NATIONAL QUALITY FORUM

MEASURE WORKSHEET

This document summarizes the evaluation of the measure as it progresses through NQF's Consensus Development Process (CDP). The information submitted by measure developers/stewards is included after the Brief Measure Information, Preliminary Analysis, and Pre-meeting Public and Member Comments sections.

To navigate the links in the worksheet: Ctrl + click link to go to the link; ALT + LEFT ARROW to return

Purple text represents the responses from measure developers.

Red text denotes developer information that has changed since the last measure evaluation review.

Brief Measure Information

NQF #: 3594

Corresponding Measures:

De.2. Measure Title: Alignment of Person-Centered Service Plan (PCSP) with Functional Assessment Standardized Items (FASI) Needs

Co.1.1. Measure Steward: Centers for Medicare & Medicaid Services

De.3. Brief Description of Measure: The percentage of home and community-based services (HCBS) recipients aged 18 years or older whose PCSP documentation addresses needs in the areas of self-care, mobility, and instrumental activities of daily living (IADL) as determined by the most recent FASI assessment.

For the purposes of this measure application, the term "home and community-based services" also will refer to community-based long-term services and supports (CB-LTSS). The definition of HCBS in the September 2016 National Quality Forum (NQF) report titled Quality in Home and Community-Based Services to Support Community Living: Addressing Gaps in Performance Measurement is consistent with the way the Centers for Medicare & Medicaid Services (CMS) uses CB-LTSS.

1b.1. Developer Rationale: Current estimates suggest that 10 million individuals who require assistance to perform ADLs or IADLs are living in the community, including in private or group homes.1 Eiken (2017)2 reported that more than 3.7 million individuals receive Medicaid-funded HCBS. Federal and state governments finance over 60 percent of paid HCBS costs in the United States through the Medicaid program. HCBS are expected to grow because of the aging U.S. population and the current move away from institutional-based care.3 As significant continued growth is expected in cost and utilization of HCBS, including through managed care contracting, greater scrutiny on quality also is expected.

This proposed measure aims to improve the alignment of service plans for individuals receiving HCBS with functional needs based on standardized functional assessment items. Aligning service plans with functional needs is important in HCBS populations because it facilitates improved outcomes, but there are measurement gaps limiting the ability to assess this key aspect of person-centered supports and

services. First, understanding a person's functional needs requires a standard, reliable assessment, yet at least 124 functional assessment tools were used by state Medicaid programs for LTSS in 2015.5 The NQF conducted a broad environmental scan of HCBS quality measurement across all payers.6 The resulting recommendations prioritized "assessment"—a process that should gather all of the information needed to inform the person-centered planning process—as one of three subdomains within the person-centered planning and coordination domain for which quality measurement can be improved. However, the current HCBS environment lacks standardized measurements of function (e.g., self-care, mobility, IADL) across settings that may form the basis of a high-quality service plan.5 Furthermore, at least 21 states had functional assessment tools for specific populations in 2015 that were not also used to plan care services.7

After an individual is assessed, the identified functional needs must be addressed in the HCBS service plan. The Medicaid and Children's Health Insurance Program (CHIP) Payment Access Commission recently funded a comprehensive scan related to HCBS and behavioral health.4 The results showed that most state-level quality measurement activity related to HCBS in Medicaid was based on CMS reporting requirements for 1915(c) waivers. These measures generally are process oriented and intended to demonstrate state and provider compliance with a range of policies and procedures. One of six key domains for the measures is "service plan," for which the focus is ensuring that plans reflect needs and participants receive services consistent with the plans. A common example of a service plan measure employed by state waiver programs is the percentage of service plans that were updated or revised as warranted by changes in participant needs. This is a critical concept to measure, and it is different from looking at whether a service plan addresses all current identified functional needs regardless of whether needs have changed. Additionally, existing service plan measures have not been endorsed by NQF.

The absence of a performance measure identifying the alignment between the functional assessment and the PCSP at any given time—not only when needs change—reflects a gap at the measurement level. The proposed measure incorporates a standardized approach to assess functional needs that was found to be reliable and valid in measuring self-care, mobility, and IADL in the HCBS population. The performance measure subsequently fills an NQF-identified gap by measuring the alignment of those needs with the service plan—an important step toward providing high-quality and person-centered service to individuals receiving HCBS.

1. Kaye HS, Harrington C. Long-term services and supports in the community: Toward a research agenda. Disability and Health Journal. 2015;8(1):3-8. Retrieved from http://proxygw.wrlc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2014-55175-002&site=eds-live&scope=site&authtype=ip,uid&custid=s8987071.
2. Eiken S. Medicaid long-term services and supports beneficiaries in 2013. Centers for Medicare & Medicaid Services; 2017. Retrieved from https://www.medicaid.gov/medicaid/ltss/downloads/reports-and-evaluations/ltss-beneficiaries-2013.pdf.
3. Ng T, Harrington C, Musumeci M, Reaves E. Medicaid home and community-based services programs: 2012 data update. Kaiser Family Foundation; 2015. Retrieved from https://www.kff.org/medicaid/report/medicaid-home-and-community-based-services-programs-2012-data-update.
4. Hartman L, Lukanen E. Quality measurement for home and community based services (HCBS) and behavioral health in Medicaid. Medicaid and CHIP Payment and Access Commission;

2016:1–30. Retrieved from https://www.macpac.gov/publication/quality-measurement-for-home-and-community-based-services-and-behavioral-health-in-medicaid.

5. Medicaid and CHIP Payment and Access Commission. June 2016 report to congress on Medicaid and CHIP, Functional assessments for long-term services and supports. Retrieved from https://www.macpac.gov/publication/june-2016-report-to-congress-on-medicaid-and-chip.

6. Caldwell J, Kaye HK. Quality in home and community-based services to support community living: Addressing gaps in performance measurement. National Quality Forum; 2016:1–59. Retrieved from https://www.qualityforum.org/Publications/2016/09/Quality_in_Home_and_Community-Based_Services_to_Support_Community_Living__Addressing_Gaps_in_Performance_Measurement.aspx.

7. 9. Medicaid and CHIP Payment and Access Commission. Inventory of the state functional assessment tools for long-term services and supports. 2017. Retrieved from https://www.macpac.gov/publication/inventory-of-the-state-functional-assessment-tools-for-long-term-services-and-supports.

S.4. Numerator Statement: The number of HCBS recipients aged 18 years or older with documented needs in the areas of self-care, mobility, or IADL as determined by the most recent FASI assessment within the previous 12 months and with documentation that the subsequent PCSP addresses the FASI-identified functional needs in self-care, mobility, and IADLs.

S.6. Denominator Statement: The number of HCBS recipients aged 18 years or older with documented needs in the areas of self-care, mobility, or IADL as determined by the most recent FASI assessment within the previous 12 months.

S.8. Denominator Exclusions: Exclusions inherent in the denominator definition include individuals younger than 18 years, individuals who have not had a FASI assessment within the previous 12 months, and individuals who have had a FASI assessment, but no functional needs were identified in the areas of self-care, mobility, or IADLs. In addition, individuals without 3 months of continuous HCBS enrollment are excluded.

De.1. Measure Type: Process

S.17. Data Source: Electronic Health Records, Instrument-Based Data, Paper Medical Records

S.20. Level of Analysis: Other

IF Endorsement Maintenance – Original Endorsement Date: Most Recent Endorsement Date:

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? Not applicable.

Preliminary Analysis: New Measure

To maintain NQF endorsement endorsed measures are evaluated periodically to ensure that the measures still meets the NQF endorsement criteria ("maintenance"). The emphasis for maintaining

endorsement is focused on how effective the measure is for promoting improvements in quality. Endorsed measures should have some experience from the field to inform the evaluation.

Criteria 1: Importance to Measure and Report

1a. Evidence

1a. Evidence. The evidence requirements for a health outcome measure include providing empirical data that demonstrate a relationship between the outcome and at least one healthcare structure, process, intervention, or service; if these data not available, data demonstrating wide variation in performance, assuming the data are from a robust number of providers and results are not subject to systematic bias. For measures derived from patient report, evidence also should demonstrate that the target population values the measured outcome, process, or structure and finds it meaningful.

Evidence Summary

- This is a new process measure that assesses the percentage of home and community-based services (HCBS) recipients aged 18 years or older whose PCSP documentation addresses needs in the areas of self-care, mobility, and instrumental activities of daily living (IADL) as determined by the most recent FASI assessment.
- The measure developer presents a logic model that depicts the relationship between the HCBS FASI needs assessment, meeting those needs and better health and quality of life outcomes for people in HCBS settings.
- Developer provides evidence of value and meaningfulness to patients by presenting results of inputs on the development of the measure through an online survey by reviewers and a technical expert panel. It is unclear the extent to which people in HCBS settings were part of the panel or the reviewers. However, the FASI tool has undergone extensive testing with individuals from HCBS settings, suggesting that if such individuals found the FASI items meaningful, then they would find meaningful a process measure that holds service providers accountable to address FASI-identified goals and needs.
- Developer provides a summary of evidence that suggests that service plans that are not properly oriented to the needs and goals identified by the person result in compromised care.
    - Frail elderly and those with disabilities are especially vulnerable to adverse outcomes from unmet needs.
    - Attainment of personalized goals is linked to improved physical outcomes and well-being.
    - Developer suggests the evidence supports the measure premise, that accountability to developing service plans that emerge from person-identified needs and goals is the natural next step in meaningful person-centered service planning.

Guidance from the Evidence Algorithm

(Box 1) Process measure → (Box 3) Evidence not graded or systematic review → (Box 7) Empirical evidence submitted → (Box 8) Body of evidence included → (Box 9) Benefits outweigh undesirable effects → MODERATE

Preliminary rating for evidence: ☐ **High** ☒ **Moderate** ☐ **Low** ☐ **Insufficient**

1b. Gap in Care/Opportunity for Improvement and 1b. Disparities

Maintenance measures – increased emphasis on gap and variation

1b. Performance Gap. The performance gap requirements include demonstrating quality problems and opportunity for improvement.

- Developer provides a performance assessment by program type from data in a sample of 475 HCBS individuals served by nine organizations from four states. Columns indicate the type of population served by the programs.
- During June and July 2018, this measure was tested in nine organizations in four different states located in geographically diverse regions of the country. These organizations serve different populations including individuals who are older adults and those with physical disabilities, intellectual/developmental disabilities (IDD), acquired brain injury, or mental health or substance use disorders (MH or SUD).
- Scores are presented by program type.

Program serves:	Older adults	Phys Disability	IDD	Brain injury	MH or SUD	Total
Total individuals	117	119	106	70	66	478
Has FASI-based need	117	119	106	69	64	475
PCSP addresses needs	68	94	45	59	49	315
Measure score, %	58.1	79.0	42.5	85.5	76.6	66.3

- Performance scores suggest an opportunity for improvement.

Disparities

- Developer presents data that suggest there are performance disparities based on race for the measure.

	Black	White	Native/Asian	Unknown	Total
Measure score, %	80.2	69.4	50.0	46.2	66.5

Questions for the Committee:

- Is the analysis presented sufficient to suggest that there is a performance gap?
- Is there a gap in care that warrants a national performance measure?
- Are you aware of additional evidence that disparities exist in this area of healthcare?

Preliminary rating for opportunity for improvement: ☐ **High** ☒ **Moderate** ☐ **Low** ☐ **Insufficient**

Committee Pre-evaluation Comments:
Criteria 1: Importance to Measure and Report (including 1a, 1b, 1c)

1a. Evidence to Support Measure Focus: For all measures (structure, process, outcome, patient-reported structure/process), empirical data are required. How does the evidence relate to the specific structure, process, or outcome being measured? Does it apply directly or is it tangential? How does the structure, process, or outcome relate to desired outcomes? For maintenance measures –are you aware of any new studies/information that changes the evidence base for this measure that has not been cited in the submission? For measures derived from a patient report: Measures derived from a patient report must demonstrate that the target population values the measured outcome, process, or structure.

- Evidence is gathered by a survey and a TEP plus a logic model. No systematic review.
- IIRC, Service Plans are often not found in the patient record. Measuring their use of patient preferences is a start to even get them utilized.
- Value of the tool has been demonstrated through surveys and reviewers
- Unclear see my review of 3593
- Evidence provided relies heavily on face validity, i.e., that functional assessment data are important and therefore alignment with service plan would be "meaningful". A basic logic model is offered. Limited empirical evidence connecting the process measure to outcomes is provided - and may not be available.
- Reviewers and TEP members considered the measure valuable or improving patient centered care by identifying and aligning patient priority needs with assessments conducted and documented in the care plan. Documentation of these assessments should lead to improvements in addressing the needs of patients.
- The evidence directly supports measure 3594 to the outcome. As a new measure, there are gaps and some inconsistencies but not worthy of not proceeding forward with the measure. Any challenges with this measure must be addressed and an update approach is warranted. The key to flipping the healthcare system to reduce overtreatment is based on the alignment of a person centered service plan with their functional assessment. To further support the need for this measure overtreatment studies include Overtreatment in the United States." This article studies, "Waste in health care is increasingly being recognized as a cause of patient harm and excess costs. In 2010, the Institute of Medicine (IOM) called attention to the problem, suggesting that “unnecessary services” are the largest contributor to waste in United States (US) health care, accounting for approximately $210 billion of the estimated $750 billion in excess spending each year. [1] " With this perspective, the measure demonstrates that the patient population values the measured process.
- Limited if any empirical data presented - mostly expert opinion attesting to the importance of patient-driven prioritization for targeting functional status improvements.
- Same as 3593 - would rate low-mod -- trying to connect the process metric to outcomes of quality care. I can see it, but needs further development to demonstrate it as evidence.
- Moderate

1b. Performance Gap: Was current performance data on the measure provided? How does it demonstrate a gap in care (variability or overall less than optimal performance) to warrant a national performance measure? Disparities: Was data on the measure by population subgroups provided? How does it demonstrate disparities in the care?

- Gap is identified and interesting disparities documented.

- I am again concerned about the Equity of lumping Indigenous Americans in with Asian Americans.
- Gap is demonstrated. Disparities data included and shows significant differences
- Unclear regarding the disparities data w respect to the measure performance between the demographic groupings listed in Table 4.
- Performance data are provided and demonstrate a performance gap which varies across populations tested. Greater gaps are shown with older adults and individuals with intellectual disabilities.
- Improvements are needed for all population groups served, but most notably for persons with Intellectual and Developmental Disabilities. Variations were also noted across racial groups particularly for whites and Native /Asians
- Overall, this measure closes the performance gap by "systematically matching the documented functional needs using valid and reliable functional items to the documented provision of service via the PCSP for the HCBS population." There is a performance gap between personal assessment service plan and functional assessment. The performance scores especially for IDD and older adults demonstrate a gap between FASI based need and PCSP solution. This needs to be on a national performance measure because the process for delivering patient-centered needs is systemic process. As this measure is deployed, we need to think about it from the patient perspective and their journey. Therefore, transitions in care become a point where ownership for the patient can be lacking. Who is the "system engineer" looking at the whole process. In "What Does it Take to Create a Person-Centered Culture of Care? Jan 12, 2016 , Health Policy Hub, Leena Sharma" it is stated that transitions should be safe, seamless, and person-centered across care settings. When preparing for discharge from the hospital, for example, the patient must be central to the planning process. The key to close performance gap is to tie the process measure back to the goals of the patient.
- Performance gap demonstrated; disparities found, especially among Native populations
- Same as 3593. This metric add the PCSP as the first metric to screen to use of FASI. An assumption that the PCSP is accurate in identifying need for the function tool.
- Moderate

Criteria 2: Scientific Acceptability of Measure Properties

2a. Reliability: Specifications and Testing

2b. Validity: Testing; Exclusions; Risk-Adjustment; Meaningful Differences; Comparability; Missing Data

2c. For composite measures: empirical analysis support composite approach

Reliability

2a1. Specifications requires the measure, as specified, to produce consistent (reliable) and credible (valid) results about the quality of care when implemented. For maintenance measures – no change in emphasis – specifications should be evaluated the same as with new measures.

2a2. Reliability testing demonstrates if the measure data elements are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period and/or that the measure score is precise enough to distinguish differences in performance across providers. For maintenance measures – less emphasis if no new testing data provided.

Validity

2b2. Validity testing should demonstrate the measure data elements are correct and/or the measure score correctly reflects the quality of care provided, adequately identifying differences in quality. For maintenance measures – less emphasis if no new testing data provided.

2b2-2b6. Potential threats to validity should be assessed/addressed.

Composite measures only:

2d. Empirical analysis to support composite construction. Empirical analysis should demonstrate that the component measures add value to the composite and that the aggregation and weighting rules are consistent with the quality construct.

Complex measure evaluated by Scientific Methods Panel? ☐ **Yes** ☒ **No**

NQF Staff Scientific Acceptability Evaluation

NQF Staff Evaluation Summary:

Reliability

- Developer performed an analysis of the degree of concordance between abstractors on FASI needs as well as whether the PCSP addressed all functional needs identified in the FASI for 431 HCBS records.
    - Developer determined if abstractors could distinguish if there was a FASI-based need present. No meaningful disagreement was found on determination of FASI-based need being present.
    - Developer used Bland-Altman limits of agreement (LOA) to evaluate the consistency between rater pairs determining the total number of FASI-based needs and the total needs addressed in the PCSP.
        - Agreement total number of FASI-based needs: 4.2% of all records fell outside of the -10 to 10 LOA range, with 93.1 – 96.4% of records falling inside the 95% confidence interval by program type.
        - Agreement number of needs addressed: 95.1% of were within the LOA.
    - Developer assessed whether all FASI-based needs were addressed in the PCSP using kappa values: $\kappa = 0.8130$, $p < 0.001$
    - Strength of agreement by program type produced moderate to good results with the exception of IDD programs which produced poor agreement.

Validity

- The data element reliability testing method used by the developer may be used for validity as well.
- The developer also asked reviewers to evaluate the face validity of:
    - Identifying needs on FASI
        - The performance measure denominator, "All individuals 18 years or older who received CB-LTSS with documented functional needs determined by a FASI within the reporting period," had a high level of endorsement by the reviewers (90.5%) and TEP members (92%) as a clear and appropriate specification.
        - Reviewers (90%) and TEP members (100%) strongly agreed or agreed with the statement "documented functional needs will be based on receiving 05 or below, or 88," indicating they considered the performance measure definition valid as a measure of function using the FASI scale.
    - Identifying importance to align FASI needs and service plan
        - Reviewers (88%) and TEP members (75%) agreed with the statement that a PCSP that addresses functional needs is an important step toward high-quality services because the assessment entity can deliver services and supports important to the person.
        - Similarly, reviewers (83%) and TEP members (92%) agreed with the statement that a PCSP that addresses identified functional needs is an important step toward high-quality services because the assessor can create a plan to address the individual's needs.
        - Finally, the reviewers (81%) and TEP members (67%) agreed with the statement about whether performance on this measure provides important information assessing whether groups of HCBS recipients are receiving high-quality services.
    - Overall measure score
        - Reviewers had high agreement with the statements regarding the wording of the performance measure numerator (91%), denominator (91%), timing (93%), and the assessment entity (provider organization) (93%). There also was high agreement with identifying the PCSP through the individual's case record (95%) and whether the reviewer will determine whether the PCSP addresses the functional needs that were identified through the FASI (93%).
        - Regarding whether the performance measure will promote person-centered supports and services, the reviewers agreed with the statements that: (1) a PCSP that addresses identified functional needs is an important step to creating person-centered services because it addresses the individual's needs (95%); and (2) a PCSP that addresses identified functional needs is an important step to creating person-centered services because the assessor can create goals addressing the individual's needs (83%). They also agreed that performance on this measure provides important information for assessing whether groups of HCBS recipients are receiving person-centered services (81%).

Questions for the Committee regarding reliability:

- Do you have any concerns that the measure can be consistently implemented (i.e., are measure specifications adequate)?
- The NQF staff is satisfied with the reliability testing for the measure. What concerns does the Committee have related to reliability?

Questions for the Committee regarding validity:

- Do you have any concerns regarding the validity of the measure (e.g., exclusions, risk-adjustment approach, etc.)?
- The NQF staff is satisfied with the reliability testing for the measure. What concerns does the Committee have related to validity?

Preliminary rating for reliability:	☐ **High**	☒ **Moderate**	☐ **Low**	☐ **Insufficient**
Preliminary rating for validity:	☐ **High**	☒ **Moderate**	☐ **Low**	☐ **Insufficient**

Committee Pre-evaluation Comments:

Criteria 2: Scientific Acceptability of Measure Properties (including all 2a, 2b, and 2c)

2a1. Reliability-Specifications: Which data elements, if any, are not clearly defined? Which codes with descriptors, if any, are not provided? Which steps, if any, in the logic or calculation algorithm or other specifications (e.g., risk/case-mix adjustment, survey/sampling instructions) are not clear? What concerns do you have about the likelihood that this measure can be consistently implemented?

- specifications seem OK
- No concerns.
- No concerns
- Unclear if there are meaningful differences between and among demographic groups and within and between program groups.
- Data elements are clearly defined. The measure is not risk adjusted. No concerns about consistent implementation.
- No concerns noted.
- My only concern is that because this is new, it may be hard to implement and the reliability of the measure can be questionable even though the data presented showed that the only data element that produced poor agreement was the IDD program and no meaningful disagreement was found on determination of FASI-based need being present. Therefore, any obstacles to consistently implement must be addressed and plans to mitigate concerns developed.
- Data element reliability demonstrated; no measure score level reliability testing performed
- No concerns. Ongoing testing will be helpful in solidifying it as evidence based.
- Moderate

2a2. Reliability - Testing: Do you have any concerns about the reliability of the measure?

- Reliability was OK except in IDD programs. This needs discussion about why.
- no.
- No concerns
- Unclear if there are meaningful differences between and among demographic groups and within and between program groups. More data needed on how the measure performs in this regard

given the high variability in populations and subpopulations and the entities targeted for public reporting and payment. No direct linkage between this process and measurable impact in health status, quality of life, functional status and patient/family experience.

- Test-retest reliability was evaluated and strong. No concerns.
- No concerns noted, the test results indicate strong inter-rater reliability and moderate to strong percent agreement.
- This is a new measure and the developer provided detailed information about their process for reliability testing. Based on their findings, the reliability of the measure can be deployed across systems.
- Some Kappas were in moderate range for specific programs but all at least moderate level agreement
- No concerns. Look forward to the discussion to better understand the testing.
- Moderate

- 2b1. Validity -Testing: Do you have any concerns with the testing results?
- seems fine
- No.
- No concerns
- Individual cognition and understanding of the process of data collection not evaluated in field testing, although supporting references screened individuals using screening tools such as passing the Orientation-Memory-Concentration Test (OMCT) and/or Mini-Mental State Exam (MMSE). High probability of significant differences between age groups as well as the 5 different target populations in this regard.
- Face validity was evaluated and supported. Little further empirical support was provided. In future testing, the relationship between measure performance and stability or change in functional needs should be included in testing.
- Reliability test also used for validity testing and the same issue exists for needed improvements in assessing needs of persons with intellectual and developmental disabilities is apparent.
- I am encouraged by the validly results. It shows the flip in thinking in healthcare today. For example, "Reviewers (88%) and TEP members (75%) agreed with the statement that a PCSP that addresses functional needs is an important step toward high-quality services because the assessment entity can deliver services and supports important to the person." Also, " (83%) and TEP members (92%) agreed with the statement that a PCSP that addresses identified functional needs is an important step toward high-quality services because the assessor can create a plan to address the individual's needs. " With agreement that this is valid, innovation for service delivery is possible.
- No empiric validity testing; all face validity assessments which concerns me for this high burden measure (although the measure intent is important)
- No concerns.
- Moderate

2b2-3. Other Threats to Validity (Exclusions, Risk Adjustment) 2b2. Exclusions: Are the exclusions consistent with the evidence? Are any patients or patient groups inappropriately excluded from the

measure? 2b3. Risk Adjustment: If outcome (intermediate, health, or PRO-based) or resource use performance measure: Is there a conceptual relationship between potential social risk factor variables and the measure focus? How well do social risk factor variables that were available and analyzed align with the conceptual description provided? Are all of the risk-adjustment variables present at the start of care (if not, do you agree with the rationale provided)? Was the risk adjustment (case-mix adjustment) appropriately developed and tested? Do analyses indicate acceptable results? Is an appropriate risk-adjustment strategy included in the measure?

- Measure is not risk-adjusted.
- n/c
- n/a
- Inadequate information regarding this issue. Also relates to assessing cognitive and cultural competency in completing the PSCP documentation.
- The measure is not risk adjusted. This appears to be appropriate for this measure.
- Again, this is a new measure, however, the exclusions appear to be appropriate. Since the measure is not routinely implemented in HCBS programs, there is insufficient evidence to identify meaningful differences across program types. However, the lowest measure scores are from the frail elderly population (58.1%) and the population of individuals with intellectual and developmental disabilities (42.5%).
- This measure did not have a risk adjustment method, 16a or supported by a conceptual rationale or empirical analyses. According to 16c social risk adjustment is not applicable.
- N/A
- Not clear on the risk adjustment; if I understand correctly, none is used. I would like to understand that in light of co-morbidity with these clients. Look forward to that discussion.
- None

2b4-6. Threats to Validity (Statistically Significant Differences, Multiple Data Sources, Missing Data) 2b4. Identification of Statistically Significant and Meaningful Differences: How do analyses indicate this measure identifies meaningful differences about quality? 2b5. Comparability of Performance Scores when more than One Set of Specifications: If multiple sets of specifications: Do analyses indicate they produce comparable results? 2b6. Missing data and Minimizing Bias/no response: Does missing data constitute a threat to the validity of this measure?

- ok
- I think it will be important to continue to look at the potential differences in outcomes from the varying diagnostic categories.
- N/a
- Same response as last question. Individual cognition and understanding of the process of data collection not evaluated in field testing, although supporting references screened individuals using screening tools such as passing the Orientation-Memory-Concentration Test (OMCT) and/or Mini-Mental State Exam (MMSE). High probability of significant differences between age groups as well as the 5 different target populations in this regard.
- There were little missing data in the field tests. Does not appear to constitute a threat to validity.

- Missing data does constitute a threat to the validity of measure, but it appears to be relatively low in the tests performed by the developer.
- No, missing data does not constitute a threat to the validity of this measure. There were 36 measure test abstraction forms that could not be paired with the FASI test forms. "The 36 forms that could not be aligned with FASI field test records were a result of incorrect form and assessor identifiers and not a result of data missing from the fields on the abstraction form related to identifying the critical data elements." Based on the evaluation, I support the finding that " Performance results were not biased because of missing data in the critical data elements."
- 6% missing data/non-FASI paired test forms - details not available so hard to see if this represents potential bias missing sample.
- Concern if PCSP is not completed correctly, or consistently, the use of FASI will be erroneous. Would look for a discussion on monitoring as this will ultimately lead to some clients getting care and others not securing care or services.
- None

Criterion 3. Feasibility

Maintenance measures – no change in emphasis – implementation issues may be more prominent

3. Feasibility is the extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

- Developer notes that measure is abstracted from a record by someone other than person obtaining original information.
- An electronic method drawing on FASI and PCSP is available, though developer notes that some organizations may yet rely on paper versions.
- Developer also notes the following:
    - A few reviewers and TEP members considered the performance measure's language unclear, especially concerning the PCSP; however, this was a minority opinion of the total survey results.
    - A majority of comments suggested it would be difficult for the provider organization to review service plan information because it was described in a variety of documents… As a result, some organizations needed a significant amount of time to collect all relevant information to complete the performance measure. However, this sentiment was not shared by all; some respondents reported that the PCSP was easily accessible.

      The developer recommends training, sampling and additional time to gather data as ways to address this issue

Questions for the Committee:

- Are the required data elements routinely generated and used during care delivery?

- Are the required data elements available in electronic form, e.g., EHR or other electronic sources?
- Is the data collection strategy ready to be put into operational use?

Preliminary rating for feasibility: ☐ **High** ☒ **Moderate** ☐ **Low** ☐ **Insufficient**

Committee Pre-evaluation Comments:

Criteria 3: Feasibility

3. Feasibility: Which of the required data elements are not routinely generated and used during care delivery? Which of the required data elements are not available in electronic form (e.g., EHR or other electronic sources)? What are your concerns about how the data collection strategy can be put into operational use?

- Would be good to know how widespread the use of the FASI is already and how long it takes to answer. Also the commends about collection of data from multiple sources needs to be reviewed.
- The measure could create more patient centeredness. I would like to understand more about how the developers envious uptake will happen.
- Some concerns about being able to review care plan since it is in multiple documents
- Data are very specific to the PSCP documentation and much not likely to be easily/readily available in EHRs as currently configured. Uncertain about whether/if existing PSCP documentation related registries exist and are complete enough before or after data collection.
- FASI data currently are collected by paper and EHR. The developers note that "some" programs still rely on paper. The number of programs relying on paper should be documented as this presents a challenge to feasibility. In addition, programs noted that service plans may be in different documents - this might be an issue for both feasibility and reliability if programs are unable to identify consistent sources of service plans.
- No concerns about data collection strategy
- There were several areas identified that impact feasibility. For example, each state organization may have its own system or reviewers "check all that apply" and totals are greater than 100%. Some individuals raised concerns about who determines their own goals. For operational use, consistency needs to be established. This includes consistent questions and training for care providers to learn how not to lead responses.
- They have demonstrated feasibility through the test data, but it does represent a high burden data collection and matching measure for programs.
- No concerns on process; well thought out and clear. I do want to understand the cost to the health system/payor for implementation and monitoring; I am not clear on the actual expense.
- Moderate

Criterion 4: Usability and Use

Maintenance measures – increased emphasis – much greater focus on measure use and usefulness, including both impact/improvement and unintended consequences

4a. Use (4a1. Accountability and Transparency; 4a2. Feedback on measure)

4a. Use evaluate the extent to which audiences (e.g., consumers, purchasers, providers, policymakers) use or could use performance results for both accountability and performance improvement activities.

4a.1. Accountability and Transparency. Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

Current uses of the measure

Publicly reported? ☐ **Yes** ☒ **No**

Current use in an accountability program? ☐ **Yes** ☒ **No** ☐ **UNCLEAR**

OR

Planned use in an accountability program? ☒ **Yes** ☐ **No**

Accountability program details

- Developer notes that CMS intends to share information about the measure to support states in evaluating programs within the 1915 HCBS Waiver program.

4a.2. Feedback on the measure by those being measured or others. Three criteria demonstrate feedback: 1) those being measured have been given performance results or data, as well as assistance with interpreting the measure results and data; 2) those being measured and other users have been given an opportunity to provide feedback on the measure performance or implementation; 3) this feedback has been considered when changes are incorporated into the measure

Feedback on the measure by those being measured or others

- Developer outlines CMS plans to share information with those being measured should the measure be implemented.

Additional Feedback: N/A

***Questions for the Committee**:*

- How have (or can) the performance results be used to further the goal of high-quality, efficient healthcare?
- How has the measure been vetted in real-world settings by those being measured or others?

Preliminary rating for Use: ☒ **Pass** ☐ **No Pass**

4b. Usability (4a1. Improvement; 4a2. Benefits of measure)

4b. Usability evaluate the extent to which audiences (e.g., consumers, purchasers, providers, policymakers) use or could use performance results for both accountability and performance improvement activities.

4b.1 Improvement. Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated.

Improvement results

- Measure has not been implemented and therefore year-over-year results are not available.

4b2. Benefits vs. harms. Benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

- Developer notes that most reviewers agree or strongly agree that the information needed to implement the measure is readily available (98%).
- Developer notes that most reviewers agree or strongly agree that the documents needed are clear (93%)
- Developer notes that most reviewers agree or strongly agree that the time needed was reasonable (81%)

Unexpected findings (positive or negative) during implementation N/A

Potential harms

Additional Feedback:

- Developer's note:
- Unexpected benefits are not yet well understood because this measure has not been implemented over a long term. However, the immediate benefits are that the reviewers gain increased awareness of the need to assess functional needs and to align them with service plans, which are foundational responsibilities of provider organizations and measures of person-centered supports and services. In addition, aligning needs to service plans are a component of CMS reporting requirements for 1915(c) waivers program, so the measure scores also may be used to address these reporting requirements.

***Questions for the Committee**:*

- How can the performance results be used to further the goal of high-quality, efficient healthcare?
- Do the benefits of the measure outweigh any potential unintended consequences?

Preliminary rating for Usability and use: ☐ **High** ☒ **Moderate** ☐ **Low** ☐ **Insufficient**

Committee Pre-evaluation Comments:

Criteria 4: Usability and Use

4a1. Use - Accountability and Transparency: How is the measure being publicly reported? Are the performance results disclosed and available outside of the organizations or practices whose performance is measured? For maintenance measures - which accountability applications is the measure being used for? For new measures - if not in use at the time of initial endorsement, is a credible plan for implementation provided? 4a2. Use - Feedback on the measure: Have those being measured been given performance results or data, as well as assistance with interpreting the measure results and data? Have those being measured or other users been given an opportunity to provide feedback on the measure performance or implementation? Has this feedback has been considered when changes are incorporated into the measure?

- Planned use in accountability programs.
- See comment on Feasibility.
- Currently not publicly reported; will be used in CMS program

- Some limited field testing and only expectational speculation regarding the utility of this measure in programs relying on public reporting and variable performance-based payments.
- The measure currently is not being publicly reported. It is planned for use in 1915 HCBS Waiver programs.
- The measure is new and has not been implemented. One intent of the measure is to promote patient centered care and improve development of the care plan. Comments from some reviewers considered some of the measure's language unclear. Some providers indicated the Patient Centered Service Plan (PCSP) was easily accessible, while others indicated it was difficult to review the service plan because information was located in a variety of documents.
- It is CMS' intent to share information about the use of this measure and include the data elements in the library. 98% of reviewers believed that the documents and sources needed for the performance measure is readily available.
- Not yet in use
- No concerns. Multiple stakeholder's feedback secured and factored in.
- Pass

4b1. Usability – Improvement: How can the performance results be used to further the goal of high-quality, efficient healthcare? If not in use for performance improvement at the time of initial endorsement, is a credible rationale provided that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations? 4b2. Usability – Benefits vs. harms: Describe any actual unintended consequences and note how you think the benefits of the measure outweigh them.

- Seems quite usable for improvement
- nc
- Will be used to address CMS reporting requirements; no harms noted
- Imprecisions in data collected as noted above may lead to imprecise comparisons and benchmarking.
- The measure developers suggest that initial use of this measure will build awareness of FASI data and the need for alignment - this is an important first step. There do not appear to be significant unintended consequences.
- The measure is new and has not been implemented. One intent of the measure is to promote patient centered care and improve alignment of the documented individual functional priorities with the care plan.
- The benefits of this measure have the potential to flip how healthcare systems deliver their service. This is a positive result for the patients but may cause added confusion, stress, and loss of profit for healthcare systems. For the intent of a patient-centered system, this measure is a critical piece of usability. The information may change what providers deliver and the importance of services to the patient. We need not to let the burden of implementation become the obstacle that prevents us from unleashing a truly innovative measure.
- The nature of the data collection and burden raises concerns for vulnerable populations; would be helpful to see some data about data collection burden/time to complete and processing time for facilities/programs.

- Can clearly see usability. Not clear on costs to implement and monitoring to ensure consistency. There is a potential for harm is tool not administered properly (e.g., client not receiving service or receiving less than need, or client receiving a service not needed). I don't assess this as a level that would restrain forward momentum, but a caution to continue to evaluate.
- Moderate

Criterion 5: Related and Competing Measures

Related or competing measures

- Developer notes the following related measures:
  - 2624 : Functional Outcome Assessment
  - 2631 : Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function
  - 2967 : CAHPS® Home- and Community-Based Services Measures

Harmonization

- Developer suggests that there are no additional actions that will increase harmonization with these measures.

Committee Pre-evaluation Comments: Criterion 5:
Related and Competing Measures

Related and Competing: Are there any related and competing measures? If so, are any specifications that are not harmonized? Are there any additional steps needed for the measures to be harmonized?

- Three related measures identified.
- Several similar measures, but I do not think the others measure personal patient preferences.
- Yes 3; 2624, 2631, and 2961
- Unsure, not aware.
- Measure 2631 looks at alignment in LTCH patients - it would be important to look for opportunities to harmonize similar alignment measures.
- 2624 : Functional Outcome Assessment, 2631 : Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function, 2967 : CAHPS® Home- and Community-Based Services Measures
- There are three related measures: 2624, 2631 and 2967. According to the report no further harmonization is possible.
- HCBS and LTCH functional status assessments/measures are not aligned
- Nothing to add.
- None

Public and Member Comments

Comments and Member Support/Non-Support Submitted as of: 01/21/2021

- No NQF Members have submitted support/non-support choices as of this date.
- No Public or NQF Member comments submitted as of this date.

NQF Staff Scientific Acceptability Evaluation

Scientific Acceptability: Preliminary Analysis Form

Measure Number: NQF 3594

Measure Title: Alignment of Person-Centered Service Plan (PCSP) with Functional Assessment Standardized Items (FASI) Needs

Type of measure:

☒ **Process** ☐ **Process: Appropriate Use** ☐ **Structure** ☐ **Efficiency** ☐ **Cost/Resource Use** ☐ **Outcome** ☐ **Outcome: PRO-PM** ☐ **Outcome: Intermediate Clinical Outcome** ☐ **Composite**

Data Source:

☐ **Claims** ☐ **Electronic Health Data** ☒ **Electronic Health Records** ☐ **Management Data** ☐ **Assessment Data** ☒ **Paper Medical Records** ☒ **Instrument-Based Data** ☐ **Registry Data** ☐ **Enrollment Data** ☐ **Other**

Level of Analysis:

☐ **Clinician: Group/Practice** ☐ **Clinician: Individual** ☐ **Facility** ☐ **Health Plan** ☐ **Population: Community, County or City** ☐ **Population: Regional and State** ☐ **Integrated Delivery System** ☒ **Other: Medicaid HCBS Program Types**

Measure is:

☒ **New** ☐ **Previously endorsed (**NOTE: Empirical validity testing is expected at time of maintenance review; if not possible, justification is required.)

RELIABILITY: SPECIFICATIONS

1. **Are submitted specifications precise, unambiguous, and complete so that they can be consistently implemented?** ☒ **Yes** ☐ **No**

   Submission document: Submission items S.1-S.22

2. **Briefly summarize any concerns about the measure specifications.**
   - None identified by NQF Staff.

RELIABILITY: TESTING

Submission document: Measure specifications, testing attachment questions 1.1-1.4 and section 2a2

3. **Reliability testing level** ☐ **Measure score** ☒ **Data element** ☐ **Neither**

4. **Reliability testing was conducted with the data source and level of analysis indicated for this measure ☒ Yes ☐ No**
5. If score-level and/or data element reliability testing was NOT conducted or if the methods used were NOT appropriate, was **empirical VALIDITY testing** of **patient-level data** conducted?

   ☐ **Yes** ☐ **No**
6. **Assess the method(s) used for reliability testing**

   Submission document: Testing attachment, section 2a2.2

   - Developer performed an analysis of the degree of concordance between abstractors on FASI needs as well as whether the PCSP addressed all functional needs identified in the FASI for 431 HCBS records.
     - Developer determined if abstractors could distinguish if there was a FASI-based need present. No meaningful disagreement was found on determination of FASI-based need being present.
     - Developer used Bland-Altman limits of agreement (LOA) to evaluate the consistency between rater pairs determining the total number of FASI-based needs and the total needs addressed in the PCSP.
       - Agreement total number of FASI-based needs: 4.2% of all records fell outside of the -10 to 10 LOA range, with 93.1 – 96.4% of records falling inside the 95% confidence interval by program type.
       - Agreement number of needs addressed: 95.1% of were within the LOA.
     - Developer assessed whether all FASI-based needs were addressed in the PCSP using kappa values: $\kappa = 0.8130$, $p < 0.001$
     - Strength of agreement by program type produced moderate to good results with the exception of IDD programs which produced poor agreement.
7. **Assess the results of reliability testing**

   Submission document: Testing attachment, section 2a2.3

   - Overall, the results indicate good consistency in reviewers' ability to identify whether an individual had a FASI based need.
8. Was the method described and appropriate for assessing the proportion of variability due to real differences among measured entities? NOTE: If multiple methods used, at least one must be appropriate.

   Submission document: Testing attachment, section 2a2.2

   ☐ **Yes**

   ☐ **No**

   ☒ **Not applicable** (score-level testing was not performed)
9. Was the method described and appropriate for assessing the reliability of ALL critical data elements?

   Submission document: Testing attachment, section 2a2.2

   ☒ **Yes**

   ☐ **No**

   ☐ **Not applicable** (data element testing was not performed)

10. **OVERALL RATING OF RELIABILITY** (taking into account precision of specifications and all testing results):

    ☐ **High** (NOTE: Can be HIGH **only if** score-level testing has been conducted)

    ☒ **Moderate** (NOTE: Moderate is the highest eligible rating if score-level testing has not been conducted)

    ☐ **Low** (NOTE: Should rate **LOW** if you believe specifications are NOT precise, unambiguous, and complete or if testing methods/results are not adequate)

    ☐ **Insufficient** (NOTE: Should rate **INSUFFICIENT** if you believe you do not have the information you need to make a rating decision)

11. **Briefly explain rationale for the rating of OVERALL RATING OF RELIABILITY and any concerns you may have with the approach to demonstrating reliability.**

    From NQF Reliability algorithm (2019 NQF Measure Evaluation Criteria):
    (Box 1) Specifications implementable → (Box 2) Reliability testing complete → (Box 4) No score level testing → (Box 8) Patient-level data element testing → (Box 9) Appropriate testing → (Box 10) Moderate confidence → MODERATE

VALIDITY: ASSESSMENT OF THREATS TO VALIDITY

12. **Please describe any concerns you have with measure exclusions.**

    Submission document: Testing attachment, section 2b2.

    - No concerns identified by staff.

13. **Please describe any concerns you have regarding the ability to identify meaningful differences in performance.**

    Submission document: Testing attachment, section 2b4.

    - No concerns identified by staff.

14. **Please describe any concerns you have regarding comparability of results if multiple data sources or methods are specified.**
    Submission document: Testing attachment, section 2b5.

    - No concerns identified by staff.

15. **Please describe any concerns you have regarding missing data.**

    Submission document: Testing attachment, section 2b6.

    - No concerns identified by staff.

16. **Risk Adjustment**

    16a. **Risk-adjustment method** ☒ **None** ☐ **Statistical model** ☐ **Stratification**

    16b. **If not risk-adjusted, is this supported by either a conceptual rationale or empirical analyses?**

    ☐ Yes ☒ No ☐ Not applicable

    16c. **Social risk adjustment:**

    16c.1 Are social risk factors included in risk model? ☐ Yes ☐ No ☒ Not applicable

    16c.2 Conceptual rationale for social risk factors included? ☐ Yes ☒ No

16c.3 Is there a conceptual relationship between potential social risk factor variables and the measure focus? ☐ Yes ☒ No

VALIDITY: TESTING

17. **Validity testing level: ☐ Measure score ☐ Data element ☒ Both**
18. **Method of establishing validity of the measure score:**

    ☒ Face validity

    ☐ Empirical validity testing of the measure score

    ☐ N/A (score-level testing not conducted)
19. **Assess the method(s) for establishing validity**

    Submission document: Testing attachment, section 2b2.2

- The data element reliability testing method used by the developer may be used for validity as well.
- The developer also asked reviewers to evaluate the face validity of:
  - Identifying needs on FASI
    - The performance measure denominator, "All individuals 18 years or older who received CB-LTSS with documented functional needs determined by a FASI within the reporting period," had a high level of endorsement by the reviewers (90.5%) and TEP members (92%) as a clear and appropriate specification.
    - Reviewers (90%) and TEP members (100%) strongly agreed or agreed with the statement "documented functional needs will be based on receiving 05 or below, or 88," indicating they considered the performance measure definition valid as a measure of function using the FASI scale.
  - Identifying importance to align FASI needs and service plan
    - Reviewers (88%) and TEP members (75%) agreed with the statement that a PCSP that addresses functional needs is an important step toward high-quality services because the assessment entity can deliver services and supports important to the person.
    - Similarly, reviewers (83%) and TEP members (92%) agreed with the statement that a PCSP that addresses identified functional needs is an important step toward high-quality services because the assessor can create a plan to address the individual's needs.
    - Finally, the reviewers (81%) and TEP members (67%) agreed with the statement about whether performance on this measure provides important information assessing whether groups of HCBS recipients are receiving high-quality services.
  - Overall measure score
    - Reviewers had high agreement with the statements regarding the wording of the performance measure numerator (91%), denominator (91%), timing (93%), and the assessment entity (provider organization) (93%). There also was high agreement with identifying the PCSP through the individual's case record (95%)

and whether the reviewer will determine whether the PCSP addresses the functional needs that were identified through the FASI (93%).

- Regarding whether the performance measure will promote person-centered supports and services, the reviewers agreed with the statements that: (1) a PCSP that addresses identified functional needs is an important step to creating person-centered services because it addresses the individual's needs (95%); and (2) a PCSP that addresses identified functional needs is an important step to creating person-centered services because the assessor can create goals addressing the individual's needs (83%). They also agreed that performance on this measure provides important information for assessing whether groups of HCBS recipients are receiving person-centered services (81%).

20. **Assess the results(s) for establishing validity**

    Submission document: Testing attachment, section 2b2.3

    - The data element testing suggests that the measure has moderate empirical validity and good face validity. The score level validity results were appropriate as well.

21. **Was the method described and appropriate for assessing conceptually and theoretically sound hypothesized relationships?**

    Submission document: Testing attachment, section 2b1.

    ☒ **Yes**

    ☐ **No**

    ☐ **Not applicable** (score-level testing was not performed)

22. **Was the method described and appropriate for assessing the accuracy of ALL critical data elements?** *NOTE that data element validation from the literature is acceptable.*

    Submission document: *Testing attachment, section 2b1.*

    ☒ **Yes**

    ☐ **No**

    ☐ **Not applicable** (data element testing was not performed)

23. **OVERALL RATING OF VALIDITY taking into account the results and scope of all testing and analysis of potential threats.**

    ☐ **High** (NOTE: Can be HIGH only if score-level testing has been conducted)

    ☒ **Moderate** (NOTE: Moderate is the highest eligible rating if score-level testing has NOT been conducted)

    ☐ **Low** (NOTE: Should rate LOW if you believe that there **are** threats to validity and/or relevant threats to validity were **not assessed OR** if testing methods/results are not adequate)

    ☐ **Insufficient** (NOTE: For instrument-based measures and some composite measures, testing at both the score level and the data element level **is required**; if not conducted, should rate as INSUFFICIENT.)

24. **Briefly explain rationale for rating of OVERALL RATING OF VALIDITY and any concerns you may have with the developers' approach to demonstrating validity.**

    From NQF Validity algorithm (2019 NQF Measure Evaluation Criteria):

(Box 1) Potential threats to validity addressed → (Box 2) Empirical testing conducted → (Box 5) Empirical score level testing not conducted → (Box 9) Testing with patient-level data → (Box 10) Assessed all data elements → (Box 11) Moderate certainty that the data elements are valid → MODERATE

ADDITIONAL RECOMMENDATIONS

25. **If you have listed any concerns in this form, do you believe these concerns warrant further discussion by the multi-stakeholder Standing Committee? If so, please list those concerns below.**
    - No additional concerns from staff.

Developer Submission

NQF #: 3594

Corresponding Measures:

De.2. Measure Title: Alignment of Person-Centered Service Plan (PCSP) with Functional Assessment Standardized Items (FASI) Needs

Co.1.1. Measure Steward: Centers for Medicare & Medicaid Services

De.3. Brief Description of Measure: The percentage of home and community-based services (HCBS) recipients aged 18 years or older whose PCSP documentation addresses needs in the areas of self-care, mobility, and instrumental activities of daily living (IADL) as determined by the most recent FASI assessment.

For the purposes of this measure application, the term "home and community-based services" also will refer to community-based long-term services and supports (CB-LTSS). The definition of HCBS in the September 2016 National Quality Forum (NQF) report titled Quality in Home and Community-Based Services to Support Community Living: Addressing Gaps in Performance Measurement is consistent with the way the Centers for Medicare & Medicaid Services (CMS) uses CB-LTSS.

1b.1. Developer Rationale: Current estimates suggest that 10 million individuals who require assistance to perform ADLs or IADLs are living in the community, including in private or group homes.1 Eiken (2017)2 reported that more than 3.7 million individuals receive Medicaid-funded HCBS. Federal and state governments finance over 60 percent of paid HCBS costs in the United States through the Medicaid program. HCBS are expected to grow because of the aging U.S. population and the current move away from institutional-based care.3 As significant continued growth is expected in cost and utilization of HCBS, including through managed care contracting, greater scrutiny on quality also is expected.

This proposed measure aims to improve the alignment of service plans for individuals receiving HCBS with functional needs based on standardized functional assessment items. Aligning service plans with functional needs is important in HCBS populations because it facilitates improved outcomes, but there are measurement gaps limiting the ability to assess this key aspect of person-centered supports and services. First, understanding a person's functional needs requires a standard, reliable assessment, yet at least 124 functional assessment tools were used by state Medicaid programs for LTSS in 2015.5 The NQF conducted a broad environmental scan of HCBS quality measurement across all payers.6 The resulting recommendations prioritized "assessment"—a process that should gather all of the information needed to inform the person-centered planning process—as one of three subdomains within the person-centered planning and coordination domain for which quality measurement can be improved. However, the current HCBS environment lacks standardized measurements of function (e.g., self-care, mobility, IADL) across settings that may form the basis of a high-quality service plan.5 Furthermore, at least 21 states had functional assessment tools for specific populations in 2015 that were not also used to plan care services.7

After an individual is assessed, the identified functional needs must be addressed in the HCBS service plan. The Medicaid and Children's Health Insurance Program (CHIP) Payment Access Commission recently funded a comprehensive scan related to HCBS and behavioral health.4 The results showed that most state-level quality measurement activity related to HCBS in Medicaid was based on CMS reporting requirements for 1915(c) waivers. These measures generally are process oriented and intended to demonstrate state and provider compliance with a range of policies and procedures. One of six key

domains for the measures is "service plan," for which the focus is ensuring that plans reflect needs and participants receive services consistent with the plans. A common example of a service plan measure employed by state waiver programs is the percentage of service plans that were updated or revised as warranted by changes in participant needs. This is a critical concept to measure, and it is different from looking at whether a service plan addresses all current identified functional needs regardless of whether needs have changed. Additionally, existing service plan measures have not been endorsed by NQF.

The absence of a performance measure identifying the alignment between the functional assessment and the PCSP at any given time—not only when needs change—reflects a gap at the measurement level. The proposed measure incorporates a standardized approach to assess functional needs that was found to be reliable and valid in measuring self-care, mobility, and IADL in the HCBS population. The performance measure subsequently fills an NQF-identified gap by measuring the alignment of those needs with the service plan—an important step toward providing high-quality and person-centered service to individuals receiving HCBS.

1. Kaye HS, Harrington C. Long-term services and supports in the community: Toward a research agenda. Disability and Health Journal. 2015;8(1):3-8. Retrieved from http://proxygw.wrlc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2014-55175-002&site=eds-live&scope=site&authtype=ip,uid&custid=s8987071.
2. Eiken S. Medicaid long-term services and supports beneficiaries in 2013. Centers for Medicare & Medicaid Services; 2017. Retrieved from https://www.medicaid.gov/medicaid/ltss/downloads/reports-and-evaluations/ltss-beneficiaries-2013.pdf.
3. Ng T, Harrington C, Musumeci M, Reaves E. Medicaid home and community-based services programs: 2012 data update. Kaiser Family Foundation; 2015. Retrieved from https://www.kff.org/medicaid/report/medicaid-home-and-community-based-services-programs-2012-data-update.
4. Hartman L, Lukanen E. Quality measurement for home and community based services (HCBS) and behavioral health in Medicaid. Medicaid and CHIP Payment and Access Commission; 2016:1–30. Retrieved from https://www.macpac.gov/publication/quality-measurement-for-home-and-community-based-services-and-behavioral-health-in-medicaid.
5. Medicaid and CHIP Payment and Access Commission. June 2016 report to congress on Medicaid and CHIP, Functional assessments for long-term services and supports. Retrieved from https://www.macpac.gov/publication/june-2016-report-to-congress-on-medicaid-and-chip.
6. Caldwell J, Kaye HK. Quality in home and community-based services to support community living: Addressing gaps in performance measurement. National Quality Forum; 2016:1–59. Retrieved from https://www.qualityforum.org/Publications/2016/09/Quality_in_Home_and_Community-Based_Services_to_Support_Community_Living__Addressing_Gaps_in_Performance_Measurement.aspx.
7. Medicaid and CHIP Payment and Access Commission. Inventory of the state functional assessment tools for long-term services and supports. 2017. Retrieved from https://www.macpac.gov/publication/inventory-of-the-state-functional-assessment-tools-for-long-term-services-and-supports.

S.4. Numerator Statement: The number of HCBS recipients aged 18 years or older with documented needs in the areas of self-care, mobility, or IADL as determined by the most recent FASI assessment within the previous 12 months and with documentation that the subsequent PCSP addresses the FASI-identified functional needs in self-care, mobility, and IADLs.

S.6. Denominator Statement: The number of HCBS recipients aged 18 years or older with documented needs in the areas of self-care, mobility, or IADL as determined by the most recent FASI assessment within the previous 12 months.

S.8. Denominator Exclusions: Exclusions inherent in the denominator definition include individuals younger than 18 years, individuals who have not had a FASI assessment within the previous 12 months, and individuals who have had a FASI assessment, but no functional needs were identified in the areas of self-care, mobility, or IADLs. In addition, individuals without 3 months of continuous HCBS enrollment are excluded.

De.1. Measure Type: Process

S.17. Data Source: Electronic Health Records, Instrument-Based Data, Paper Medical Records

S.20. Level of Analysis: Other

IF Endorsement Maintenance – Original Endorsement Date: Most Recent Endorsement Date:

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? Not applicable.

1. Evidence and Performance Gap – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. ***Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria.***

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form

NQF3594_MeasureEvidenceForm_2020-11-23.docx

1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

1a. Evidence (subcriterion 1a)

NATIONAL QUALITY FORUM—Evidence (subcriterion 1a)

Measure Number (*if previously endorsed*)**:** 3594

Measure Title: Alignment of Person-Centered Service Plan (PCSP) with Functional Assessment Standardized Items (FASI) Needs

IF the measure is a component in a composite performance measure, provide the title of the Composite Measure here:

Date of Submission: **11/23/2020**

1a.1.This is a measure of: (*should be consistent with type of measure entered in De.1*)

Outcome

☐ Outcome:

☐ Patient-reported outcome (PRO):

PROs include HRQoL/functional status, symptom/symptom burden, experience with care, health-related behaviors. (*A PRO-based performance measure is not a survey instrument. Data may be collected using a survey instrument to construct a PRO measure.)*

☐ Intermediate clinical outcome (*e.g., lab value*):

☒ Process: **Measurement of alignment between PCSPs and needs identified by FASI**

☐ Appropriate use measure:

☐ Structure:

☐ Composite:

1a.2 LOGIC MODEL Diagram or briefly describe the steps between the healthcare structures and processes (e.g., interventions, or services) and the patient's health outcome(s). The relationships in the diagram should be easily understood by general, non-technical audiences. Indicate the structure, process or outcome being measured.

The process of having an individual complete the FASI creates an opportunity for HCBS recipients to identify key personal priorities related to self-care, mobility, and instrumental activities of daily living (IADLs). Data from the FASI then help Medicaid and HCBS providers to act upon the identified needs, partnering with HCBS recipients to create a PCSP that facilities responsivity to unmet needs, aligns goals with recipients' PCSPs, and increases the quality of life for these recipients.

Table 1 provides a conceptual model for this logic flow, describing the inputs, processes, and outcomes associated with use of the FASI to create a PCSP.

Table 1. Conceptual Model for the Impact of Improvement in Alignment of PCSP With FASI Needs

Inputs	Processes	Output	Short-Term Outcomes	Long-Term Outcomes
Individuals who are eligible for HCBS, and brings their needs and preferences	• HCBS program staff assesses individual using the FASI • FASI identifies and documents support need(s) on self-care, mobility, and instrumental activities of daily living (IADL) sections	This process measure identifies whether self-care, mobility, and IADL needs as measured by the FASI are addressed by the individual's PCSP	• Facilitate responsivity to unmet needs • Facilitate accurate alignment between needs and service plan • Increased standardization of assessing functional needs in HCBS • Identify what is needed for reviewers to align PCSP to the individual's needs	• Address unmet needs to prevent poor outcomes • Will set goals to benchmark progress on quality measure across program or unit of analysis • Increased service satisfaction by individuals served and their families

1a.3 Value and Meaningfulness: IF this measure is derived from patient report, provide evidence that the target population values the measured ***outcome, process, or structure*** and finds it meaningful. (Describe how and from whom their input was obtained.)

Input on the development of the proposed measure was received through an online survey by reviewers and Technical Expert Panel (TEP) members. Reviewer and TEP members responded positively to the questions concerning the performance measure's value to quality improvement, person-centered supports and services, and as a measure of quality care. Reviewers had a 95% agreement on the statement "A PCSP that addresses identified functional needs is an important step to creating person-centered services because it addresses the individual's needs," an 83% agreement on the statement "A PCSP that addresses identified functional needs is an important step to creating person-centered services because the assessor can create goals addressing the individual's needs," and an 81% agreement on the statement "Performance on this measure provides important information for assessing whether groups of CB-LTSS recipients are receiving person-centered services." Importantly, the reviewers had an 83% agreement on the statement "Performance on this measure provides important information assessing whether groups of CB-LTSS recipients are receiving high quality services," which highlights the goal of a performance measure.

TEP members similarly had high agreement on the importance of the proposed measure for determining quality and person-centered supports and services. TEP members had a 92% agreement on the statement "A PCSP that addresses identified functional needs is an important

step to creating person-centered services because it addresses the individual's needs," a 75% agreement on the statement "A PCSP that addresses identified functional needs is an important step to creating person-centered services because the assessor can create goals addressing the individual's needs," and a 67% agreement on the statement "Performance on this measure provides important information for assessing whether groups of CB-LTSS recipients are receiving person-centered services." In addition, TEP members had a 67% agreement on the statement "Performance on this measure provides important information assessing whether groups of CB-LTSS recipients are receiving high quality services."

The overall agreement from the TEP and reviewers suggests that the performance measure is of value to the HCBS community and can contribute meaningfully to quality improvement and person-centered supports and services. Because retrospective data were used, there was no opportunity to garner input from the individuals assessed with the FASI; however, it is important to remember that the TEP did include self-advocates and advocacy group representatives.

****RESPOND TO ONLY ONE SECTION BELOW -EITHER 1a.2, 1a.3 or 1a.4) ****

1a.2 FOR OUTCOME MEASURES including PATIENT REPORTED OUTCOMES - Provide empirical data demonstrating the relationship between the outcome (or PRO) to at least one healthcare structure, process, intervention, or service.

Not applicable

1a.3. SYSTEMATIC REVIEW (SR) OF THE EVIDENCE (for INTERMEDIATE OUTCOME, PROCESS, OR STRUCTURE PERFORMANCE MEASURES, INCLUDING THOSE THAT ARE INSTRUMENT-BASED) If the evidence is not based on a systematic review go to section 1a.4) If you wish to include more than one systematic review, add additional tables.

Not applicable

What is the source of the systematic review of the body of evidence that supports the performance measure? A systematic review is a scientific investigation that focuses on a specific question and uses explicit, prespecified scientific methods to identify, select, assess, and summarize the findings of similar but separate studies. It may include a quantitative synthesis (meta-analysis), depending on the available data. (IOM)

☐ Clinical Practice Guideline recommendation (with evidence review)

☐ US Preventive Services Task Force Recommendation

☐ Other systematic review and grading of the body of evidence (*e.g., Cochrane Collaboration, AHRQ Evidence Practice Center*)

☐ Other

Systematic Review	Evidence
Source of Systematic Review: • Title • Author • Date • Citation, including page number • URL	*
Quote the guideline or recommendation verbatim about the process, structure or intermediate outcome being measured. If not a guideline, summarize the conclusions from the SR.	*
Grade assigned to the **evidence** associated with the recommendation with the definition of the grade	*
Provide all other grades and definitions from the evidence grading system	*
Grade assigned to the **recommendation** with definition of the grade	*
Provide all other grades and definitions from the recommendation grading system	*
Body of evidence: • Quantity – how many studies? • Quality – what type of studies?	*
Estimates of benefit and consistency across studies	*
What harms were identified?	*
Identify any new studies conducted since the SR. Do the new studies change the conclusions from the SR?	*

*cell intentionally left blank

_____

1a.4 OTHER SOURCE OF EVIDENCE

If source of evidence is NOT from a clinical practice guideline, USPSTF, or systematic review, please describe the evidence on which you are basing the performance measure.

1a.4.1 Briefly SYNTHESIZE the evidence that supports the measure. A list of references without a summary is not acceptable.

Determining the individual's needs and providing appropriate services and supports for those identified needs are keys to the success of enabling individuals to remain in their homes and community. In fact, state agencies use the assessment of the individual's unmet needs to determine eligibility for services and to create the service plan for providing publicly funded HCBS. Consequently, the quality of care is compromised if services fail to meet the individuals' needs or expectations.[1,2] For individuals who are frail elderly or have physical disabilities, adverse outcomes such as increased hospital admissions, emergency department visits, discomfort and injuries, and caregiver stress are well documented consequences of a failure to meet the individual's needs.[3–6] Several studies demonstrate that increased prioritization, pursuit, and attainment of personalized goals in individual care plans are linked to improved physical outcomes and well-being. For example, incorporating physical activity as a self-care priority is associated with improvements in frailty status, fall rates, and health-related quality of life (HRQoL).[7–9] The proposed performance measure helps to address CMS's requirements for Health and Welfare assurances and sub assurances under 1915(c) waivers, thus potentially leading to enhanced quality.[10]

Additionally, the reliable and valid determination of an individual's needs for support in self-care, mobility, and IADLs is an important step toward aligning identified needs with subsequent service plans. In a comprehensive review of the literature, Williams, Lyons, and Rowland suggest that accurate and consistent measurement of functional and performance limitations are primary issues to determining unmet needs.[11] Work conducted by Li, Chadiha, and Morrow-Howell also highlighted the variability of methods and sources of information used to identify unmet needs, including functional needs, in eligible populations.[6] Current measures have not been adequately tested for reliability and validity, thus leading to unwarranted variations in practice that compromise continuity and quality of care. Thompson, Schalock, and Tasse indicate that defensible resource allocations must be based on results that come from assessment tools that are reliable, valid, and standardized.[12]

On the basis of a national field test, the FASI have been found to be reliable, valid, and appropriate for use with individuals receiving HCBS. The FASI includes three core factors of function: self-care, mobility, and IADL. Thus, completion of the FASI assessment provides a standardized and reliable method of identifying service needs in eligible individuals who need assistance or support to meet daily mobility, self-care, or IADLs to sustain their capacity to remain in the home and community environment.

PCSPs are intended to support HCBS participants' functional needs and are part of a systematic approach to providing services that are tailored to an individual's strengths, needs, and goals. According to Schalock, Thompson, and Tasse, PCSPs for individuals with intellectual and developmental disabilities should be focused on support rather than compliance, and they should indicate which supports need to be modified or maintained to meet the individual's needs and facilitate their personal goals.[12] Similarly, Hannan et al. determined that goal setting frameworks are dependent on environmental and personal factors.[13] The researchers concluded from clinician feedback on personalized goal setting that patients with emotional distress should prioritize identity development in their person-centered goal frameworks. Further, variation in an individual's needs and goals necessitate the development of a personalized care plan.[14] Rietkerk et al. found that when comprehensive geriatric assessment programs were tailored to patient preferences and needs, the majority of participants reported high program satisfaction.[15]

The functional assessment that is part of HCBS eligibility determination and planning for care services is the primary source of information about the unmet functional needs of participants.[10] In both fee-for-service and managed long-term services and supports programs, quality monitoring is typically a series of checks to ensure that a need appearing on the assessment also is addressed in the service plan, as required by the CMS.[16–17] However, standardized measures of functional needs are rarely used in state programs. Therefore, systematically matching the documented functional needs using valid and reliable functional items to the documented provision of service via the PCSP for the HCBS population—as the proposed measure does—is a critical linkage that has the potential to improve quality of care and lead to better outcomes.

1a.4.2 What process was used to identify the evidence?

The project team conducted a targeted literature review of studies using the following search terms: performance measure, person-centered supports and services, functional assessment, personal priorities, home and community-based service, and community-based long-term services and supports. The team searched academic journal articles, gray literature, and federal and state agency reports published in the past 20 years using PubMed (US National Library of Medicine, National Institutes of Health), Scopus®, Google, Google Scholar, and personal libraries.

1a.4.3. Provide the citation(s) for the evidence.

1. MaloneBeach EE, Zarit SH, Spore DL. Caregivers' perceptions of case management and community-based services: Barriers to service use. *Journal of Applied Gerontology*. 1992;11(2):146–159. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/10171017.
2. Morgan DG, Semchuk KM, Stewart NJ, D'Arcy C. Rural families caring for a relative with dementia: Barriers to use of formal services. *Social Science Medicine*. 2002;55(7):1129–1142. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/12365526.
3. Allen SM, Mor V. The prevalence and consequences of unmet need: Contrasts between older and younger adults with disability. *Medical Care*. 1997;35(11):1132–1148. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/9366892.
4. Desai MM, Lentzner HR, Weeks JD. Unmet need for personal assistance with activities of daily living among older adults. *Gerontologist*. 2001;41(1):82–88. doi: 10.1093/geront/41.1.82.
5. Long SK, Coughlin TA, Kendall SJ. Access to care among disabled adults on Medicaid. *Health Care Financing Review*. 2002;23(4):159–173. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4194759.
6. Li H, Chadiha LA, Morrow-Howell N. Association between unmet needs for community services and caregiving strain. *Families in Society*. 2005;86(1):55–62. doi: 10.1606/1044-3894.1877.
7. Haider S, Grabovac I. Effects of physical activity interventions in frail and prefrail community-dwelling people on frailty status, muscle strength, physical performance and muscle mass: A narrative review. *Journal of the American Geriatrics Society*. 2019;131(11–12), 244–254. doi: 10.1111/jgs.15312.
8. Sherrington C, Fairhall NJ, Wallbank GK, Tiedemann A, Michaleff ZA, Howard K, Clemson L, Hopewell S, Lamb SE. Exercise for preventing falls in older people living in the community. *Cochrane Database Systematic Review*. 2019;1, Cd012424. doi: 10.1002/14651858.CD012424.pub2.

9. Von Berens A, Fielding RA, Gustafsson T, Kirn D, Laussen J, Nydahl M, Reid K, Travison TG, Zhu H, Cederholm T, Koochek A. Effect of exercise and nutritional supplementation on health-related quality of life and mood in older adults: The VIVE2 randomized controlled trial. *BMC Geriatrics*. 2018; 18(1), 286. doi: 10.1186/s12877-018-0976-z.
10. Centers for Medicare & Medicaid Services, Disabled and Elderly Health Programs Group. Application for a §1915(c) home and community-based waiver: Instructions, technical guide, and review criteria. *Centers for Medicare & Medicaid Services*. 2015. Retrieved from https://www.medicaid.gov/medicaid-chip-program-information/by-topics/waivers/downloads/technical-guidance.pdf.
11. Williams J, Lyons B, Rowland D. Unmet long-term care needs of elderly people in the community: A review of the literature. *Home Health Care Services Quarterly*. 1997;16(1–2):93–119. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/10168492.
12. Thompson JR, Schalock RL, Tasse MJ. How support needs can be used to inform allocation of resources and funding decisions. *American Association on Intellectual and Developmental Disabilities*. 2018. Retrieved from https://aaidd.org/docs/default-source/sis-docs/supportneeds.pdf?sfvrsn=a88b3021_0.
13. Hannan P, Castelino R, Prescott S, Fleming J. Rehabilitation goal setting with community dwelling adults with acquired brain injury: A theoretical framework derived from clinicians' reflections on practice. *Postgraduate Medicine*. 2018;40(20), 2388–2399. doi: 10.1080/00325481.2018.1502016.
14. Maurer C, Draganescu S, Mayer H, Gattinger H. Attitudes and needs of residents in long-term care facilities regarding physical activity: A systematic review and synthesis of qualitative studies. *Journal of Clinical Nursing*. 2019;28(13–14), 2386–2400. doi: 10.1111/jocn.14761.
15. Rietkerk W. Explaining experiences of community-dwelling older adults with a pro-active comprehensive geriatric assessment program: A thorough evaluation by interviews. *AIDS Behavior*. 2019;19(1), 12. doi: 10.1007/s10461-018-2094-5.
16. Centers for Medicare & Medicaid Services. Medicaid and Children's Health Insurance Program (CHIP) Programs: Medicaid Managed Care, CHIP delivered in managed care, and revisions related to third party liability. Final rule. Federal Register. 2016. Retrieved from https://www.gpo.gov/fdsys/pkg/FR-2016-05-06/pdf/2016-09581.pdf.
17. Integrated Care Resource Center. Spotlight: CMS Medicaid managed care final rule: Provisions related to integrated programs for Medicare-Medicaid enrollees. 2016. Retrieved from http://www.integratedcareresourcecenter.com/PDFs/2016%2005%2012%20Medicaid%20Managed%20Care%20Regulations.pdf.

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure *(e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)*

If a COMPOSITE *(e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.*

Current estimates suggest that 10 million individuals who require assistance to perform ADLs or IADLs are living in the community, including in private or group homes.1 Eiken (2017)2 reported that more than 3.7 million individuals receive Medicaid-funded HCBS. Federal and state governments finance over 60 percent of paid HCBS costs in the United States through the Medicaid program. HCBS are expected to grow because of the aging U.S. population and the current move away from institutional-based care.3 As significant continued growth is expected in cost and utilization of HCBS, including through managed care contracting, greater scrutiny on quality also is expected.

This proposed measure aims to improve the alignment of service plans for individuals receiving HCBS with functional needs based on standardized functional assessment items. Aligning service plans with functional needs is important in HCBS populations because it facilitates improved outcomes, but there are measurement gaps limiting the ability to assess this key aspect of person-centered supports and services. First, understanding a person's functional needs requires a standard, reliable assessment, yet at least 124 functional assessment tools were used by state Medicaid programs for LTSS in 2015.5 The NQF conducted a broad environmental scan of HCBS quality measurement across all payers.6 The resulting recommendations prioritized "assessment"—a process that should gather all of the information needed to inform the person-centered planning process—as one of three subdomains within the person-centered planning and coordination domain for which quality measurement can be improved. However, the current HCBS environment lacks standardized measurements of function (e.g., self-care, mobility, IADL) across settings that may form the basis of a high-quality service plan.5 Furthermore, at least 21 states had functional assessment tools for specific populations in 2015 that were not also used to plan care services.7

After an individual is assessed, the identified functional needs must be addressed in the HCBS service plan. The Medicaid and Children's Health Insurance Program (CHIP) Payment Access Commission recently funded a comprehensive scan related to HCBS and behavioral health.4 The results showed that most state-level quality measurement activity related to HCBS in Medicaid was based on CMS reporting requirements for 1915(c) waivers. These measures generally are process oriented and intended to demonstrate state and provider compliance with a range of policies and procedures. One of six key domains for the measures is "service plan," for which the focus is ensuring that plans reflect needs and participants receive services consistent with the plans. A common example of a service plan measure employed by state waiver programs is the percentage of service plans that were updated or revised as warranted by changes in participant needs. This is a critical concept to measure, and it is different from looking at whether a service plan addresses all current identified functional needs regardless of whether needs have changed. Additionally, existing service plan measures have not been endorsed by NQF.

The absence of a performance measure identifying the alignment between the functional assessment and the PCSP at any given time—not only when needs change—reflects a gap at the measurement level. The proposed measure incorporates a standardized approach to assess functional needs that was found to be reliable and valid in measuring self-care, mobility, and IADL in the HCBS population. The performance measure subsequently fills an NQF-identified gap by measuring the alignment of those needs with the service plan—an important step toward providing high-quality and person-centered service to individuals receiving HCBS.

1. Kaye HS, Harrington C. Long-term services and supports in the community: Toward a research agenda. Disability and Health Journal. 2015;8(1):3-8. Retrieved from

http://proxygw.wrlc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2014-55175-002&site=eds-live&scope=site&authtype=ip,uid&custid=s8987071.

2. Eiken S. Medicaid long-term services and supports beneficiaries in 2013. Centers for Medicare & Medicaid Services; 2017. Retrieved from https://www.medicaid.gov/medicaid/ltss/downloads/reports-and-evaluations/ltss-beneficiaries-2013.pdf.

3. Ng T, Harrington C, Musumeci M, Reaves E. Medicaid home and community-based services programs: 2012 data update. Kaiser Family Foundation; 2015. Retrieved from https://www.kff.org/medicaid/report/medicaid-home-and-community-based-services-programs-2012-data-update.

4. Hartman L, Lukanen E. Quality measurement for home and community based services (HCBS) and behavioral health in Medicaid. Medicaid and CHIP Payment and Access Commission; 2016:1–30. Retrieved from https://www.macpac.gov/publication/quality-measurement-for-home-and-community-based-services-and-behavioral-health-in-medicaid.

5. Medicaid and CHIP Payment and Access Commission. June 2016 report to congress on Medicaid and CHIP, Functional assessments for long-term services and supports. Retrieved from https://www.macpac.gov/publication/june-2016-report-to-congress-on-medicaid-and-chip.

6. Caldwell J, Kaye HK. Quality in home and community-based services to support community living: Addressing gaps in performance measurement. National Quality Forum; 2016:1–59. Retrieved from https://www.qualityforum.org/Publications/2016/09/Quality_in_Home_and_Community-Based_Services_to_Support_Community_Living__Addressing_Gaps_in_Performance_Measurement.aspx.

7. Medicaid and CHIP Payment and Access Commission. Inventory of the state functional assessment tools for long-term services and supports. 2017. Retrieved from https://www.macpac.gov/publication/inventory-of-the-state-functional-assessment-tools-for-long-term-services-and-supports.

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. ***(This is required for maintenance of endorsement***. *Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

The scores from recent tests of the proposed measure indicate a sizeable gap in the performance of accountable HCBS programs in aligning PCSPs of participants with FASI-identified functional needs. During June and July 2018, this measure was tested in nine organizations in four different states located in geographically diverse regions of the country. These organizations serve different populations including individuals who are older adults and those with physical disabilities, intellectual/developmental disabilities, acquired brain injury, or mental health or substance use disorders. The FASI field testing demonstrated that functional needs differed depending on HCBS program type (e.g., individuals who are older adults had different types and numbers of needs than individuals with mental health and substance use disorders).

To reflect these differences, Table 1 presents the numerator, denominator, and score for this measure by program type. The denominator was defined as those individuals receiving HCBS with documented

need on the self-care, mobility, or IADL sections of the FASI. The numerator was defined as the percentage of individuals aged 18 years or older who received HCBS with documented functional needs as determined by the FASI assessment AND documentation of a PCSP that addressed the identified functional needs. The sample consisted of 475 individuals who had a FASI need (denominator). The score varied depending on the program; the lowest score was found in individuals with an intellectual or developmental disability (42.5%) and the highest in individuals with acquired brain injury (85.5%). The relatively low scores across programs suggest there is room for improvement in aligning the functional needs and service plan, offering a means to improve HCBS. Table 2 presents the minimum and maximum scores as well as the scores by quintile; the mean is 66.3%.

Table 1. Alignment of PCSP With FASI Needs: Denominator, Numerator, and Score by Program Type

Measure Component Individuals in Programs Serving Those Who Are Older Adults (row%) Individuals in Programs Serving Those With a Physical Disability (row%) Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %) Individuals in Programs Serving Those With an Acquired Brain Injury (row %) Individuals in Programs Serving Those With Mental Health or Substance Use Disorders (row%) TOTAL

Total unique individuals 117 (24.5) 119 (24.9) 106 (22.2) 70 (14.6) 66 (13.8) 478 (100)

Individual does not have a FASI identified need 0 (0.0) 0 (0.0) 0 (0.0) 1 (33.3) 2 (66.7) 3 (100)

Denominator: Has a need identified by the FASI (% of sample) 117 (24.6) 119 (25.1) 106 (22.3) 69 (14.5) 64 (13.5) 475 (100)

Numerator: Has at least 1 need and PCSPs address all needs 68 94 45 59 49 315

Performance measure score, % 58.1 79.0 42.5 85.5 76.6 66.3

Table 2. Alignment of PCSP with FASI Needs: Minimum, Maximum, and Quintile Scores

Measure Score	Minimum and First Quintile	Second Quintile	Third Quintile	Fourth Quintile	Maximum and Fifth Quintile
Performance measure score, %	42.5	58.1	76.6	79.0	85.5

The calculation of this performance measure includes determining whether the PCSP addressed the individual's functional needs, as documented using the FASI standardized items. Table 3 provides descriptive statistics of total FASI-based needs for individuals in the denominator of the performance measure. A one-way ANOVA was conducted to compare the effect of program type on the summed total number of FASI-based needs identified across all five programs. There was a significant effect of program type on the summed total of all FASI-based needs identified [$F(4, 470) = 22.97$, $p < 0.0001$]. Post hoc comparisons using the Tukey honestly significant difference (HSD) test indicated that the mean number of needs for the older adult and physical disability groups were significantly different from each other and the remaining three groups. However, the mean number of needs for individuals with intellectual/development disability, acquired brain injury, and mental health and substance use disorders were not statistically different from each other.

Table 3. Descriptive Statistics for the Total Number of FASI-Based Needs Identified by Program Type

Program Type	n	Mean (Standard Deviation)	Median	25th & 75th percentiles	Interquartile Range	Minimum & Maximum Values
Individuals in programs serving those who are older adults	117	21.3 (9.6)	22	13, 28	15	1, 44
Individuals in programs serving those with a physical disability	119	17.9 (8.4)	19	12, 24	12	2, 37
Individuals in programs serving those with an intellectual or developmental disability	106	13.2 (10.9)	10	4, 20	16	1, 39
Individuals in programs serving those with an acquired brain injury	69	14.4 (8.7)	14	6, 22	16	1, 34
Individuals in programs serving those with mental health or substance use disorders	64	8.9 (8.0)	7	2, 13	11	1, 30
All individuals	475	16.0 (10.2)	16	7, 16	16	1, 44

Table 4 provides descriptive statistics on the total number of needs addressed by the PCSP for individuals in the denominator of the performance measure. A one-way ANOVA was conducted to compare the effect of program type on the summed total of all needs addressed across all five programs. There was a significant effect of program type on the summed total of all needs addressed [$F(4, 470) = 30.33$, $p < 0.0001$]. Post hoc comparisons using the Tukey HSD test indicated that the mean number of needs addressed for the older adult and physical disability groups were significantly different from each other and the remaining three groups. However, the mean number of needs addressed for individuals with intellectual/development disability, acquired brain injury, and mental health or substance use disorders were not statistically different from each other.

Table 4. Descriptive Statistics for the Total Number of FASI-Based Needs Addressed in the PCSP by Program Type

Program Type	n	Mean (SD)	Median	25th & 75th percentiles	Interquartile Range	Minimum & Maximum Values
Individuals in programs serving those who are older adults	117	19.1 (9.7)	19	12 26	14	1, 40
Individuals in programs serving those with a physical disability	119	17.3 (8.5)	18	11, 24	13	0, 37
Individuals in programs serving those with an intellectual or developmental disability	106	9.5 (7.5)	8	3, 14	11	0, 30
Individuals in programs serving those with an acquired brain injury	69	13.9 (8.5)	13	6, 21	15	1, 31
Individuals in programs serving those with mental health or substance use disorders	64	8.0 (7.6)	6	2, 10	8	0, 30
All individuals	475	14.3 (9.5)	13	6, 21	15	0, 40

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

Not applicable.

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. *(**This is required for maintenance of endorsement**. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.) For measures that show high levels of performance, i.e., "topped out", disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

Differences in performance measure scores based on race and ethnicity were investigated. To perform the analysis, the groups were collapsed to form three program groupings: individuals who are African American or Black; individuals who are American Indian, Alaskan Native, Asian or Other; and individuals who are White. Individuals who did not designate race or whose race was unknown were kept in a separate category. Ethnicity categories were Hispanic and non-Hispanic. The results indicated significant differences in scores by race (Pearson chi2(3) = 27.3272, Pr = 0.0001). However, there were no significant differences by ethnicity (Pearson chi2(1) = 0.7737, Pr = 0.379). These results suggest that there was a possible issue with racial disparity; however, caution in generalizing these scores is advised and further exploration is needed because in some cases the numbers were small. Tables 5 and 6 summarize the results.

Table 5. Alignment of PCSP With FASI Needs: Denominator, Numerator, and Score by Race

Measure Component	Individuals Who Are African American or Black	Individuals Who Are American Indian, Alaskan Native, Asian or Other	Individuals Who Are White	Individuals Whose Race Is Unknown	All Individuals*
Denominator: Has a need identified by the FASI (% of sample)	106 (22.4)	84 (17.7)	245 (51.7)	39 (8.2)	474 (100)
Numerator: Has at least 1 need and PCSPs address all needs	85	42	170	18	315
Performance measure score, %	80.2	50.0	69.4	46.2	66.5

*1 individual from the intellectual/developmental disabilities program was missing information on race and ethnicity. Pearson chi2(3) = 27.3272, Pr = 0.0001.

Table 6. Alignment of PCSP With FASI Needs: Denominator, Numerator, and Score by Ethnicity

Measure Component	Individuals Who Are Hispanic	Individuals Who Are Not Hispanic	All Individuals*
Denominator: Has a need identified by the FASI (% of sample)	16 (3.4)	458 (96.4)	474 (100)
Numerator: Has at least 1 need and PCSPs address all needs	9	306	315
Performance measure score, %	56.3	66.8	66.5

*1 individual from the intellectual/developmental disabilities program was missing information on race and ethnicity. Pearson chi2(1) = 0.7737, Pr = 0.379.

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b.4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in 1b.4

Not applicable.

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, **as specified**, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. ***Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.***

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area *(check all the areas that apply):*

De.6. Non-Condition Specific*(check all the areas that apply):*

De.7. Target Population Category *(Check all the populations for which the measure is specified and tested if any):*

S.1. Measure-specific Web Page *(Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)*

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

This is not an eMeasure **Attachment:**

S.2b. Data Dictionary, Code Table, or Value Sets *(and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)*

Attachment: NQF3594_DataElementLibraryCodeSet_2020-11-06.xlsx

S.2c. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Attachment: NQF3594_FASISetInstrument_2020-11-06.pdf

S.2d. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Patient

S.3.1. For maintenance of endorsement: Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

S.3.2. For maintenance of endorsement, please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.

S.4. Numerator Statement *(Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome) DO NOT include the rationale for the measure.*

***IF an OUTCOME MEASURE**, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).*

The number of HCBS recipients aged 18 years or older with documented needs in the areas of self-care, mobility, or IADL as determined by the most recent FASI assessment within the previous 12 months and

with documentation that the subsequent PCSP addresses the FASI-identified functional needs in self-care, mobility, and IADLs.

S.5. Numerator Details *(All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*

IF an OUTCOME MEASURE, *describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).*

The numerator is a portion (i.e., a potential subset) of HCBS recipients in the denominator. This portion is the result of a review of PCSP documentation in conjunction with the FASI to determine whether the PCSP addresses each functional need. For the PCSP to be counted as addressing the identified functional needs in self-care, mobility, or IADLs, a service (paid or unpaid) or a plan in progress must be associated with each need. Documentation of a PCSP is identified through a HCBS recipient's case record.

The frequency of data aggregation will be at the discretion of state users because CMS has determined that states will use the standardized items (i.e., FASI) from which the measure is derived on a voluntary basis. It is anticipated that states would calculate the measure at least annually per HCBS program. Some states may choose to calculate the measure more frequently than annually (e.g., every 3 or 6 months).

S.6. Denominator Statement *(Brief, narrative description of the target population being measured)*

The number of HCBS recipients aged 18 years or older with documented needs in the areas of self-care, mobility, or IADL as determined by the most recent FASI assessment within the previous 12 months.

S.7. Denominator Details *(All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)*

IF an OUTCOME MEASURE*, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).*

The proposed measure focuses on the assessment of functional needs that are common among adult HCBS recipients and derived from use of FASI. These are functional needs in the areas of self-care, mobility, and IADLs. The denominator is determined by items in Section B of the FASI form, Functional Abilities and Goals.

Self-care needs are identified in the following items on the FASI form: 6a (eating), 6b (oral hygiene), 6c (toileting hygiene), 6d (wash upper body), 6e (shower/bathe self), 6f (upper body dressing), 6g (lower body dressing), and 6h (putting on/taking off footwear).

Bed mobility and transfer needs are identified in the following items on the FASI form: 7a (roll left and right), 7b (sit to lying), 7c (lying to sitting on side of bed), 7d (sit to stand), 7e (chair/bed-to-chair transfer), 7f (toilet transfer), and 7g (car transfer).

If the response to item 8 on the FASI form indicates that the person walks, ambulation needs are identified in the following items on the FASI form: 8a (walks 10 feet), 8b (walks 50 feet with two turns), 8c (walks 150 feet), 8d (walks 10 feet on uneven surfaces), 8e (1 step (curb)), 8f (4 steps), 8g (12 steps), 8h (walks indoors), 8i (carries something in both hands), 8j (picking up object), 8k (walks for 15 minutes), and 8l (walks across a street).

If the response to item 9 on the FASI form indicates that the person uses a manual wheelchair, wheelchair mobility needs are identified in the following items on the FASI form: 9a (wheels 50 feet with two turns), 9b (wheels 150 feet), 9c (wheels for 15 minutes) and 9d (wheels across a street).

If the response to item 10 on the FASI form indicates that the person uses a motorized wheelchair/scooter, wheelchair/scooter mobility needs are identified in the following items on the FASI form: 10a (wheels 50 feet with two turns), 10b (wheels 150 feet), 10c (wheels for 15 minutes) and 10d (wheels across a street).

IADLs are identified in the following items on the FASI form: 11a (makes a light cold meal), 11b (makes a light hot meal), 11c (light daily housework), 11d (heavier periodic housework), 11e (light shopping), 11f (telephone-answering call), 11g (telephone-placing call), 11h (medication management-oral medications), 11i (medication management-inhalant/mist medications), 11j (medication management-injectable medications), 11k (simple financial management), and 11l (complex financial management.

S.8. Denominator Exclusions *(Brief narrative description of exclusions from the target population)*

Exclusions inherent in the denominator definition include individuals younger than 18 years, individuals who have not had a FASI assessment within the previous 12 months, and individuals who have had a FASI assessment, but no functional needs were identified in the areas of self-care, mobility, or IADLs. In addition, individuals without 3 months of continuous HCBS enrollment are excluded.

S.9. Denominator Exclusion Details *(All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)*

See S.7, Denominator Details, for information required to identify functional needs.

S.10. Stratification Information *(Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)*

The primary unit of analysis is the Medicaid HCBS program type. Programs can provide a combination of standard medical services and nonmedical services. Standard services include but are not limited to case management (i.e., supports and service coordination), homemaker, home health aide, personal care, adult day health services, habilitation (both day and residential), and respite care. States also can propose "other" types of services that may assist in diverting and/or transitioning individuals from institutional settings into their homes and community. (Source: Home & Community-Based Services 1915(c), https://www.medicaid.gov/medicaid/hcbs/authorities/1915-c/index.html)

These programs are designed to provide an array of services to a certain target population; as a result, each state typically operates more than one HCBS program. Five HCBS program types were used to test this measure. Their labels reflect the predominant population eligible for services under each HCBS program. However, the group of individuals served within a single HCBS program may be heterogeneous by design (e.g., the intentional combination of individuals with mental health or substance use disorders) or because of the presence of comorbidities. These are the program types:

1. HCBS programs serving individuals who are older adults
2. HCBS programs serving individuals with a physical disability

3. HCBS programs serving individuals with an intellectual or developmental disability
4. HCBS programs serving individuals with an acquired brain injury
5. HCBS programs serving individuals with mental health or substance use disorders.

Medicaid agencies in the states have administrative authority over these HCBS programs and determine which services and supports to offer beneficiaries who are deemed eligible for a given HCBS program. Although Medicaid HCBS programs are administered by state Medicaid agencies under various Medicaid legal authorities, they frequently are operated by other entities including non-Medicaid state agencies (e.g., department of aging), non-state governmental entities (e.g., county), or managed care organizations. The operating entities then contract with direct service and support providers.

S.11. Risk Adjustment Type (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

S.12. Type of score:

Rate/proportion

If other:

S.13. Interpretation of Score *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)*

Better quality = Higher score

S.14. Calculation Algorithm/Measure Logic (*Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)*

The following steps are used to create the score for this measure:

1. Restrict the HCBS sample to individuals aged 18 years or older with continuous enrollment for at least 3 months and those who have had a FASI assessment within the previous 12 months.
2. Count the number of sampled individuals with at least one FASI-documented functional need in self-care, mobility, or IADLs. Documented functional needs are based on receiving either a "05" or below (04, 03, 02, or 01) or "88" on any item in the Self-Care, Mobility, or IADL sections of a FASI form. See S.2b. (data dictionary, code table, or value sets) for value labels and S.7 (denominator details) for the list of specific items on the FASI form that comprise the Self-Care, Mobility, and IADL sections.
3. For each individual with at least one FASI-documented functional need, determine whether the PCSP documentation indicates that there is either a paid service, unpaid help, or a plan in progress for addressing each FASI-identified functional need in self-care, mobility, and IADLs.
4. Count the number of sampled individuals for whom the PCSP addresses all FASI-identified functional needs in self-care, mobility, and IADLs.
5. Calculate the percentage by dividing the resulting number in step 4 by the resulting number in step 2.

S.15. Sampling *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*

IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

The intended sample for this measure is adult Medicaid beneficiaries aged 18 years or older who currently are receiving HCBS. Sampling should be representative of all HCBS recipients and stratified by HCBS program type within each state to allow comparisons of measure results for each HCBS program type to the mean. The source of the sample frame will be the state Medicaid agency or an accountable entity delegated by the state Medicaid agency (e.g., state agency other than the Medicaid agency that operates the program, a managed care organization, a case management agency, state county).

Proxy responses are not applicable to the data abstraction form involved in this measure because it is completed by reviewers. Family members and caregivers are among the acceptable sources of information for clinicians (including case managers and other paid members of the services and supports team) who conduct the FASI assessment and make the final determination about how to complete the form. A similar situation applies to PCSP documentation.

S.16. Survey/Patient-reported data *(If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)*

Specify calculation of response rates to be reported with performance measure results.

Not applicable because individuals with incomplete or no FASI are excluded from the denominator.

S.17. Data Source *(Check ONLY the sources for which the measure is SPECIFIED AND TESTED).*

If other, please describe in S.18.

Electronic Health Records, Instrument-Based Data, Paper Medical Records

S.18. Data Source or Collection Instrument *(Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)*

IF instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

1. FASI set. CMS developed the FASI as part of the Testing Experience and Functional Assessment Tools (TEFT) demonstration to assess the status of individuals receiving HCBS. HCBS program staff or assessors at agencies under contract to state HCBS programs use the FASI set to assess HCBS recipients' functional ability and need for assistance. A FASI assessment commonly is performed during an in-person visit, and it can be performed in any community-based setting where HCBS recipients reside. The assessor can use various sources of information to complete a FASI assessment including an interview with the person, an interview with a helper, written records, and naturally occurring observation of performance. Fields for the FASI set are available within CMS's Data Element Library (DEL) and are attached in Section S.2b.
2. PCSP documentation. A PCSP typically is developed by the case manager following a state-established process that considers unmet needs and informal support systems and then fills in gaps with Medicaid or other services. A PCSP is put in place after the assessment is conducted. It can be created in all community-based settings, depending on the recipient's need. The format of a PCSP can vary across and within programs.
3. Data abstraction. Each program will apply methods of their choice for abstracting FASI data. These methods are likely to be similar to those used by the state to generate existing quality

measures that are derived from the same data sources. One method could be to make use of a data abstraction form. The Appendix contains a sample form that is based on the form used during measure testing. This form could be adapted by programs implementing the measure.

S.19. Data Source or Collection Instrument *(available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*

Available at measure-specific web page URL identified in S.1

S.20. Level of Analysis *(Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)*

Other

S.21. Care Setting *(Check ONLY the settings for which the measure is SPECIFIED AND TESTED)*

Home Care, Other

If other: Medicaid HCBS Program

S.22. COMPOSITE Performance Measure - Additional Specifications *(Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)*

Not applicable

Validity – See attached Measure Testing Submission Form

FASI_PM2_MeasureTestingForm.docx

2.1 For maintenance of endorsement

Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

2.2 For maintenance of endorsement

Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

2.3 For maintenance of endorsement

Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1,2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required questions.

Measure Testing (subcriteria 2a2, 2b1-2b6)

NATIONAL QUALITY FORUM—Measure Testing (subcriteria 2a2, 2b1-2b6)

Measure Number (*if previously endorsed*)**:**

Measure Title: Alignment of Person-Centered Service Plan (PCSP) with Functional Assessment Standardized Items (FASI) Needs

Date of Submission: **7/31/2020**

Type of Measure:

Measure	Measure (continued)
☐ Outcome (*including PRO-PM*)	☐ Composite – *STOP – use composite testing form*
☐ Intermediate Clinical Outcome	☐ Cost/resource
☒ Process *(including Appropriate Use)*	☐ Efficiency
☐ Structure	*

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1. DATA/SAMPLE USED FOR ALL TESTING OF THIS MEASURE

Often the same data are used for all aspects of measure testing. In an effort to eliminate duplication, the first five questions apply to all measure testing. ***If there are differences by aspect of testing****, (e.g., reliability vs. validity) be sure to indicate the specific differences in question 1.7.*

1.1. What type of data was used for testing? (*Check all the sources of data identified in the measure specifications and data used for testing the measure. Testing must be provided for* ***all*** *the sources of data specified and intended for measure implementation.* ***If different data sources are used for the numerator and denominator, indicate N [numerator] or D [denominator] after the checkbox.***)

Measure Specified to Use Data From: (*must be consistent with data sources entered in S.17*)	Measure Tested with Data From:
☒ abstracted from paper record	☒ abstracted from paper record
☐ claims	☐ claims
☐ registry	☐ registry
☒ abstracted from electronic health record	☒ abstracted from electronic health record
☐ eMeasure (HQMF) implemented in EHRs	☐ eMeasure (HQMF) implemented in EHRs
☒ other: FASI may exist as a paper form or in the electronic health record (EHR)	☒ other: FASI may exist as a paper record or in an EHR

1.2. If an existing dataset was used, identify the specific dataset (*the dataset used for testing must be consistent with the measure specifications for target population and healthcare entities being measured; e.g., Medicare Part A claims, Medicaid claims, other commercial insurance, nursing home MDS, home health OASIS, clinical registry*).

The FASI field test data set was used to identify individuals for inclusion in the numerator and denominator.

1.3. What are the dates of the data used in testing?

FASI field test data were collected March 2017 through September 2017. These data were reviewed to test this performance measure from June 2018 to July 2018.

1.4. What levels of analysis were tested? (*testing must be provided for **all** the levels specified and intended for measure implementation, e.g., individual clinician, hospital, health plan*)

Measure Specified to Measure Performance of: (*must be consistent with levels entered in item S.20*)	Measure Tested at Level of:
☐ individual clinician	☐ individual clinician
☐ group/practice	☐ group/practice
☐ hospital/facility/agency	☐ hospital/facility/agency
☐ health plan	☐ health plan
☒ other: Medicaid HCBS program type	☒ other: Medicaid HCBS program type

1.5. How many and which measured entities were included in the testing and analysis (by level of analysis and data source)? (*identify the number and descriptive characteristics of measured entities included in the analysis (e.g., size, location, type); if a sample was used, describe how entities were selected for inclusion in the sample*)

This process measure was tested in five waiver Medicaid HCBS program types in four different states (Colorado, Connecticut, Georgia, and Kentucky) located in geographically diverse regions of the country. The nine organizations that collected data enrolled individuals who were receiving HCBS and supports through five Medicaid program types: (1) programs serving individuals who are frail elderly, (2) programs serving individuals who have physical disabilities, (3) programs serving individuals who have intellectual/developmental disabilities, (4) programs serving individuals who have brain injury, and (5) programs serving individuals who have serious mental illness. The four participating states offer all five of these HCBS program types; however, for the purposes of the original FASI field test in 2017, states selected which programs would participate in the field test. Table 1 describes the nine data collection organizations by state, HCBS program type, and number of FASI field test records that were reviewed for testing this performance measure. The unit of analysis for the proposed measure is the HCBS program type.

Table 1. Data Collection by HCBS Program Type and State*

State	Individuals in Programs Serving Those Who Are Frail Elderly (col %)	Individuals in Programs Serving Those With a Physical Disability (col %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (col %)	Individuals in Programs Serving Those With a Brain Injury (col %)	Individuals in Programs Serving Those With Serious Mental Illness (col %)	State Total (col %)
Colorado	- -	- -	108 (100)	29 (41.4)	57 (86.4)	194 (39.7)
Connecticut	49 (40.2)	15 (12.2)	- -	- -	9 (13.6)	73 (14.9)
Georgia	- -	67 (54.5)	- -	37 (52.9)	- -	104 (21.3)
Kentucky	73 (59.8)	41 (33.3)	- -	4 (5.7)	- -	118 (24.1)
TOTAL	122 (100)	123 (100)	108(100)	70 (100)	66 (100)	489 (100)

* The number of table cells populated is more than the nine data collection organizations because some organizations collected data for more than one HCBS program type within the state.

** Eleven of these 489 individuals had additional issues with their forms that could not be resolved. Therefore, as shown in other tables, 478 is the total number of individuals for which data collected could be used to analyze the performance measure; furthermore, 475 (of 478) met the denominator definition for calculating the performance measure score.

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1.6. How many and which patients were included in the testing and analysis (by level of analysis and data source)? (*identify the number and descriptive characteristics of patients included in the analysis (e.g., age, sex, race, diagnosis); if a sample was used, describe how patients were selected for inclusion in the sample*)

Testing and analysis involved 478 unique individuals who were eligible to receive services from services under Medicaid HCBS programs within four states. HCBS programs enable individuals who otherwise would need institutional residential services to live in the least restrictive environment of their choosing in the community. Five populations (HCBS programs) were represented in the testing and analysis. Those five populations included individuals who were frail elderly and those with physical disabilities, intellectual/developmental disabilities, brain injury, or serious mental illness. Table 2 describes the HCBS program type for individuals whose FASI field test records were reviewed for testing this performance measure. Of these, 3 individuals did not have FASI-based needs; the final sample for analysis included 475 unique individuals in five program types (Table 3).

Table 2. Overall Sample Description by Program Type

Measure	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)	TOTAL
Total no. of forms received	229 (23.6)	237 (24.4)	211 (21.7)	133 (13.7)	126 (13.0)	972* (100)
Total no. of usable forms	229 (24.5)	237 (25.3)	211 (22.5)	133 (14.2)	126 (13.5)	936 (100)
Individuals missing a FASI need	0 (0.0)	3 (50.0)	1 (16.7.0)	0 (0.0)	2 (33.0)	6 (100)**
Individuals whose mobility needs did not align with FASI field testing	5 (71.4)	1 (14.3)	1 (14.3)	0 (0.0)	0 (0.0)	7 (100)
Total no. of unique individuals	117 (24.5)	119 (24.9)	106 (22.2)	70 (14.6)	66 (13.8)	478 (100)

* Included in this total, but not shown, are 36 (3.7%) forms that could not be aligned with FASI field test records because of incorrect form and assessor identifiers and not because of data missing from the fields on the abstraction form related to identifying the critical data elements. These forms were not usable in our analysis.

** Included in this total are 2 individuals whose forms were already considered not usable for other reasons.

Table 3. Denominator Sample Description by Program Type

Measure	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)	TOTAL
Total unique individuals	117 (24.5)	119 (24.9)	106 (22.2)	70 (14.6)	66 (13.8)	478 (100)
Individual does not have a FASI-identified need	0 (0.0)	0 (0.0)	0 (0.0)	1 (33.3)	2 (66.7)	3 (100)

Measure	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)	TOTAL
Denominator: Has a need identified by the FASI (% of sample)	117 (24.6)	119 (25.1)	106 (22.3)	69 (14.5)	64 (13.5)	475 (100)

The sample demographic data are summarized in Table 4. Fifty-six percent of the sample were female, and the average age was 55.1 years. Individuals self-reported race: 51.6% reported White, 22.3% African American, 3.8% Asian, 0.2% American Indian or Alaskan Native, and 13.7% Other. Approximately 8.2% of self-reported race designation was unknown or missing. Ninety-seven percent reported not Hispanic.

As expected, the program for individuals who are frail elderly had a higher percentage of females and was, on average, about 20–25 years older than those in the other four programs. The program for individuals who are frail elderly had the highest percentage who were White, and the program for individuals with physical disabilities had the highest percentage who were African American (Table 4).

Table 4. Sample Demographic Characteristics by Program Type

Characteristic	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)	TOTAL
Sex	- -	- -	- -	- -	- -	- -
Female	79 (29.8)	62 (23.4)	46 (17.4)	37 (14.0%)	41 (15.5)	265 (100)
Male	38 (18.1)	57 (27.1)	60 (28.6)	32 (15.2%)	23 (11.0)	210 (100)
Age (mean, SD)	76.0 ± 6.2	51.5 ± 11.6	40.2 ± 13.9	48.0 ± 13.3	56.1 ± 11.4	55.1 ± 17.2
Race	- -	- -	- -	- -	- -	- -
White	73 (29.8)	60 (24.5)	36 (14.7)	39 (15.9%)	37 (15.1)	245 (100)
African American	24 (22.6)	50 (47.2)	9 (9.5)	20 (18.9%)	3 (2.8)	106 (100)
Asian	14 (77.8)	1 (5.6)	2 (11.1)	0 (0%)	1 (5.6)	18 (100)

Characteristic	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)	TOTAL
American Indian or Alaskan Native	0 (0)	0 (0)	0 (0)	0 (0%)	1 (100)	1 (100)
Other	6 (9.2)	3 (4.6)	39 (60.0)	4 (6.2%)	13 (20.0)	65 (100)
Unknown or missing	0 (0)	5 (12.8)	20 (50.0)	6 (15.4%)	9 (23.1)	39 (100)
Ethnicity*	- -	- -	- -	- -	- -	- -
Hispanic	0 (0)	1 (6.3)	5 (31.3)	4 (25.0%)	6 (37.5)	16 (100)
Not Hispanic	117 (25.6)	118 (25.8)	100 (21.8)	65 (14.2%)	58 (12.7)	458 (100)

*One individual from the program for individuals with intellectual/developmental disability was missing information on ethnicity and race.

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1.7. If there are differences in the data or sample used for different aspects of testing (e.g., reliability, validity, exclusions, risk adjustment), identify how the data or sample are different for each aspect of testing reported below.

For calculating the measure score, all individuals with at least one FASI-based need were included in the denominator (n=475). Organizations selected a percentage of these FASI records as a convenience sample on which to conduct the two sets of ratings for concordance and inter-rater reliability (IRR) testing. Of the 475 individuals included in the denominator of this performance measure, IRR ratings were available for 431 (Table 5).

Table 5. Number of Unique Individual Records for Denominator and Inter-rater Reliability Testing by Program Type

Measure	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)	TOTAL
Denominator	117 (24.6)	119 (25.1)	106 (22.3)	69 (14.5)	64 (13.5)	475 (100)
IRR records	101 (23.4)	111 (25.8)	101 (23.4)	62 (14.4)	56 (13.0)	431 (100)

1.8 What were the social risk factors that were available and analyzed? For example, patient-reported data (e.g., income, education, language), proxy variables when social risk data are not collected from each patient (e.g. census tract), or patient community characteristics (e.g. percent vacant housing, crime rate) which do not have to be a proxy for patient-level data.

None. Social risk factors were not available for testing.

2a2. RELIABILITY TESTING

***Note**: If accuracy/correctness (validity) of data elements was empirically tested, separate reliability testing of data elements is not required – in 2a2.1 check critical data elements; in 2a2.2 enter "see section 2b2 for validity testing of data elements"; and skip 2a2.3 and 2a2.4.*

2a2.1. What level of reliability testing was conducted? (*may be one or both levels*)

☒ **Critical data elements used in the measure** (*e.g., inter-abstractor reliability; data element reliability must address ALL critical data elements*)

☐ **Performance measure score** (e.g., *signal-to-noise analysis*)

2a2.2. For each level checked above, describe the method of reliability testing and what it tests (*describe the steps—do not just name a method; what type of error does it test; what statistical analysis was used*)

Testing involved use of the FASI assessment data collected during the 2017 field test and service plans at the time of that testing. For the FASI field test, assessors interviewed and observed individuals enrolled in one of the five program types, talked with their primary caregivers and/or guardians, and reviewed case notes. They then coded each of the FASI function items on the basis of the person's usual need for assistance in the past 3 days and their most dependent performance in the past month. Codes for both the usual and most dependent items ranged from 01 (total dependence) to 06 (independent), 07 (person refused), 09 (not applicable), and 88 (not attempted). For this performance measure, an individual is identified as having a FASI-based need if he or she is coded as 01–05 or 88 on any of the FASI function items, including both usual or most dependent.[1]

The organizations that participated in the FASI field test were invited to continue their participation by testing this performance measure. Record "reviewers" (case managers and agency administrators): (1) reviewed each previously completed FASI; (2) completed a performance measure data abstraction form for each record reviewed; and (3) provided feedback regarding the effectiveness of this FASI-based performance measure as an indicator of service quality provided to individuals receiving HCBS. Finally, a Technical Expert Panel (TEP) was convened to provide feedback on the results of the testing and garner subject matter expertise on this performance measure.

Reliability Testing Approach

Forms collected during the FASI field test were studied by a reviewer at each agency. Two reviewers also independently studied a subset of the forms. Each reviewer independently accomplished the following:

a. Determined whether the record indicated any self-care, mobility, or IADL functional needs on the FASI and recorded the result on the data abstraction form. Functional need is defined as receiving a code of 05 or below, or 88 on the FASI for either usual performance in the past 3 days or most dependent performance in the past month.

b. Determined whether there was a need for each functional item and checked the appropriate box on the data abstraction form.
c. Determined whether the PCSP addressed each functional need and checked the appropriate box on the data abstraction form.
d. Indicated *yes* or *no* that the PCSP addressed all identified functional needs as determined by the FASI. Note: During the analysis described below, the development team evaluated whether individuals with greater numbers of FASI-based needs were more likely not to have all needs addressed, as documented in the PCSP (see Appendix X).

The data were collected using a digital, fillable PDF form that administrators uploaded at each site directly to a password-protected, secure ShareFile® maintained by IBM Watson Health. From there, it was transferred to George Washington University and imported to an analytic file.

Method of Reliability Testing for Each Critical Data Element

1. **Definition of need**. The development team evaluated the degree of concordance between reviewers' indication of a FASI-based need and functional need as determined by the FASI field test data. Reviewers in the current performance measure field test reviewed FASI records collected during the field test and answered *yes* or *no* to the question "Does the individual have documented needs determined by a FASI?" For the field test data, the team created a variable with a value of 1 if the individual was coded as 05 or below or 88 for either the usual or most dependent version of each item and used a value of 0 for all other scores on each specified item on the FASI form. Summing across the items on the FASI form produced a total possible range from FASI-based needs of 0 to 44.

   The team then created a dichotomous variable that was coded 0 if the individual had no needs or 1 if the individual had 1 or more FASI needs. The team matched each of the records reviewed during performance measure testing to the same record in the field test data set and used a Kappa statistic to evaluate the concordance between the performance measure testing and field testing in determining whether the individual had a FASI-based need. Kappa is an inter-rater agreement statistic, which is calculated with a 95% confidence interval.[4] Concordance was evaluated for the entire sample and by program type.

   The team did not calculate inter-rater reliability for determination of a FASI-based need (i.e., reviewer response to the question "Does the individual have documented needs determined by a FASI?") because no meaningful disagreement occurred. This finding is described in section 2a2.3.

2. **Identifying the total number of FASI-based needs and the total needs addressed in the PCSP**. The development team used an ecologically robust and pragmatic approach to evaluating consistency in the number of FASI-based needs addressed by each pair of raters. The organizations assigned pairs of raters to independently review the same record from the field testing data set. The result was 862 paired evaluations of 431 records. The team used Bland-Altman limits of agreement (LOA) to evaluate the consistency between rater pairs in determining the total number of FASI-based needs and the total needs addressed in the PCSP for each individual.

The Bland-Altman LOA plot compares two measurements[2,3]; in this case, it is used for comparing measurements from two different reviewers. The differences within each pair of reviewers are plotted against the averages of each pair. The Bland-Altman displays LOA, which is defined as the average difference plus 1.96 times the standard deviation of the differences. The LOA allows identification of outliers when looking at the relationship between the difference and the average using 95% confidence intervals.

3. **Identifying whether the individual had all FASI-based needs reported as addressed in the PCSP.** The team evaluated the concordance between the number of FASI-based needs addressed and the reviewers' assessment that the numerator definition had been met. This analysis involved comparing the number of documented needs addressed against the reviewers' assessment that the record indicated all needs had been addressed. To do this, the team calculated the total number of needs addressed across each of the three domains (self-care, mobility, and IADL) with values ranging from 0 to 40 needs addressed. The team also calculated the total number of FASI-based needs. They compared the number of needs with the number of needs addressed. They then created a dichotomous variable, which was coded 1 if the total number of needs addressed equaled the total number of FASI-based needs and 0 if the total number of needs addressed was less than the total number of FASI-based needs. They compared this to the *yes* or *no* responses reviewers coded to the question "After reviewing all the documents, did the individual who received CB-LTSS have a PCSP that addressed all the identified functional needs as determined by the FASI?" The team used a Kappa statistic to evaluate the level of concordance between the two evaluations where the record met the description of the numerator. Table 6 shows the range of quantitative values for Kappa and the corresponding strength of agreement.

Table 6. Kappa Values and Description

Value of Kappa	Strength of Agreement
<0.20	Poor
0.21–0.40	Fair
0.41–0.60	Moderate
0.61–0.80	Good
0.81–1.00	Very Good

The team also examined the inter-rater reliability with which reviewers evaluated whether a record met or did not meet the definition of this performance measure. To do this, they examined the concordance between reviewers in each pair regarding their summary assessments of whether the record indicated that all the FASI-based needs were addressed by the PCSP. These analyses were conducted for those records that had been determined to meet the criteria for the denominator; that is, there was at least one FASI-based need. The team tested IRR using Kappa.

1. Mallinson T, Dietrich CN, Harwood K, Maring J, Lyons L, Gaskin S, et al. FASI Final Report to the Centers for Medicare & Medicaid Services under Contract HHSM-500-2010-0025i-T006. March 30, 2018.
2. Bland JM, Altman DG. Statistical methods for assessing agreement between two methods of clinical measurement. The Lancet. 1986;1(8476):307-310.

3. Bland JM, Altman DG. Measuring agreement in method comparison studies. AACN Advanced Critical Care. 1999;19:223-234.
4. Fleiss JL, Levin B, Paik MC. Statistical Methods for Rates and Proportions. 3rd ed. Hoboken: John Wiley & Sons; 2003.

2a2.3. For each level of testing checked above, what were the statistical results from reliability testing? (e.*g., percent agreement and kappa for the critical data elements; distribution of reliability statistics from a signal-to-noise analysis*)

Results of Reliability Testing for Each Critical Data Element

1. **Definition of need.** A total of 478 proposed performance measure forms were analyzed to determine the level of agreement between FASI needs and documented needs. Results indicated perfect agreement ($K = 1.0000$, $p < 0.001$). Subsequent analysis was run to determine the level of agreement by program type. For frail elderly, physical disability, and intellectual/development disability programs, responses to both FASI needs and documented needs were *yes* (i.e., complete agreement of need). Kappas for brain injury and serious mental illness programs indicated perfect agreement ($K = 1.0000$, $p < 0.001$); this included agreement for both *yes* and *no* regarding need.

   The development team did not calculate IRR for determination of a FASI-based need because no variation existed. Of the 431 pairs of records, 3 records concurred that no FASI-based need was present. There were 8 instances of nonconcurrence; these came from the same pair of raters and, in every instance, the second rater indicated there was no need. Checking against the FASI field test data indicated that each of these individuals had 8 or more FASI-based needs. The team believes the lack of concurrence of the second reviewer was caused by a known error that occurred with the data abstraction form when a reviewer failed to reset the data form to conduct a new review and instead modified an existing form.

2. **Identifying the total number of FASI-based needs and the total needs addressed in the PCSP.** Bland-Altman Limits of Agreement (LOA) were used to evaluate the extent to which reviewers agreed in their assessment of the number of FASI-based needs and the number of needs addressed in the PCSP for each individual. The LOA are defined by the lower and upper values and define the range between which 95% of values should fall. As shown in Table 7, the LOAs for FASI-based needs identified by the pairs of reviewers were between -10.05 to 10.80. On analysis, 4.2% of all records fell outside of these LOA after removing a reviewer that was consistently outside of the LOA. The percentage of records that fell within the 95% confidence intervals ranged from 93.1% to 96.4% by program type.

   As shown in Table 8, the LOA for total pairs of records reflecting that the needs were addressed by the PCSP was between -9.94 and 10.47. The percentage of pairs within LOA ranged from 91.6% to 94.1% by program type. The analysis of the total pairs of records indicated 95.1% were

within the LOA using a 95% confidence interval after removing a reviewer that was consistently outside of the LOA.

Table 7. Agreement for Total Number of Needs

Measure	Individuals in Programs Serving Those Who Are Frail Elderly	Individuals in Programs Serving Those With a Physical Disability	Individuals in Programs Serving Those With an Intellectual or Developmental Disability	Individuals in Programs Serving Those With a Brain Injury	Individuals in Programs Serving Those With Serious Mental Illness	TOTAL
Pairs of records	102	111	101	62	56	432
Limits of Agreement (LOA) range	-7.97 to 8.61	-11.29 to 9.90	-13.09 to 17.59	-4.67 to 3.57	-3.79 to 4.26	-10.05 to 10.80
% within LOA	96.1	94.6	93.1	95.2	96.4	95.8

Table 8. Agreement Number of Needs Addressed by Program Type

Measure Component	Individuals in Programs Serving Those Who Are Frail Elderly	Individuals in Programs Serving Those With a Physical Disability	Individuals in Programs Serving Those With an Intellectual or Developmental Disability	Individuals in Programs Serving Those With a Brain Injury	Individuals in Programs Serving Those With Serious Mental Illness	TOTAL
Pairs of records	102	111	101	62	56	432
Limits of Agreement (LOA) range	-10.49 to 8.92	-13.80 to 14.09	-7.52 to 8.86	-6.79 to 8.73	-6.32 to 8.14	-9.94 to 10.47
% within LOA	93.1	92.3	94.1	93.5	91.6	93.8
% within LOA (removal of reviewer A)	93.1	95.4	94.1	98.3	91.6	95.1

3. **Identifying whether the individual had all FASI-based needs reported as addressed in the PCSP.** A total of 471 forms were analyzed to determine the level of agreement (Kappa) between needs addressed as determined by the FASI versus those determined by the reviewer summary report. Results indicated very good agreement that was statistically significant ($\kappa = 0.8130$, $p < 0.001$). Subsequent analysis was run to look at strength of agreement by program type (Kappa).

Results ranged from good to strong levels of agreement (defined in Table 6). Table 9 provides the results by program type.

Table 9. Agreement Between FASI-Based Needs Addressed and Reviewer Evaluation That the Definition of the Numerator Was Met

Measure	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)
Kappa (p-value)	0.67 (< 0.001)	0.75 (< 0.001)	0.96 (< 0.001)	0.88 (< 0.001)	0.69 (< 0.001)

Inter-rater reliability was evaluated for the concordance between reviewers' overall assessment that the record indicated all FASI-based needs were addressed. These analyses were conducted for records that had been determined to meet the criteria for the denominator; that is, there was at least one FASI-based need. A total of 424 individuals with two abstraction forms were analyzed to determine the strength of agreement (Kappa) between two reviewers. Results indicated good agreement that was statistically significant ($\kappa = 0.5759$, $p < 0.001$). Subsequent analysis was run to determine the level of agreement by program type. Results ranged from moderate to good levels of agreement with the exception of the program for individuals with intellectual/developmental disability (Table 10).

Table 10. Concordance Between Reviewers' Overall Assessment That the Record Indicated All Identified FASI-Based Needs Were Addressed by the PCSP

Measure	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)
Kappa (p-value)	0.78 (< 0.001)	76 (< 0.001)	0.02 (< 0.001)	0.69 (< 0.001)	0.56 (< 0.001)

2a2.4 What is your interpretation of the results in terms of demonstrating reliability? (i.*e., what do the results mean and what are the norms for the test conducted?*)

Overall, these results indicate that reviewers were able to consistently identify whether an individual had a FASI-based need (denominator), identify the total number of needs (preparatory to determining the numerator) and the needs addressed by the PCSP, and identify whether individuals met the requirements of the numerator. The development team investigated whether increasing numbers of FASI-based needs resulted in an increased likelihood of needs not being addressed by the PCSP. Overall,

the development team found a 2% increase in the likelihood of needs not being addressed for each additional need.

2b1. VALIDITY TESTING

2b1.1. What level of validity testing was conducted? (*may be one or both levels*)

☒ **Critical data elements** (*data element validity must address ALL critical data elements*)

☐ **Performance measure score**

☐ **Empirical validity testing**

☒ **Systematic assessment of face validity of performance measure score as an indicator** of quality or resource use (*i.e., is an accurate reflection of performance on quality or resource use and can distinguish good from poor performance*) **NOTE**: Empirical validity testing is expected at time of maintenance review; if not possible, justification is required.

2b1.2. For each level of testing checked above, describe the method of validity testing and what it tests (*describe the steps—do not just name a method; what was tested, e.g., accuracy of data elements compared to authoritative source, relationship to another measure as expected; what statistical analysis was used)*

Reviewers and TEP members were surveyed on a series of questions to assess the face validity of the proposed measure. After reviewing at least 10 forms, or at the end of data collection, reviewers were asked to complete a one-time feedback form on a secured, online survey. The feedback form was designed to allow reviewers the opportunity to share opinions and experiences in completing the performance measure and to provide critique on the measure's usability, appropriateness of content as a performance measure, and specifications of the measures (validity). In addition, a TEP consisting of 22 subject matter experts and stakeholders was convened and preliminary results were presented. Following the TEP meeting, members also completed the online feedback form.

Method for Validity Testing of Each Critical Data Element

Face facility of the critical data elements was tested by summarizing percent agreement of applicable survey questions on the reviewer and TEP feedback forms.

1. **Identifying needs on FASI.** Reviewers and TEP members indicated whether they thought the statements in the survey regarding the performance measure definition of need were clear and appropriate.
2. **Identifying whether the alignment of needs to personal service plan is important to quality.** Reviewers and TEP members indicated to what extent they agreed with survey questions regarding the alignment of needs and the PCSP as important to high-quality care.

Systematic Assessment of Face Validity

Face facility of the performance measure as a measure of the quality of person-centered supports and services was tested by summarizing percent agreement of applicable survey questions on the reviewer and TEP feedback forms.

2b1.3. What were the statistical results from validity testing? (*e.g., correlation; t-test*)

The feedback form used a 4-level Likert-type scale that included anchors from "strongly disagree," "disagree," "agree," and "strongly agree." For ease of presentation, the results of the critical data elements and the systematic assessment of face validity sections are presented as a dichotomized list that combined "strongly disagree" with "disagree" and "strongly agree" with "agree."

Results of Validity Testing of Each Critical Data Element

1. **Identifying needs on FASI.** The performance measure denominator, "All individuals 18 years or older who received CB-LTSS with documented functional needs determined by a FASI within the reporting period," had a high level of endorsement by the reviewers (90.5%) and TEP members (92%) as a clear and appropriate specification. Reviewers (90%) and TEP members (100%) strongly agreed or agreed with the statement "documented functional needs will be based on receiving 05 or below, or 88," indicating they considered the performance measure definition valid as a measure of function using the FASI scale (Table 11).
2. **Identifying whether the alignment of needs to personal service plan is important to quality.** A series of questions was asked regarding whether the performance measure was important to the quality of HCBS care. Reviewers (88%) and TEP members (75%) agreed with the statement that a PCSP that addresses functional needs is an important step toward high-quality services because the assessment entity can deliver services and supports important to the person. Similarly, reviewers (83%) and TEP members (92%) agreed with the statement that a PCSP that addresses identified functional needs is an important step toward high-quality services because the assessor can create a plan to address the individual's needs. Finally, the reviewers (81%) and TEP members (67%) agreed with the statement about whether performance on this measure provides important information assessing whether groups of HCBS recipients are receiving high-quality services. Overall, reviewers and TEP members had high to moderate agreement on the questions regarding whether the performance measure is important to providing high-quality care in HCBS (Table 12).

Table 11. Reviewer and TEP Member Responses to Performance Measure Definition, Clarity, and Critical Data Element Questions From Feedback Survey

Question No.	Survey Question (or aspect of measure definition being addressed)	Reviewer*: Strongly Disagree & Disagree freq (%)	Reviewer*: Strongly Agree & Agree freq (%)	TEP*: Strongly Disagree & Disagree freq (%)	TEP*: Strongly Agree & Agree freq (%)
10	The definition of the numerator is easy to understand	4 (9.5)	38 (90.5)	0 (0.0)	12 (100)
11	The definition of the denominator is easy to understand	4 (9.5)	38 (90.5)	1 (8.3)	11 (91.7)
12A	The performance measure reporting period is defined as 12 months.	3 (7.1)	39 (92.9)	0 (0.0)	12 (100)

Question No.	Survey Question (or aspect of measure definition being addressed)	Reviewer*: Strongly Disagree & Disagree freq (%)	Reviewer*: Strongly Agree & Agree freq (%)	TEP*: Strongly Disagree & Disagree freq (%)	TEP*: Strongly Agree & Agree freq (%)
12B	This performance measure may be reported by the state or contracted [assessment] entity.	3 (7.1)	39 (92.9)	0 (0.0)	12 (100)
12C	Documented functional needs will be based on receiving a 5 or below, or 88	4 (9.5)	38 (90.5)	0 (0.0)	12 (100)
12D	Documentation of a PCSP will be identified through the individual's case record. (PCSP may vary within and across [assessment] entities; each [assessment] entity will use its forms for the PCSP)	3 (7.1)	39 (92.9)	0 (0.0)	12 (100)
12E	A reviewer will determine whether the PCSP addressed the identified self-care, mobility and/or IADL needs. This means that there is a service (paid or unpaid) and/or action steps associated with all the unmet needs identified using a FASI assessment	3 (7.1)	39 (92.9)	4 (33.3)	8 (66.7)

*Total N for reviewer respondents to each question was 42 (100%). Total N for TEP respondents to each question was 12 (54.5%).

Systematic Assessment of Face Validity

The reviewers and TEP members were asked a series of questions regarding the clarity and definitions of the performance measure and whether the measure is important to providing person-centered supports and services. Each group is described separately (also see Table 12).

Reviewer results. One hundred percent of the reviewers completed the feedback form. Reviewers had high agreement with the statements regarding the wording of the performance measure numerator (91%), denominator (91%), timing (93%), and the assessment entity (provider organization) (93%). There also was high agreement with identifying the PCSP through the individual's case record (95%) and whether the reviewer will determine whether the PCSP addresses the functional needs that were identified through the FASI (93%).

Regarding whether the performance measure will promote person-centered supports and services, the reviewers agreed with the statements that: (1) a PCSP that addresses identified functional needs is an important step to creating person-centered services because it addresses the individual's needs (95%); and (2) a PCSP that addresses identified functional needs is an important step to creating person-centered services because the assessor can create goals addressing the individual's needs (83%). They also agreed that performance on this measure provides important information for assessing whether groups of HCBS recipients are receiving person-centered services (81%).

TEP Results. Fifty-five percent of the reviewers completed the feedback form. The feedback form used the same Likert scale and rating merging methods. TEP members were asked the same questions as the reviewers.

TEP members had high agreement on the statements regarding the wording of the performance measure numerator (100%), denominator (92%), timing (100%), and the assessment entity (provider organization) (100%). There also was high agreement on identifying the PCSP through the individual's

case record (100%) and whether the reviewer will determine whether the PCSP addresses the functional needs that were identified through the FASI (100%).

Regarding the performance measure's effect on person-centered supports and services, TEP members agreed with the statements that: (1) a PCSP that addresses identified functional needs is an important step to creating person-centered services because it addresses the individual's needs (92%); and (2) a PCSP that addresses identified functional needs is an important step to creating person-centered services because the assessor can create goals addressing the individual's needs (75%). They also agreed that performance on this measure provides important information for assessing whether groups of HCBS recipients are receiving person-centered services (67%).

Table 12. Reviewer and TEP Member Agreement on Quality and Person-Centered Questions

Question No.	Survey Question (or aspect of measure definition being asked about)	Reviewers*: Strongly Disagree & Disagree freq (%)	Reviewers*: Strongly Agree & Agree freq (%)	TEP*: Strongly Disagree & Disagree freq (%)	TEP*: Strongly Agree & Agree freq (%)
14A	A PCSP that addresses identified functional needs is an important step to creating person-centered services because it addresses the individual's needs.	2 (4.8)	40 (95.2)	1 (8.3)	11 (91.7)
14B	A PCSP that addresses identified functional needs is an important step to creating person-centered services because the assessor can create goals addressing the individual's needs.	7 (16.7)	35 (83.3)	3 (25.0)	9 (75.0)
14C	Performance on this measure provides important information for assessing whether groups of CB-LTSS recipients are receiving person-centered services.	8 (19.1)	34 (81.0)	4 (33.3)	8 (66.7)
14D	A PCSP that addresses identified functional needs is an important step towards high quality services because the [assessment] entity can deliver services and supports important to the individual.	5 (11.9)	37 (88.1)	3 (25.0)	9 (75.0)
14E	A PCSP that addresses identified functional needs is an important step towards high quality services because the assessor can create a plan to address the individual's needs	7 (16.7)	35 (83.3)	1 (8.3)	11 (91.7)
14F	Performance on this measure provides important information assessing whether groups of CB-LTSS recipients are receiving high quality services.	7 (16.7)	35 (83.3)	4 (33.3)	8 (66.7)

*Total N for reviewer respondents to each question was 42 (100%). Total N for TEP respondents to each question was 12 (54.5%).

2b1.4. What is your interpretation of the results in terms of demonstrating validity? (i.*e., what do the results mean and what are the norms for the test conducted?*)

Reviewers and TEP members generally had high agreement on the importance of the performance measure to person-centered supports and services and its potential as a measure of quality care for HCBS. In addition, there was high to moderate agreement on the performance measure definitions, the timing of the performance measure, and the importance of aligning the functional needs to the PCSP.

2b2. EXCLUSIONS ANALYSIS

NA ☐ no exclusions — *skip to section 2b3*

2b2.1. Describe the method of testing exclusions and what it tests (*describe the steps—do not just name a method; what was tested, e.g., whether exclusions affect overall performance scores; what statistical analysis was used*)

Individuals who did not have a FASI-identified need were excluded from the performance measure, ensuring that only individuals with functional needs in self-care, mobility, and IADLs were included in its testing. The majority of HCBS recipients were individuals with functional needs in one of these three areas; however, because FASI evaluates only functional needs, there may be other reasons an individual is receiving HCBS services (e.g., cognitive, behavioral, or emotional needs) that may not be manifested as a functional need.

2b2.2. What were the statistical results from testing exclusions? (*include overall number and percentage of individuals excluded, frequency distribution of exclusions across measured entities, and impact on performance measure scores*)

Three individuals out of the total sample of 478 did not have a FASI-identified need (Table 13). Although this is to be expected, it is reassuring that only a small group of individuals did not have a functional need. These were individuals with brain injury or serious mental illness who may be receiving services because of cognitive, emotional, or behavioral needs. FASI is only one component of a comprehensive, person-centered assessment for individuals receiving HCBS.

Table 13. Number of Unique Individuals and Number Identified as Not Having a FASI-Based Need

Measure	Individuals Who Are Frail Elderly (row %)	Individuals With a Physical Disability (row %)	Individuals With an Intellectual or Developmental Disability (row %)	Individuals With a Brain Injury (row %)	Individuals With Serious Mental Illness (row%)	TOTAL
Total unique individuals	117 (24.5)	119 (24.9)	106 (22.2)	70 (14.6)	66 (13.8)	478 (100)

Measure	Individuals Who Are Frail Elderly (row %)	Individuals With a Physical Disability (row %)	Individuals With an Intellectual or Developmental Disability (row %)	Individuals With a Brain Injury (row %)	Individuals With Serious Mental Illness (row%)	TOTAL
Individual does not have a FASI-identified need	0 (0.0)	0 (0.0)	0 (0.0)	1 (33.3)	2 (66.7)	3 (100)

2b2.3. What is your interpretation of the results in terms of demonstrating that exclusions are needed to prevent unfair distortion of performance results? (*i.e., the value outweighs the burden of increased data collection and analysis.* ***Note**: **If patient preference is an exclusion**, the measure must be specified so that the effect on the performance score is transparent, e.g., scores with and without exclusion*)

Individuals with serious mental illness, developmental/intellectual disabilities, or brain injury may not have functional disabilities that limit their participation in everyday activities. Thus, it is reasonable that these individuals, while needing HCBS for other reasons (such as behavioral needs), do not have FASI-identified needs. It is important to note that FASI data elements capture only one aspect (i.e., function) of a comprehensive, person-centered assessment.

2b3. RISK ADJUSTMENT/STRATIFICATION FOR OUTCOME OR RESOURCE USE MEASURES
If not an intermediate or health outcome, or PRO-PM, or resource use measure, skip to section 2b4.

2b3.1. What method of controlling for differences in case mix is used?

☐ **No risk adjustment or stratification**

☐ **Statistical risk model with risk factors**

☐ **Stratification by risk categories**

☐ **Other,**

2b3.1.1 If using a statistical risk model, provide detailed risk model specifications, including the risk model method, risk factors, coefficients, equations, codes with descriptors, and definitions.

2b3.2. If an outcome or resource use component measure is not risk adjusted or stratified, provide rationale and analyses to demonstrate that controlling for differences in patient characteristics (case mix) is not needed to achieve fair comparisons across measured entities.

2b3.3a. Describe the conceptual/clinical and statistical methods and criteria used to select patient factors (clinical factors or social risk factors) used in the statistical risk model or for stratification by risk (*e.g., potential factors identified in the literature and/or expert panel; regression analysis; statistical significance of p<0.10; correlation of x or higher; patient factors should be present at the start of care*) **Also discuss any "ordering" of risk factor inclusion**; for example, are social risk factors added after all clinical factors?

2b3.3b. How was the conceptual model of how social risk impacts this outcome developed? Please check all that apply:

- ☐ **Published literature**
- ☐ **Internal data analysis**
- ☐ **Other (please describe)**

2b3.4a. What were the statistical results of the analyses used to select risk factors?

2b3.4b. Describe the analyses and interpretation resulting in the decision to select social risk factors *(e.g. prevalence of the factor across measured entities, empirical association with the outcome, contribution of unique variation in the outcome, assessment of between-unit effects and within-unit effects.)* **Also describe the impact of adjusting for social risk (or not) on providers at high or low extremes of risk.**

2b3.5. Describe the method of testing/analysis used to develop and validate the adequacy of the statistical model or stratification approach (*describe the steps—do not just name a method; what statistical analysis was used*)

Provide the statistical results from testing the approach to controlling for differences in patient characteristics (case mix) below.
If stratified, skip to 2b3.9

2b3.6. Statistical Risk Model Discrimination Statistics (*e.g., c-statistic, R-squared*)**:**

2b3.7. Statistical Risk Model Calibration Statistics (*e.g., Hosmer-Lemeshow statistic*):

2b3.8. Statistical Risk Model Calibration – Risk decile plots or calibration curves:

2b3.9. Results of Risk Stratification Analysis:

2b3.10. What is your interpretation of the results in terms of demonstrating adequacy of controlling for differences in patient characteristics (case mix)? (i.*e., what do the results mean and what are the norms for the test conducted*)

2b3.11. Optional Additional Testing for Risk Adjustment (***not required****, but would provide additional support of adequacy of risk model, e.g., testing of risk model in another data set; sensitivity analysis for missing data; other methods that were assessed*)

2b4. IDENTIFICATION OF STATISTICALLY SIGNIFICANT & MEANINGFUL DIFFERENCES IN PERFORMANCE

2b4.1. Describe the method for determining if statistically significant and clinically/practically meaningful differences in performance measure scores among the measured entities can be identified (*describe the steps—do not just name a method; what statistical analysis was used? Do not just repeat the information provided related to performance gap in 1b)*

Because this measure is not routinely implemented in HCBS programs, there is not sufficient experience to identify what counts as a meaningful difference in the score across program types. However, chi-square results indicated a statistically significant difference in the performance measure scores ($\chi 2$ (4) = 53.5, $p<0.0001$). Table 142 shows that the highest performance measure score is from the brain injury, physical disability, and serious mental illness program types (85.5%, 79.0%, and 76.6%, respectively), whereas the lowest performance measure scores are from the frail elderly and intellectual/ developmental disability program types (58.1% and 42.5%, respectively).

Table 14. Aligning PCSP with FASI Needs: Score by Program Type

Measure Score	Individuals in Programs Serving Those Who Are Frail Elderly (row %)	Individuals in Programs Serving Those With a Physical Disability (row %)	Individuals in Programs Serving Those With an Intellectual or Developmental Disability (row %)	Individuals in Programs Serving Those With a Brain Injury (row %)	Individuals in Programs Serving Those With Serious Mental Illness (row %)	Total
Performance measure score	58.1	79.0	42.5	85.5	76.6	66.3

2b4.2. What were the statistical results from testing the ability to identify statistically significant and/or clinically/practically meaningful differences in performance measure scores across measured entities? (e.g., *number and percentage of entities with scores that were statistically significantly different from mean or some benchmark, different from expected; how was meaningful difference defined*)

2b4.3. What is your interpretation of the results in terms of demonstrating the ability to identify statistically significant and/or clinically/practically meaningful differences in performance across measured entities? (i.*e., what do the results mean in terms of statistical and meaningful differences?*)

2b5. COMPARABILITY OF PERFORMANCE SCORES WHEN MORE THAN ONE SET OF SPECIFICATIONS

If only one set of specifications, this section can be skipped.

Not applicable

Note*: This item is directed to measures that are risk-adjusted (with or without social risk factors)* ***OR*** *to measures with more than one set of specifications/instructions (e.g., one set of specifications for how to identify and compute the measure from medical record abstraction and a different set of specifications for claims or eMeasures). It does not apply to measures that use more than one source of data in one set of specifications/instructions (e.g., claims data to identify the denominator and medical record abstraction for the numerator).* ***Comparability is not required when comparing performance scores with and without social risk factors in the risk adjustment model. However, if comparability is not demonstrated for measures with***

more than one set of specifications/instructions, the different specifications (e.g., for medical records vs. claims) should be submitted as separate measures.

2b5.1. Describe the method of testing conducted to compare performance scores for the same entities across the different data sources/specifications (*describe the steps—do not just name a method; what statistical analysis was used*)

2b5.2. What were the statistical results from testing comparability of performance scores for the same entities when using different data sources/specifications? (*e.g., correlation, rank order*)

2b5.3. What is your interpretation of the results in terms of the differences in performance measure scores for the same entities across the different data sources/specifications? (i.*e., what do the results mean and what are the norms for the test conducted?*)

2b6. MISSING DATA ANALYSIS AND MINIMIZING BIAS

2b6.1. Describe the method of testing conducted to identify the extent and distribution of missing data (or nonresponse) and demonstrate that performance results are not biased due to systematic missing data (or differences between responders and nonresponders) and how the specified handling of missing data minimizes bias (*describe the steps—do not just name a method; what statistical analysis was used*)

IN THEORY, USING THE FASI FIELD TEST DATA ENSURED THAT MISSING DATA WERE NOT AN ISSUE IN TERMS OF THE CRITICAL DATA ELEMENTS. HOWEVER, DATA ABSTRACTED ONTO THE MEASURE TEST FORMS NEEDED TO BE MERGED WITH THE FASI FIELD TEST DATA TO DETERMINE HCBS PROGRAM TYPE AND DEMOGRAPHICS. THE DEVELOPER TEAM FOUND 36 MEASURE TEST ABSTRACTION FORMS THAT COULD NOT BE PAIRED WITH FASI FIELD TEST FORMS. WITHOUT BEING ABLE TO MATCH THE MEASURE TEST DATA TO THE FASI FIELD TEST DATA, THE TEAM WAS UNABLE TO DETERMINE THEIR PROGRAM TYPE, WHICH IS THE UNIT OF ANALYSIS.

2b6.2. What is the overall frequency of missing data, the distribution of missing data across providers, and the results from testing related to missing data? (*e.g., results of sensitivity analysis of the effect of various rules for missing data/nonresponse;* ***if no empirical sensitivity analysis****, identify the approaches for handling missing data that were considered and pros and cons of each*)

Missing data were minimal for this performance measure. The 36 forms that could not be aligned with FASI field test records were a result of incorrect form and assessor identifiers and not a result of data missing from the fields on the abstraction form related to identifying the critical data elements.

2b6.3. What is your interpretation of the results in terms of demonstrating that performance results are not biased due to systematic missing data (or differences between responders and nonresponders) and how the specified handling of missing data minimizes bias**?** (i.*e., what do the results mean in terms of supporting the selected approach for missing data and what are the norms for the test conducted;* ***if no empirical analysis****, provide rationale for the selected approach for missing data*)

Performance results were not biased because of missing data in the critical data elements.

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)

If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields (*i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields*) Update this field for **maintenance of endorsement**.

Some data elements are in defined fields in electronic sources

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources. For **maintenance of endorsement**, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM).

This proposed measure requires two sources of data—the FASI and the PCSP. The data entry process for each source of data will depend on the provider organization's resources. For the FASI, some organizations likely will use the electronic version of the FASI in their records; however, some organizations may rely on paper versions. For the PCSP, a variety of documents may be used to document the PCSP; in fact, it has been recognized in the performance measure that each state organization may have its own system. During measure testing, reviewers recorded where they obtained the data for the measure; their responses are summarized in Table 7. Although data were obtained from only a subset of all provider organizations, the variety of electronic and paper-based sources demonstrates the reality of the environment. The most common source for each program type was an electronic service plan.

Table 7. Sources of Documentation Used in Producing the Performance Measure by Program Type

Source Individuals Who Are Older Adults Individuals With a Physical Disability Individuals With an Intellectual or Developmental Disability Individuals With an Acquired Brain Injury Individuals With Mental Health or Substance Use Disorders

Electronic service plan 59/117 (50.4) 87/119 (73.1) 106/106

(100.0) 65/69

(50.0) 63/64 (98.4)

Paper service plan 44/117 (37.6) 19/119 (16.0) 9/106

(8.5) 2/69

(2.9) 0/64

(0.0)

Case notes 52/117 (44.3) 80/119 (67.2) 36/106

(34.0) 39/69 (56.5) 11/64 (17.2)

Administrative/claims data 0/117

(0.0) 47/119 (39.5) 0/106

(0.0) 19/69 (27.5) 0/64

(0.0)

Other 6/117

(5.1) 2/119

(1.7) 23/106

(21.7) 5/69

(7.3) 10/64 (15.6)

*NB: Reviewers were instructed to "check all that apply" when indicating sources of documentation used; thus, for some records multiple sources of documentation were selected. As a result, columns do not total to 100%.

All data elements come from two sources: the FASI and PSCP documentation. CMS will make the defined fields in the FASI readily available to all HCBS programs through the Data Element Library (DEL). The FASI set recently was field tested in HCBS programs and found to be a reliable and valid assessment of function. If the organizations integrate the FASI into their electronic records, then all data elements will be in defined fields in an electronic record. If the paper form is uploaded to the EHR or, if the provider organization uses paper forms, the data can be abstracted for the defined fields on a data abstraction form. The documentation for the PCSP is dependent on the provider organization and the state. It may be obtained from a variety of sources, some of which are electronic. Each organization may determine the best mechanism to abstract the data from the PCSP.

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL. Please also complete and attach the NQF Feasibility Score Card.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Required for maintenance of endorsement. Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

IF instrument-based, consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

The reviewers, Technical Expert Panel (TEP) members, and researchers identified the following difficulties in data collection:

- Understanding the FASI tool and performance measure instructions. A few reviewers and TEP members considered the performance measure's language unclear, especially concerning the PCSP; however, this was a minority opinion of the total survey results. (See Table 11 in the Validity Testing section: Reviewer and TEP Member Responses to Performance Measure Definition, Clarity, and Critical Data Element Questions From Feedback Survey.) In addition, reviewer and TEP member comments showed concern that the performance measure did not address other needs. They stated that it is

common for other issues such as housing and transportation to be main considerations in the individual's ability to stay in the home or community. Finally, many comments were received about the difference between developing goals and service planning. One concern was that the process used to determine needs and goals should have a person-centered approach (e.g., "I feel that the client should determine their own goals, not the assessor" and "The assessor should not be creating goals or plans to address the individual's needs, that should be done starting with the customer and all team members involved for support"). The other general concern was the association between addressing needs, service planning, and quality. Some reviewers and TEP members recognized the differences between the individual's "wants" and "needs" and their association with quality (e.g., "What if, for example, an individual doesn´t like roommates but is receiving HCBS residential services in a group home? The group home may be addressing all of their identified needs, but it´s not a person-centered service [they don´t like roommates] and may or may not be a high quality residential service"). Others recognized the need to prioritize (e.g., " …those [functional] needs may not be addressed if there are other, more serious needs that the client has identified"). The latter concerns may be addressed by appropriate training to help the assessors understand the intent of the performance measure—namely to isolate functional needs and their association with service planning—while emphasizing that other needs are important but require the use of other tools that are not addressed in this performance measure. In addition, training should address how assessors are engaging the individuals being served and their families in the discussion of needs and service planning. A proposed training program is described below.

- Administrative burden (accessibility of information, time to complete measure). A majority of comments suggested it would be difficult for the provider organization to review service plan information because it was described in a variety of documents (e.g., case notes, service planning forms; see Table 7). As a result, some organizations needed a significant amount of time to collect all relevant information to complete the performance measure. However, this sentiment was not shared by all; some respondents reported that the PCSP was easily accessible. The perception of the administrative burden most likely depends on the provider organization. Finally, some reviewers suggested that the variance in training among states may affect the user's understanding and the time needed to complete the performance measure.

In order to mitigate these difficulties, the following recommendations are provided:

1. Training. The training program the development team used in the testing included a 1.5 hour Microsoft® PowerPoint presentation with time for questions and discussion. The content included (1) FASI set description and purpose, (2) performance measure foundational principles, (3) detailed description of the performance measure with examples, and (4) instructions on how to complete the data abstraction form. The FASI team also included a weekly roundtable during implementation to discuss the performance measure. An online, accessible presentation (asynchronous or synchronous) is recommended. A possible addition to the FASI training may include methods to elicit and record functional needs from all individuals in HCBS and more detail on how to obtain the PCSP. To address the concern about person-centered supports and services, the training should include a module on best practices to effectively engage individuals receiving HCBS in a discussion about their goals and needs.
2. Time to gather data. Reviewers voiced concern about the amount of time it took to complete the data abstraction form. Possible solutions include creating a streamlined data abstraction form by removing all unnecessary items that were used for the testing and modifying the FASI to an electronic system. A model of a streamlined data abstraction form is attached (Appendix X). State and provider organizations may consider developing a standardized form for the PCSP.
3. Sampling. Use of standard sampling techniques is recommended to allow for scientifically sound analysis and maintenance of data integrity while decreasing the time needed for the analysis. Possible methods include using a randomized or stratified random sampling of eligible candidates.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified *(e.g., value/code set, risk model, programming code, algorithm)*.

Not applicable.

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Specific Plan for Use	Current Use (for current use provide URL)
Public Reporting Quality Improvement (external benchmarking to organizations) Quality Improvement (Internal to the specific organization)	*

*cell intentionally left blank

4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

Not applicable (no current uses indicated above).

4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (*e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?*)

CMS intends to share information about the availability and potential utility of this measure for public reporting through numerous communication venues. The measure may support states in their efforts to meet Medicaid's section 1915(c) Home and Community Based Services Waiver Program Assurances, particularly the Service Plan Assurance, which requires that participants have a service plan that is appropriate to their need and that they receive the services/supports specified in the plan. States must establish performance measures, and remediation and quality improvement strategies in their waiver application. Once approved by CMS, a state must demonstrate that they are monitoring their programs by submitting evidence reports to CMS using the approved performance measures. CMS has also established Sub Assurances, which are how the Assurances are operationalized. The first Sub Assurance is that service plans address all participants' assessed needs (including health and safety risk factors) and personal goals, either by the provision of waiver services or through other means. This PM could be used to help address this first Sub Assurance. For more information on the waiver assurances, see https://www.medicaid.gov/medicaid-chip-program-information/by-topics/waivers/downloads/technical-guidance.pdf.

In addition, the FASI data elements are included in the CMS Data Elements Library, which may increase the likelihood of uptake by stakeholders seeking information about functional assessment data elements that can be used across settings.

4a1.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (*Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.*)

The measure in this submission is derived from the HCBS FASI set, which is available publicly through the CMS Data Element Library. Because the FASI set was developed for voluntary use in Medicaid HCBS, it is expected that states are likely to use the measures derived from the assessment tool for their internal assessment of HCBS program quality and related quality and improvement projects, as well as for public reporting at the state level. These measures will likely be included in CMS's HCBS Recommended Measure set (current draft available for public comment) for voluntary adoption by states' HCBS programs.

4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.

This process measure was tested in 9 organizations in four different states (Colorado, Connecticut, Georgia, and Kentucky) located in geographically diverse regions of the country. These organizations participated in the 2017 FASI field test and agreed to continue their participation by testing this performance measure. These organizations serve different populations including individuals who are older adults and those with physical disabilities, intellectual/developmental disabilities, acquired brain injury, or mental health or substance use disorders. Individuals included in the testing and analysis were eligible to receive services under Medicaid HCBS programs within the four states. HCBS programs enable individuals who otherwise would need institutional residential services to live in the least restrictive environment of their choosing in the community.

Measure testing focused on the reliability and face validity of the measure and did not include a method to give the participating organizations the results of the testing, their performance on the measure, or interpretative guidelines. In the future, CMS plans to share information about the availability and potential utility of the measure for reporting through numerous communication venues. Communication of the performance data, results, and interpretative guidelines will be addressed in the implementation plan.

4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

Measure testing focused on the reliability and face validity of the measure and did not include a method to give the participating organizations the results of the testing. The results of the testing were submitted to CMS to review and use to develop future activity. The measure was tested as including an annual (12 month) reporting period to coincide with the reporting requirements in Medicaid's section 1915(c) Home and Community Based Services Waiver Program Assurances and Sub Assurances. . CMS will use various communication vehicles to provide performance measure results, reporting instructions, and educational material needed to calculate the measures.

4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.

Describe how feedback was obtained.

During performance measure testing, the reviewers that abstracted the FASI data completed a feedback form. After reviewing at least 10 forms, or at the end of data collection, reviewers completed a one-time feedback form on a secured, online platform (SurveyMonkey®). The feedback form was designed to allow reviewers the opportunity to share opinions and experiences in completing the performance measure and to provide a

critique on the usability, appropriateness of content as a performance measure, and specifications of the measure (i.e., validity). In addition, a TEP consisting of 22 subject matter experts and stakeholders was convened. They reviewed the performance measure and preliminary results and provided feedback. Following the TEP, members also completed the online feedback form. The results of the feedback are summarized in the next two sections of the application.

4a2.2.2. Summarize the feedback obtained from those being measured.

In the feedback survey, the reviewers were asked a series of questions regarding the feasibility of the performance measure, the clarity of the rules and measure description, and whether the measure would assist in measuring quality of care. One hundred percent of the reviewers completed the feedback form. Table 8 summarizes the questions and results addressing the feasibility and usability of the measure. A more detailed analysis of the feedback is provided in the validity section (Section 2b1.) in the measure testing form portion of the application.

Table 8. Reviewer Ratings of Usability and Feasibility Questions

Question Number	Survey Statements: Usability/Feasibility	Total N (%)	Strongly Disagree & Disagree (%)*	Strongly Agree & Agree (%)*
16 A	The information needed to implement this PM for groups of CB-LTSS recipients is readily available.	42 (100)	1 (2.4)	41 (97.6)
16 B	The measurement guidelines clearly specify the documents or sources needed to implement this PM.	42 (100)	3 (7.1)	39 (92.9)
16 C	The time necessary to collect the information for each CB-LTSS recipient included in the PM is reasonable (does not cause undue burden for the [assessment] entity or state).	42 (100)	8 (19.1)	34 (81.0)
16 D	This PM will assist the [assessment] entity or state with continuous improvement under its CB-LTSS quality management system.	42 (100)	4 (9.5)	38 (90.5)

Abbreviations: CB-LTSS, community-based long-term services and supports; PM, performance measure.

*The column sums the frequency of the Likert scare responses "strongly disagree" and "disagree" into one category and "strong agree" and "agree" into the second category.

A significant majority of the reviewers believed that the documents and sources needed for the performance measure are readily available (98%) and clearly specified (93%) and that the time necessary to complete the measure is reasonable (81%). Qualitative comments did note inconsistencies in PCSP documentation depending on who performs the PCSP and on the provider organization; however, a large majority of reviewers agreed that the information needed was readily available. The reviewers also were asked whether they thought the performance measure would assist the provider organization or state with continuous improvement activities (Question 16D). A strong majority of the reviewers (90.5%) agreed.

4a2.2.3. Summarize the feedback obtained from other users

Feedback was solicited from the TEP members using the same feedback form provided to the reviewers. The TEP consisted of 22 members that represented provider organizations, state Medicaid agencies, advocacy groups, self-advocates, and potential users. Twelve of the 22 TEP members provided feedback, including 8 potential FASI performance measure users (e.g., states, managed long-term services and supports [MLTSS] plans), 2 advocacy group representatives, and 2 self-advocates. TEP members reviewed the performance measure and the preliminary results of performance measure testing before completing the feedback form. The level of agreement for the usability and feasibility statements are summarized in Table 9.

Table 9. Technical Expert Panel Ratings of Usability and Feasibility Questions

Question Number	Survey Statements: Usability/Feasibility	Total N (%)	Strongly Disagree & Disagree (%)*	Strongly Agree & Agree (%)*

16 A The information needed to implement this PM for groups of CB-LTSS recipients is readily available. 12 (54.5) 5 (41.7) 7 (58.3)

16 B The measurement guidelines clearly specify the documents or sources needed to implement this PM. 12 (54.5) 1 (8.3) 11 (91.7)

16 C The time necessary to collect the information for each CB-LTSS recipient included in the PM is reasonable (does not cause undue burden for the [assessment] entity or state). 12 (54.5) 3 (25.0) 9 (75.0)

16 D This PM will assist the [assessment] entity or state with continuous improvement under its CB-LTSS quality management system. 12 (54.5) 2 (16.7) 10 (83.3)

Abbreviations: CB-LTSS, community-based long-term services and supports; PM, performance measure.

*The column sums the frequency of the Likert scare responses "strongly disagree" and "disagree" into one category and "strong agree" and "agree" into the second category.

A majority of the TEP respondents agreed with the performance measure feasibility and usability statements. TEP members strongly agreed that the guidelines for the measure are clearly stated (91.7%) and that the time necessary to collect the information for the performance measure is reasonable (75%); however, a smaller majority (58%) agreed with the statement "The information needed to implement this performance measure (PM) for groups of CB-LTSS recipients is readily available." TEP member comments provided some rationale for this discrepancy. Some TEP members recounted the variability of provider organization accessibility of documents and trained staff as supported by the statement "States do not have standardized electronic care plans or quality assurance staff already funded to do this very labor-intensive process." Others described the need to do an extensive review of documents to find the important information, as supported by two statements: one individual pointed out "The need to do fairly in-depth record review to determine whether the PCSP addressed the identified... needs"; and the second individual thought it "results in a labor-intensive measure."

Like the reviewer response, 83% of TEP members agreed with the statement, "This [performance measure] would assist the provider organization or state with continuous improvement activities" (Question 16D).

The level of agreement among the TEP respondents generally was somewhat less than those of the reviewers. The greatest difference in percent agreement between the TEP and reviewer respondents was regarding statements on the availability of information. This difference may be due to the relatively lower number of TEP respondents and their lack of experience in using the performance measure in the field. There was close agreement, however, that the guidelines to complete the performance measure were clearly specified and that the performance measure will assist the provider organization or state with continuous quality improvement for HCBS.

4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

The feedback from reviewers was very positive. The feedback from TEP members primarily focused on concerns about data accessibility related to the disparate documentation of PCSPs. This issue will be addressed as more states move to centralized electronic records to facilitate access to information in PCSPs. Given this reality, the performance measure specifications or implementation were not modified to address this specific issue.

Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b1. Refer to data provided in 1b but do not repeat here. Discuss any progress on improvement (trends in performance results, number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable entities and patients included.)

If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

The proposed performance measure was developed to address a foundational responsibility of HCBS provider organizations, to assess individual needs, and to align these needs with the service plan. The literature supports the need to develop performance measures in HCBS environments and aligning functional needs to the service planning process in a standardized manner is a current performance gap. The results of the testing and feedback from reviewers and TEP members generally support the importance of the measure, its reliability, and its potential role in quality improvement and person-centered service plans.

Four short-term outcomes are expected to be associated with the implementation of practices aligned with the performance measure: (1) using the performance measure may facilitate responsivity of the provider organization to the unmet needs of the individual, (2) the performance measure may facilitate an accurate alignment between the individual's needs and the service plan, (3) using the FASI set may increase standardization of assessing functional needs within HCBS environments, and (4) using the performance measure may provide information to reviewers to determine what is needed to align the PCSP to the individual's needs. The attainment of the short-term outcomes may lead to longer-term goals such as better service outcomes, including increased satisfaction, and the potential of establishing realistic, scientifically-based benchmarks for performance.

The performance measure was not measured over time; therefore, changes because of its implementation were not determined. Data collected during performance measure testing indicates, however, that improvement is needed. Programs have a relatively low measure score on the performance measure, with an average measure score of 66.3% and a range from 42.5% for individuals with an intellectual or developmental disability to 85.5% for individuals with an acquired brain injury (see Table 12). In addition, reviewer and TEP feedback demonstrated that the performance measure definitions were clear, the time to complete the performance measure was reasonable, and aligning individual functional needs to the service plan was important to providing high-quality, person-centered services.

4b2. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.

The team was positively surprised by the extent of reviewer and TEP agreement (no less than 83.3%) regarding the importance of this potential performance measure for aligning functional needs with service planning. (See Table 12 in the Validity Testing section: Reviewer and TEP Member Agreement on Quality and Person-Centered Questions.)

4b2.2. Please explain any unexpected benefits from implementation of this measure.

Unexpected benefits are not yet well understood because this measure has not been implemented over a long term. However, the immediate benefits are that the reviewers gain increased awareness of the need to assess functional needs and to align them with service plans, which are foundational responsibilities of provider organizations and measures of person-centered supports and services. In addition, aligning needs to service plans is a component of CMS reporting requirements for 1915(c) waivers program, so the measure scores also may be used to address these reporting requirements.

5. Comparison to Related or Competing Measures

If a measure meets the above criteria **and** there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

Yes

5.1a. List of related or competing measures (selected from NQF-endorsed measures)

2624 : Functional Outcome Assessment

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

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

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

5a. Harmonization of Related Measures

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):

Are the measure specifications harmonized to the extent possible?

Yes

5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

No further harmonization is possible. Both the proposed measure and NQF#2624 rely on a standardized functional assessment to specify the numerator, although the target populations differ. The proposed measure relies on the FASI assessment, which has been tested and validated specifically in HCBS populations, and NQF #2624 specifies use of any standardized assessment tool that has been normalized and validated (e.g., Oswestry Disability Index, Patient-Reported Outcomes Measurement Information System, Knee Outcome Survey Activities of Daily Living Scale). FASI meets the NQF #2624 specification requirement for a standardized assessment tool that has been normalized and validated. Like the proposed measure, NQF#2631 requires both a complete functional assessment (using the Long-Term Care Hospital Continuity Assessment Record and Evaluation Data Set Version 3.00) and a minimum level of alignment between the assessed needs/goals and the care services. NQF#2967 focuses specifically on individuals continuously enrolled in HCBS for 3 months or longer who pass a cognitive screen and their proxies. The proposed measure, while necessarily focusing on a subset of HCBS recipients who have documented functional needs as measured by the FASI, also excludes individuals who do not have 3 months of continuous HCBS enrollment.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

There are no competing measures.

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

No appendix Attachment:

Contact Information

Co.1 Measure Steward (Intellectual Property Owner): Centers for Medicare & Medicaid Services

Co.2 Point of Contact: Helen, Dollar-Maples, Helen.Dollar-Maples@cms.hhs.gov, 410-786-7214-

Co.3 Measure Developer if different from Measure Steward: The Lewin Group

Co.4 Point of Contact: Colleen, McKiernan, colleen.mckiernan@lewin.com, 703-269-5595-

Additional Information

Ad.1 Workgroup/Expert Panel involved in measure development

Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

The research team involved in the development of the measures includes the following:

Centers for Medicare & Medicaid Services

Kerry Lida, Ph.D.

Other Investigators

Pat Rivard, MBA, IBM Watson Health

Rebecca Woodward, PhD, IBM Watson Health

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Additional research assistance was provided by Karen Schlumpf, MHP, EdDc, George Washington University.

The current developers for NQF 3593 include:

The Lewin Group (Lewin)

The National Committee for Quality Assurance (NCQA)

Qlarant

George Washington University (GW) School of Medicine and Health Sciences

Marymount University

DMA Health Strategies

The TEP members involved in the development of the measures are listed below. TEP members attended meetings in February 2018 and/or July 2018. They provided stakeholder feedback regarding measure concepts and measure specifications, including aspects such as value for quality improvement and potential implementation feasibility.

- Brian Bennett, Louisiana TEFT Grantee
- Mary Lou Bourne, National Association of State Directors of Developmental Disabilities Services
- Joe Caldwell, National Council on Aging
- Marcus Canaday, West Virginia Medicaid
- Tim Cortez, Colorado TEFT Grantee
- Danielle Darby, Revitalizing Community Membership of Washington
- Camille Dobson, National Association of States United for Aging and Disabilities
- Pam Erkel, Minnesota TEFT Grantee
- Chester Finn, self-advocate, New York Office for People with Developmental Disabilities
- Nancy Flinn, Courage Kenny Rehabilitation Institute
- Wendy Fox-Grage, AARP Public Policy Institute
- Dolores Frantz, Pennsylvania Developmental Disabilities Agency
- Michelle Goody, Massachusetts Medicaid
- Kendra Hanley, Health Services Advisory Group
- Celeste Januszewski, University of Illinois at Chicago
- Angela Kimball, National Alliance on Mental Illness
- Rachel LaCroix, Florida Agency for Health Care Administration
- Steve Lutzky, HCBS Solutions
- Michael Monson, Centene Corporation
- Teri Morgan, Virginia Medicaid
- Lorraine Nawara, Maryland TEFT Grantee
- Bonnie Neighbour, Peer Specialist
- Jim O'Neill, self-advocate
- Jake Reuter, North Dakota Medicaid
- Julie Robison, Connecticut TEFT Grantee
- Jennifer VanderNoot, New Hampshire TEFT Grantee
- Dave Zacks, self-advocate

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2018

Ad.3 Month and Year of most recent revision: 03, 2018

Ad.4 What is your frequency for review/update of this measure? Annual review/update

Ad.5 When is the next scheduled review/update for this measure? 04, 2021

Ad.6 Copyright statement:

Ad.7 Disclaimers:

Ad.8 Additional Information/Comments: