobility, and peer relationships as well as a single pain intensity item. | Pediatric self-report (8-17 yrs.) Parent Proxy for children 5-17 yrs. | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |
| <u>PROMIS-Pediatric/Parent Proxy Profile 49</u> A collection of 8-item short forms assessing anxiety, depressive symptoms, fatigue, pain interference, physical function-mobility, and peer relationships as well as a single pain intensity item. | Pediatric self-report (8-17 yrs.) Parent Proxy for children 5-17 yrs. | <ul style="list-style-type: none"> T-scores calculated that compare the respondent's performance to that of a reference population; higher scores mean more of the concept being measured. |

Functional Assessment Tools in Medicare

| Tool Name and Description | Setting | Frequency of Assessment |
|--|-------------------------------------|---|
| <u>Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI)</u> Based largely on the FIM, which assess motor and cognitive activities and is used to track progress during rehab stay and for case-mix grouping. | Inpatient Rehabilitation Facilities | <ul style="list-style-type: none"> • Admission, discharge |
| <u>Outcome and Assessment Information Set (OASIS-D)</u> Function items: Mobility, Ambulation, Feeding, Meal preparation, Ability to use phone, Prior functioning ADL/IADL (prior to recent illness). | Home Health Agencies | <ul style="list-style-type: none"> • Start of care, 5-day follow up, q 60 days, Significant change in condition, transfer to inpatient, discharge, death |
| <u>The Long-Term Care Hospital (LTCH) Continuity Assessment Record and Evaluation (CARE) Data Set V 4.00</u> Function items: grooming, ability to dress upper and lower body, bathing, toilet transferring, toileting hygiene, transferring, ambulation, feeding, and falls risk assessment | Long-Term Care Hospitals | <ul style="list-style-type: none"> • Admission, discharge (planned or unplanned) and when the individuals passes |
| <u>Long Term Care Minimum Data Set (MDS) 3.0</u> Function Items: Bathing, Balance During Transitions and Walking, Functional Limitation in Range of Motion, Mobility Devices, Functional Rehabilitation Potential, Self-Care, Mobility | Skilled Nursing Facility | <ul style="list-style-type: none"> • Comprehensive Assessment -Admission, Change in Condition, Discharge, Readmission • Quarterly Assessment |

*Quality Measures***NQF Quality Positioning System Results**

| NQF # | Measure Title | Measure Description | Type | Setting |
|-------------|--|---|---------|--|
| 0426 | Functional Status Change for Patients with Shoulder Impairments | A patient-reported outcome measure of risk-adjusted change in functional status (FS) for patients 14 years+ with shoulder impairments. The change in FS is assessed using the Shoulder FS patient-reported outcome measure (Focus on Therapeutic Outcomes, Inc.). | Outcome | Home care, Outpatient Services, Post-Acute Care, Other |
| 0174 | Improvement in Bathing | Percentage of home health episodes of care during which the patient got better at bathing self. | Outcome | Home Care |
| 0175 | Improvement in Bed Transferring | Percentage of home health episodes of care during which the patient improved in ability to get in and out of bed. | Outcome | Home Care |
| 0176 | Improvement in Management of Oral Medication | Percentage of home health episodes of care during which the patient improved in ability to take their medicines correctly (by mouth). | Outcome | Home Care |
| 0177 | Improvement in Pain Interfering with Activity | Percentage of home health episodes of care during which the patient's frequency of pain when moving around improved. | Outcome | Home Care |
| 2286 | Functional Change: Change in Self-Care Score for Inpatient Rehabilitation Facilities | 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. | Outcome | Home Care, Inpatient/Hospital/Post-Acute Care |
| 2624 | Functional Outcome Assessment | 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 | Process | Outpatient Services |

| NQF # | Measure Title | Measure Description | Type | Setting |
|-------------|--|---|-------------------|---------------------|
| 2631 | Long-Term Care Hospital Patients with an Admission and Discharge Functional Assessment and a Care Plan Addressing Function | 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. | Process | Post-Acute Care |
| 2643 | Average Change in Functional Status Following Lumbar Spine Fusion Surgery | The average change (preoperative to postoperative) in functional status using the Oswestry Disability Index (ODI version 2.1a) for patients 18 years of age and older who had a lumbar fusion procedure | Outcome PRO-PM | Outpatient Services |
| 2774 | Functional Change: Change in Mobility Score for Skilled Nursing Facilities | Change in Rasch derived values of mobility function from admission to discharge among adult short-term rehabilitation skilled nursing facility patients aged 18 years and older who were discharged alive. The time frame for the measure is 12 months. The measure includes 4 mobility items: Transfer Bed/Chair/Wheelchair, Transfer Toilet, Locomotion and Stairs. | Outcome | Post-Acute Care |

CMS Measures Inventory Results

| Measure Title | Measure Description | Type | Programs |
|--|---|------------------|---|
| Ability to participate in social roles and activities (PROMIS) | Composite of questions from the PROMIS on ability to participate in the community with friends and family in work and leisure activities. | Outcome | Dual Eligible Beneficiaries Program (Development) |
| Annual Assessment of Quality of Life for Patients with Essential Tremor (ET) | Percentage of patients aged 18 years and older diagnosed with ET who were assessed* annually for quality of life in the 12-month measurement period. | Process | N/A |
| Average Change in Functional Status Following Lumbar Discectomy Laminotomy Surgery | The average change (preoperative to postoperative) in functional status using the Oswestry Disability Index (ODI version 2.1a) for patients age 18 and older who had lumbar discectomy/laminotomy procedure | Outcome – PRO-PM | MIPS (proposed) |
| Average change in functional status following total knee replacement | Adults age 18 and older; no upper age limit who undergo either a primary or revision total knee replacement during the measurement period and complete both a pre-operative and post-operative OKS functional status assessment. | Outcome – PRO-PM | MIPS (proposed) |
| Care for Older Adults Functional Status Assessment | Percent of plan members whose doctor has done a functional status assessment– to see how well members are able to do activities of daily living. (This information about the yearly assessment is collected for Medicare Special Needs Plans only) | Process | Medicare Part C Star Rating (Implemented) |
| Improvement in Eating | Percentage of home health episodes of care during which the patient got better at feeding self. | Outcome | N/A |
| Improvement in Grooming | Percentage of home health episodes of care during which patients improved in ability to groom self. | Outcome | N/A |
| Improvement in Housekeeping | Percentage of home health episodes of care during which the patient improved in ability to handle light housekeeping tasks. | Outcome | N/A |

| Measure Title | Measure Description | Type | Programs |
|---------------------------------------|--|---------|-------------------------------|
| Improvement in Laundry | Percentage of home health episodes of care during which the patient improved in ability to handle laundry tasks. | Outcome | N/A |
| Improvement in Light Meal Preparation | Percentage of home health episodes of care during which patients improved in ability to fix or reheat light meals or snacks. | Outcome | N/A |
| Improvement in Lower Body Dressing | Percentage of home health episodes of care during which patients improved in ability to dress lower body. | Outcome | Home Health Quality Reporting |
| Improvement in Phone Use | Percentage of home health episodes of care during which the patient improved in ability to use the telephone. | Outcome | N/A |
| Improvement in Shopping | Percentage of home health episodes of care during which the patient improved in ability to handle shopping tasks. | Outcome | N/A |
| Improvement in Speech and Language | Percentage of home health episodes of care during which patients improved in ability to speak clearly and be understood. | Outcome | N/A |
| Improvement in Toilet Transferring | Percentage of home health episodes of care during which patients improved in ability to get to and from and on and off the toilet. | Outcome | Home Health Quality Reporting |
| Improvement in Toileting Hygiene | Percentage of home health episodes of care during which patients improved in ability to manage toileting hygiene. | Outcome | N/A |
| Improvement in Upper Body Dressing | Percentage of home health episodes of care during which patients improved in ability to dress upper body. | Outcome | Home Health Quality Reporting |

| Measure Title | Measure Description | Type | Programs |
|---|--|------------------|--|
| Patient-Reported Outcomes Measurement Information System [PROMIS]- PROMIS 29 Profile, Physical Function | Multi-item measure: Are you able to do chores such as vacuuming or yard work Are you able to go up and down stairs at a normal pace Are you able to go for a walk of at least 15 minutes Are you able to run errands and shop Response scale: Without any difficulty/with a little difficulty, with some difficulty, with much difficulty, unable to do | Outcome – PRO-PM | N/A |
| Patient-Reported Outcomes Measurement Information System [PROMIS]- PROMIS 29 Profile, Ability to Participate in Social Roles and Activities | Multi-item measure: I have trouble doing all of my regular leisure activities with others I have trouble doing all of the family activities that I want to do I have trouble doing all of my usual work (include work at home) I have trouble doing all of the activities with friends that I want to do | Outcome – PRO-PM | N/A |
| Assessment of Health-related Quality of Life (Physical & Mental Functioning) in dialysis patients | Percentage of dialysis patients who receive a quality of life assessment using the measure based on calculated results from the KDQOL-36. | Process | End-Stage Renal Disease Quality Incentive Program |
| Home Health Patients with an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function | This quality measure reports the percent of patients/residents with an admission and a discharge functional assessment and a treatment goal that addresses function. The treatment goal provides evidence that a care plan with a goal has been established for the patient/resident. | Process | Home Health Quality Reporting (under consideration) |
| Standardized functional assessment | Percentage of individuals who have documentation of assessment of function (physical, mental, and social functioning) using a standardized assessment instrument at two points in time. | Process | Dual Eligible Beneficiaries Program (in development) |

| Measure Title | Measure Description | Type | Programs |
|--------------------|---|---------|----------|
| Frailty Assessment | Percentage of patients age 80 and older who have been evaluated for frailty prior to an elective operation. using ANY one of many available frailty scales: 1. FRAIL (provided as an example below) 2. Study of Osteoporotic Fractures (SOF scale) 3. Cardiovascular Health Study (CHS scale) 4. Edmonton Frail Scale 5. Groningen Frailty Indicator 6. Tilburg Frailty Indicator 7. Frailty Index 8. Comprehensive Geriatric Assessment (B) The results of the screen are documented, i.e. the patient is designated as frail or not frail | Process | N/A |