



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

Brief Measure Information

NQF #: 3500

Corresponding Measures:

Measure Title: Evaluation of Cognitive Function for Home-Based Primary Care and Palliative Care Patients

Measure Steward: American Academy of Home Care Medicine

sp.02. Brief Description of Measure: Percentage of actively enrolled home-based primary care and palliative care patients who received an assessment of their cognitive ability.

1b.01. Developer Rationale: Functional limitations, frailty, and homebound status render approximately 4 million US adults unable to easily access office-based primary care. (1) Compared to the non-homebound population, homebound individuals have twice as many chronic conditions, are nearly two to two-and-a-half times more likely to have been hospitalized in the past year, and are among the most costly and sickest patients in the US healthcare system. (2-4) Further, one study of Medicare beneficiaries found that 50.7% are homebound in the last year of life, suggesting that half are unable to receive office-based care at a time when they may have the most need. (5) To address these care access and cost issues, home-based primary and palliative care is a model growing with the support of providers and policymakers alike. (2) Between 2000 and 2006, the number of physician house calls to Medicare beneficiaries more than doubled while the number of providers practicing home care has decreased. (6) This suggests a growing emphasis on home-based primary and palliative care as a focused medical specialty, with home care providers seeing increasingly more patients in their homes than before. (3,6) Seizing on the opportunities inherent in this emerging practice model, Centers for Medicare and Medicaid Services (CMS) has invested millions of dollars into the Independence at Home (IAH) Demonstration, which tests a payment incentive and service delivery model for home based primary care. (2) Outside of this demonstration project, however, there are no currently endorsed performance measures specific to home-based primary care, leaving a growing, high priority practice model with disease-specific measures that do not take into account the clinical complexity and multi-morbidity of the homebound population. (3)

It is estimated that 40.5% of homebound elderly have psychiatric disorders, with the two most common being dementia and depression. (1) According to one estimate, dementia, including Alzheimer's disease, affects 29% of this population. (7) Depression, which often occurs concomitantly with cognitive impairment (8), affects homebound individuals at a rate three times the general primary care population aged 60 years and older. (1) Worsening cognitive functioning over time is a major risk factor for physical decline and further loss of independence. This finding is particularly salient in the transition from borderline intact functioning to impaired functioning. (8,9) In addition to worsening functional status, executive function impairment is also associated with overall mortality in the homebound population. (10) Although it is not always possible to stop the downward trajectory of cognitive decline, regular assessments give providers clinical information that can be used to assist

the homebound patient and caregivers in preparing for possible physical deterioration, potentially allowing them to continue to stay in their homes longer. (8) Regular and systematic assessment of cognition in the elderly and homebound population is supported in gerontological literature, quality of life literature, and clinical practice guidelines. (8,11,12) Despite these recommendations, an opportunity for improvement remains. One study of patients receiving home care found that 17% of patients have cognitive impairments undiagnosed by their home care providers. (13) Further, 2017-2018 registry data for this measure, based on 220 providers and 63,849 quality encounters indicate an average performance rate of 40% with a range from 6% to 80%. This variability and low rate of performance indicate that home-based primary care and palliative care providers have room to improve on cognitive assessment rates in care of the homebound population. Achieving high performance should ultimately lead to enhanced patient-centered care in the home and improved outcomes for this complex population and is a crucial first step in achieving many high priority quality of care standards identified by the National Home-Based Primary and Palliative Care Network. (3)

1. Qiu WQ, Dean M, Liu T, et al. Physical and mental health of homebound older adults: an overlooked population. *J Am Geriatr Soc.* 2010;58(12):2423-2428.
2. Report to Congress: Evaluation of the Independence at Home Demonstration. Centers for Medicare and Medicaid Services;2018.
3. Leff B, Carlson CM, Saliba D, Ritchie C. The invisible homebound: setting quality-of-care standards for home-based primary and palliative care. *Health Aff (Millwood).* 2015;34(1):21-29.
4. Ornstein KA, Leff B, Covinsky KE, et al. Epidemiology of the Homebound Population in the United States. *JAMA internal medicine.* 2015;175(7):1180-1186.
5. Soones T, Federman A, Leff B, Siu AL, Ornstein K. Two-Year Mortality in Homebound Older Adults: An Analysis of the National Health and Aging Trends Study. *J Am Geriatr Soc.* 2017;65(1):123-129.
6. Peterson LE, Landers SH, Bazemore A. Trends in physician house calls to Medicare beneficiaries. *J Am Board Fam Med.* 2012;25(6):862-868.
7. Kronish IM, Federman AD, Morrison RS, Boal J. Medication utilization in an urban homebound population. *J Gerontol A Biol Sci Med Sci.* 2006;61(4):411-415.
8. Li LW, Conwell Y. Effects of changes in depressive symptoms and cognitive functioning on physical disability in home care elders. *J Gerontol A Biol Sci Med Sci.* 2009;64(2):230-236.
9. Greiner PA, Snowdon DA, Schmitt FA. The loss of independence in activities of daily living: the role of low normal cognitive function in elderly nuns. *Am J Public Health.* 1996;86(1):62-66.
10. Vu LN, Dean MJ, Mwamburi M, Au R, Qiu WQ. Executive function and mortality in homebound elderly adults. *J Am Geriatr Soc.* 2013;61(12):2128-2134.
11. Miranda-Castillo C, Woods B, Galboda K, Oomman S, Olojugba C, Orrell M. Unmet needs, quality of life and support networks of people with dementia living at home. *Health and quality of life outcomes.* 2010;8:132.
12. Clinical Practice Guidelines for Quality Palliative Care. Richmond, VA: National Coalition for Hospice and Palliative Care;2018.
13. Setter SM, Neumiller JJ, Weeks DL, Borson S, Scanlan JM, Sonnett TE. Screening for undiagnosed cognitive impairment in homebound older adults. *Consult Pharm.* 2009;24(4):299-305.

sp.12. Numerator Statement: Submission Criteria 1 - Newly enrolled:

Number of newly enrolled home-based primary care and palliative care patients for whom cognitive assessment was performed

Submission Criteria 2 - Established patients:

Number of established home-based primary care and palliative care patients for whom cognitive assessment was performed annually

sp.14. Denominator Statement: Submission Criteria 1 - Newly enrolled:

Total number of newly enrolled (and active) home-based primary care and palliative care patients. The enrollment period includes 90 days from the first recorded new patient E&M visit code with the practice. *A patient is considered active if they have at least 2 E&M visit codes with a provider from the practice within the reporting

period.

Submission Criteria 2 - Established patients:

Total number of established enrolled and active home-based primary care and palliative care patients. A patient is considered established if they have at least 2 Established Patient Encounter E&M visit codes with a provider from the practice within the reporting period.

sp.16. Denominator Exclusions: Submission Criteria 1 - Newly enrolled:

Denominator Exceptions:

1. Most recent new patient encounter (with subsequent established patient encounter) occurs within the last 90 days of the measurement period
2. Documentation of medical reason(s) for not assessing cognition (eg, patient with very advanced stage dementia, other medical reason) or Documentation of patient reason(s) for not assessing cognition

Submission Criteria 2 - Established patients:

There are no exceptions or exclusions for this submission criteria.

Measure Type: Process

sp.28. Data Source:

Registry Data

sp.07. Level of Analysis:

Clinician: Individual

IF Endorsement Maintenance – Original Endorsement Date: 2019-10-23 04:44 PM

Most Recent Endorsement Date: 10/23/2019 4:44:15 PM

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

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

sp.03. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?:

1. 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

1ma.01. Indicate whether there is new evidence about the measure since the most recent maintenance evaluation. If yes, please briefly summarize the new evidence, and ensure you have updated entries in the Evidence section as needed.

[Response Begins]

[Response Ends]

Please separate added or updated information from the most recent measure evaluation within each question response in the Importance to Measure and Report: Evidence section. For example:

Current Submission:

Updated evidence information here.

Previous (Year) Submission:

Evidence from the previous submission here.

1a.01. Provide a logic model.

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.

[Response Begins]

[Response Ends]

1a.02. Select the type of source for 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.

[Response Begins]

[Response Ends]

If the evidence is not based on a systematic review, skip to the end of the section and do not complete the repeatable question group below. If you wish to include more than one systematic review, add additional tables by clicking "Add" after the final question in the group.

Evidence - Systematic Reviews Table (Repeatable)

Group 1 - Evidence - Systematic Reviews Table

1a.03. Provide the title, author, date, citation (including page number) and URL for the systematic review.

[Response Begins]

[Response Ends]

1a.04. Quote the guideline or recommendation verbatim about the process, structure or intermediate outcome being measured. If not a guideline, summarize the conclusions from the systematic review.

[Response Begins]

[Response Ends]

1a.05. Provide the grade assigned to the evidence associated with the recommendation, and include the definition of the grade.

[Response Begins]

[Response Ends]

1a.06. Provide all other grades and definitions from the evidence grading system.

[Response Begins]

[Response Ends]

1a.07. Provide the grade assigned to the recommendation, with definition of the grade.

[Response Begins]

[Response Ends]

1a.08. Provide all other grades and definitions from the recommendation grading system.

[Response Begins]

[Response Ends]

1a.09. Detail the quantity (how many studies) and quality (the type of studies) of the evidence.

[Response Begins]

[Response Ends]

1a.10. Provide the estimates of benefit, and consistency across studies.

[Response Begins]

[Response Ends]

1a.11. Indicate what, if any, harms were identified in the study.

[Response Begins]

[Response Ends]

1a.12. Identify any new studies conducted since the systematic review, and indicate whether the new studies change the conclusions from the systematic review.

[Response Begins]

[Response Ends]

1a.13. If source of evidence is NOT from a clinical practice guideline, USPSTF, or systematic review, describe the evidence on which you are basing the performance measure.

[Response Begins]

[Response Ends]

1a.14. Briefly synthesize the evidence that supports the measure.

[Response Begins]

[Response Ends]

1a.15. Detail the process used to identify the evidence.

[Response Begins]

[Response Ends]

1a.16. Provide the citation(s) for the evidence.

[Response Begins]

[Response Ends]

1b.01. Briefly explain the rationale for this measure.

Explain how the measure will improve the quality of care, and list the benefits or improvements in quality envisioned by use of this measure.

[Response Begins]

Functional limitations, frailty, and homebound status render approximately 4 million US adults unable to easily access office-based primary care. (1) Compared to the non-homebound population, homebound individuals have twice as many chronic conditions, are nearly two to two-and-a-half times more likely to have been hospitalized in the past year, and are among the most costly and sickest patients in the US healthcare system. (2-4) Further, one study of Medicare beneficiaries found that 50.7% are homebound in the last year of life, suggesting that half are unable to receive office-based care at a time when they may have the most need. (5) To address these care access and cost issues, home-based primary and palliative care is a model growing with the support of providers and policymakers alike. (2) Between 2000 and 2006, the number of physician house calls to Medicare beneficiaries more than doubled while the number of providers practicing home care has decreased. (6) This suggests a growing emphasis on home-based primary and palliative care as a focused medical specialty, with home care providers seeing increasingly more patients in their homes than before. (3,6) Seizing on the opportunities inherent in this emerging practice model, Centers for Medicare and Medicaid Services (CMS) has invested millions of dollars into the Independence at Home (IAH) Demonstration, which tests a payment incentive and service delivery model for home based primary care. (2) Outside of this demonstration project, however, there are no currently endorsed performance measures specific to home-based primary care, leaving a growing, high priority practice model with disease-specific measures that do not take into account the clinical complexity and multi-morbidity of the homebound population. (3)

It is estimated that 40.5% of homebound elderly have psychiatric disorders, with the two most common being dementia and depression. (1) According to one estimate, dementia, including Alzheimer's disease, affects 29% of this population. (7) Depression, which often occurs concomitantly with cognitive impairment (8), affects homebound individuals at a rate three times the general primary care population aged 60 years and older. (1) Worsening cognitive functioning over time is a major risk factor for physical decline and further loss of independence. This finding is particularly salient in the transition from borderline intact functioning to impaired functioning. (8,9) In addition to worsening functional status, executive function impairment is also associated with overall mortality in the homebound population. (10) Although it is not always possible to stop the downward trajectory of cognitive decline, regular assessments give providers clinical information that can be used to assist the homebound patient and caregivers in preparing for possible physical deterioration, potentially allowing them to continue to stay in their homes longer. (8) Regular and systematic assessment of cognition in the elderly and homebound population is supported in gerontological literature, quality of life literature, and clinical practice guidelines. (8,11,12) Despite these recommendations, an opportunity for improvement remains. One study of patients receiving home care found that 17% of patients have cognitive impairments undiagnosed by their home care providers. (13) Further, 2017-2018 registry data for this measure, based on 220 providers and 63,849 quality encounters indicate an average performance rate of 40% with a range from 6% to 80%. This variability and low rate of performance indicate that home-based primary care and palliative care providers have room to improve on cognitive assessment rates in care of the homebound population. Achieving high performance should ultimately lead to enhanced patient-centered care in the home and improved outcomes for this complex population and is a crucial first step in achieving many high priority quality of care standards identified by the National Home-Based Primary and Palliative Care Network. (3)

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2. Report to Congress: Evaluation of the Independence at Home Demonstration. Centers for Medicare and Medicaid Services;2018.
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6. Peterson LE, Landers SH, Bazemore A. Trends in physician house calls to Medicare beneficiaries. *J Am Board Fam Med*. 2012;25(6):862-868.
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10. Vu LN, Dean MJ, Mwamburi M, Au R, Qiu WQ. Executive function and mortality in homebound elderly adults. *J Am Geriatr Soc*. 2013;61(12):2128-2134.
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12. Clinical Practice Guidelines for Quality Palliative Care. Richmond, VA: National Coalition for Hospice and Palliative Care;2018.
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[Response Ends]

1b.02. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis.

Include mean, std dev, min, max, interquartile range, and 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 (4b) under Usability and Use.

[Response Begins]

Mean: 0.40

Standard deviation: 0.19

Minimum: 0.06

Maximum: 0.80

Interquartile range: 0.30 (0.54-0.24)

Data source: 2017-2018 registry data from the National Home-Based Primary Care and Palliative Care Registry

Number of measured entities: 220 providers; 63,849 quality events (patients)

Dates of data: 11/1/2017-10/31/2018

[Response Ends]

1b.03. If no or limited performance data on the measure as specified is reported above, 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. Include citations.

[Response Begins]

There was minimal literature identified that specifically addressed the rate of completion of a cognitive evaluation for home based primary care and palliative care patients. One study reported that 17% of homebound patients without a diagnosis of dementia failed the Mini-Cog, a widely accepted assessment of cognitive functioning.

Setter SM, Neumiller JJ, Weeks DL, Borson S, Scanlan JM, Sonnett TE. Screening for undiagnosed cognitive impairment in homebound older adults. Consult Pharm. 2009;24(4):299-305.

[Response Ends]

1b.04. 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.

Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included. Include mean, std dev, min, max, interquartile range, and scores by decile. 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 (4b) under Usability and Use.

[Response Begins]

Disparities in numerator performance are not available for the measure as specified.

[Response Ends]

1b.05. If no or limited data on disparities from the measure as specified is reported above, 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 above.

[Response Begins]

It is well established that minority status and educational attainment are related to decreased cognitive function in older age. (1-4) This research demonstrates disparities in cognition. It is also known that patients of racial and ethnic minorities comprise a significant proportion of those receiving home-based primary and palliative care. (5,6)

However, we are not aware of any publications specifically related to the evaluation of cognition among home-based primary care and palliative care patients.

1. Alley D, Suthers K, Crimmins E. Education and cognitive decline in older Americans: results from the AHEAD sample. *Res Aging*. 2007;29(1):73–94. doi:10.1177/0164027506294245
2. Masel MC, Peek MK. Ethnic differences in cognitive function over time. *Ann Epidemiol*. 2009;19(11):778–783. doi:10.1016/j.annepidem.2009.06.008
3. Schwartz BS, Glass TA, Bolla KI, et al. Disparities in cognitive functioning by race/ethnicity in the Baltimore Memory Study. *Environ Health Perspect*. 2004;112(3):314–320. doi:10.1289/ehp.6727
4. Zsembik BA, Peek MK. Race differences in cognitive functioning among older adults. *J Gerontol*. 2001 Sep;56(5):S266–74. doi.org/10.1093/geronb/56.5.S266
5. Report to Congress: Evaluation of the Independence at Home Demonstration. Centers for Medicare and Medicaid Services;2018.
6. Klein S, Hostetter M, McCarthy D. An overview of home-based primary care: Learning from the field. *Issue Brief (Commonw Fund)*. 2017; 15:1-20.

[Response Ends]

2. 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.

spma.01. Indicate whether there are changes to the specifications since the last updates/submission. If yes, update the specifications in the Measure Specifications section of the Measure Submission Form, and explain your reasoning for the changes below.

[Response Begins]

[Response Ends]

spma.02. Briefly describe any important changes to the measure specifications since the last measure update and provide a rationale.

For annual updates, please explain how the change in specifications affects the measure results. If a material change in specification is identified, data from re-testing of the measure with the new specifications is required for early maintenance review.

For example, specifications may have been updated based on suggestions from a previous NQF CDP review.

[Response Begins]

N/A

[Response Ends]

sp.01. Provide the measure title.

Measure titles should be concise yet convey who and what is being measured (see [What Good Looks Like](#)).

[Response Begins]

Evaluation of Cognitive Function for Home-Based Primary Care and Palliative Care Patients

[Response Ends]

sp.02. Provide a brief description of the measure.

Including type of score, measure focus, target population, timeframe, (e.g., Percentage of adult patients aged 18-75 years receiving one or more HbA1c tests per year).

[Response Begins]

Percentage of actively enrolled home-based primary care and palliative care patients who received an assessment of their cognitive ability.

[Response Ends]

sp.04. Check all the clinical condition/topic areas that apply to your measure, below.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- *Surgery: General*

[Response Begins]

[Response Ends]

sp.05. Check all the non-condition specific measure domain areas that apply to your measure, below.

[Response Begins]

[Response Ends]

sp.06. Select one or more target population categories.

Select only those target populations which can be stratified in the reporting of the measure's result.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- *Populations at Risk: Populations at Risk*

[Response Begins]

[Response Ends]

sp.07. Select the levels of analysis that apply to your measure.

Check ONLY the levels of analysis for which the measure is SPECIFIED and TESTED.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- *Clinician: Clinician*
- *Population: Population*

[Response Begins]

Clinician: Individual

[Response Ends]

sp.08. Indicate the care settings that apply to your measure.

Check ONLY the settings for which the measure is SPECIFIED and TESTED.

[Response Begins]

Home Care

Other

[Response Ends]

sp.09. 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. If no URL is available, indicate "none available".

[Response Begins]

The measure specifications are included in this submission. Additional measure details may be found at https://www.medconcert.com/content/medconcert/NHBCPCR/2019_National_Home-Based_Primary_Care_&_Palliative_Care_Measure_Specific.pdf

[Response Ends]

sp.12. Attach the data dictionary, code table, or value sets (and risk model codes and coefficients when applicable). Excel formats (.xlsx or .csv) are preferred.

Attach an excel or csv file; if this poses an issue, [contact staff](#). Provide descriptors for any codes. Use one file with multiple worksheets, if needed.

[Response Begins]

No data dictionary/code table – all information provided in the submission form

[Response Ends]

sp.13. State the numerator.

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.

[Response Begins]

Submission Criteria 1 - Newly enrolled:

Number of newly enrolled home-based primary care and palliative care patients for whom cognitive assessment was performed

Submission Criteria 2 - Established patients:

Number of established home-based primary care and palliative care patients for whom cognitive assessment was performed annually

[Response Ends]

sp.14. Provide details needed to calculate the numerator.

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 sp.11.

[Response Begins]

Time Period for Data Collection: At least once during the measurement period

GUIDANCE:

Cognitive assessment must be performed with validated tools such as the Montreal Cognitive Assessment tool, the Mini-Mental State Examination, the Mini-Cog, etc.

Use of a standardized tool or instrument to assess cognition other than those listed will meet numerator performance.

Submission Criteria 1 - Newly enrolled:

Report NHBPC14.NUMER.1.YES - Cognitive assessment performed and documented within 90 days of New Patient Encounter

Submission Criteria 2 - Established patients:

Report NHBPC14.NUMER.3.YES - Cognitive assessment performed and documented within performance period

[Response Ends]

sp.15. State the denominator.

Brief, narrative description of the target population being measured.

[Response Begins]

Submission Criteria 1 - Newly enrolled:

Total number of newly enrolled (and active) home-based primary care and palliative care patients. The enrollment period includes 90 days from the first recorded new patient E&M visit code with the practice. *A patient is considered active if they have at least 2 E&M visit codes with a provider from the practice within the reporting period.

Submission Criteria 2 - Established patients:

Total number of established enrolled and active home-based primary care and palliative care patients. A patient is considered established if they have at least 2 Established Patient Encounter E&M visit codes with a provider from the practice within the reporting period.

[Response Ends]

sp.16. Provide details needed to calculate the denominator.

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 sp.11.

[Response Begins]

Time Period for Data Collection: 12 consecutive months

Submission Criteria 1 - Newly enrolled:

New Patient Encounter during the performance period (CPT): 99324, 99325, 99326, 99327, 99328, 99341, 99342, 99343, 99344, 99345

AND

At least one subsequent Established Patient Encounter during the performance period (CPT): 99334, 99335, 99336, 99337, 99347, 99348, 99349, 99350, 99497

Submission Criteria 2 - Established patients:

At least two instances of Established Patient Encounter (CPT): 99334, 99335, 99336, 99337, 99347, 99348, 99349, 99350, 99497

[Response Ends]

sp.17. Describe the denominator exclusions.

Brief narrative description of exclusions from the target population.

[Response Begins]

Submission Criteria 1 - Newly enrolled:

Denominator Exceptions:

1. Most recent new patient encounter (with subsequent established patient encounter) occurs within the last 90 days of the measurement period
2. Documentation of medical reason(s) for not assessing cognition (eg, patient with very advanced stage dementia, other medical reason) or Documentation of patient reason(s) for not assessing cognition

Submission Criteria 2 - Established patients:

There are no exceptions or exclusions for this submission criteria.

[Response Ends]

sp.18. Provide details needed to calculate the denominator exclusions.

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 sp.11.

[Response Begins]

Time Period for Data Collection: During the measurement period.

Submission Criteria 1 - Newly enrolled:

Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. This measure has been developed using the PCPI exception methodology, which uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure Evaluation of Cognitive Function for Home-Based Primary Care and Palliative Care Patients, exceptions may include most recent new patient encounter (with subsequent established patient encounter) occurs within the last 90 days of the measurement period; documentation of medical reason(s) for not assessing cognition (eg, patient with very advanced stage dementia, other medical reason); or documentation of patient reason(s) for not assessing cognition. Although this methodology does not require the external reporting of more detailed exception data, it is recommended that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The UCSF, JHU School of Medicine, and the PCPI also advocate the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.

Exception 1 is determined by date(s) of encounter(s).

Submission Criteria 2 - Established patients:
Not applicable.

[Response Ends]

sp.19. Provide all information required to stratify the measure results, if necessary.

Include 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 in the Data Dictionary field.

[Response Begins]

Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now the National Academies) and NQF, the University of California San Francisco, and Johns Hopkins University School of Medicine encourage collection of race and ethnicity data as well as the results of this measure to be stratified by race, ethnicity, administrative sex, and payer.

[Response Ends]

sp.20. Is this measure adjusted for socioeconomic status (SES)?

[Response Begins]

[Response Ends]

sp.21. Select the risk adjustment type.

Select type. Provide specifications for risk stratification and/or risk models in the Scientific Acceptability section.

[Response Begins]

No risk adjustment or risk stratification

[Response Ends]

sp.22. Select the most relevant type of score.

Attachment: If available, please provide a sample report.

[Response Begins]

Rate/proportion

[Response Ends]

sp.23. Select the appropriate interpretation of the measure score.

Classifies interpretation of score according to whether better quality or resource use is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score

[Response Begins]

Better quality = Higher score

[Response Ends]

sp.24. Diagram or describe the calculation of the measure score as an ordered sequence of steps.

Identify the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period of data, aggregating data; risk adjustment; etc.

[Response Begins]

This measure is comprised of two populations but is intended to result in one reporting rate. The reporting rate is the aggregate of Submission Criteria 1 (Newly enrolled) and Submission Criteria 2 (Established patients), resulting in a single performance rate. For the purposes of this measure, the single performance rate can be calculated as follows:

Performance Rate = (Numerator 1 + Numerator 2) / [(Denominator 1 – Denominator Exceptions 1) + (Denominator 2)]

To calculate performance rates for Submission Criteria 1 - Newly enrolled:

1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).
2. From the patients within the initial population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
3. From the patients within the denominator, find the patients who meet the numerator criteria (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: most recent new patient encounter (with subsequent established patient encounter) occurs within the last 90 days of the measurement period; documentation of medical reason(s) for not assessing cognition (eg, patient with very advanced stage dementia, other medical reason); or documentation of patient reason(s) for not assessing cognition]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. --Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (ie, percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

To calculate performance rates for Submission Criteria 2 - Established patients:

1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).
2. From the patients within the initial population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
3. From the patients within the denominator, find the patients who meet the numerator criteria (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.

If the patient does not meet the numerator, this case represents a quality failure.

[Response Ends]

sp.27. If measure testing is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.

Examples of samples used for testing:

- Testing may be conducted on a sample of the accountable entities (e.g., hospital, physician). The analytic unit specified for the particular measure (e.g., physician, hospital, home health agency) determines the sampling strategy for scientific acceptability testing.
- The sample should represent the variety of entities whose performance will be measured. The [2010 Measure Testing Task Force](#) recognized that the samples used for reliability and validity testing often have limited generalizability because measured entities volunteer to participate. Ideally, however, all types of entities whose performance will be measured should be included in reliability and validity testing.
- The sample should include adequate numbers of units of measurement and adequate numbers of patients to answer the specific reliability or validity question with the chosen statistical method.
- When possible, units of measurement and patients within units should be randomly selected.

[Response Begins]

Not applicable. The measure is not based on a sample.

[Response Ends]

sp.30. Select only the data sources for which the measure is specified.

[Response Begins]

Registry Data

[Response Ends]

sp.31. Identify the specific data source or data collection instrument.

For example, provide the name of the database, clinical registry, collection instrument, etc., and describe how data are collected.

[Response Begins]

The data source is the National Home-Based Primary Care & Palliative Care Registry.

[Response Ends]

sp.32. Provide the data collection instrument.

[Response Begins]

No data collection instrument provided

[Response Ends]

2ma.01. Indicate whether additional empirical reliability testing at the accountable entity level has been conducted. If yes, please provide results in the following section, Scientific Acceptability: Reliability - Testing. Include information on all testing conducted (prior testing as well as any new testing).

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous Submission:

Testing from the previous submission here.

[Response Begins]

[Response Ends]

2ma.02. Indicate whether additional empirical validity testing at the accountable entity level has been conducted. If yes, please provide results in the following section, Scientific Acceptability: Validity - Testing. Include information on all testing conducted (prior testing as well as any new testing).

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous Submission:

Testing from the previous submission here.

[Response Begins]

[Response Ends]

2ma.03. For outcome, patient-reported outcome, resource use, cost, and some process measures, risk adjustment/stratification may be conducted. Did you perform a risk adjustment or stratification analysis?

[Response Begins]

[Response Ends]

2ma.04. For maintenance measures in which risk adjustment/stratification has been performed, indicate whether additional risk adjustment testing has been conducted since the most recent maintenance evaluation. This may include updates to the risk adjustment analysis with additional clinical, demographic, and social risk factors.

Please update the Scientific Acceptability: Validity - Other Threats to Validity section.

Note: This section must be updated even if social risk factors are not included in the risk adjustment strategy.

[Response Begins]

[Response Ends]

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate fields in the Scientific Acceptability sections of the Measure Submission Form.

- Measures must be tested for all the data sources and levels of analyses that are specified. If there is more than one set of data specifications or more than one level of analysis, contact NQF staff about how to present all the testing information in one form.
- All required sections must be completed.
- For composites with outcome and resource use measures, Questions 2b.23-2b.37 (Risk Adjustment) also must be completed.
- If specified for multiple data sources/sets of specifications (e.g., claims and EHRs), Questions 2b.11-2b.13 also must be completed.
- An appendix for supplemental materials may be submitted (see Question 1 in the Additional section), but there is no guarantee it will be reviewed.
- Contact NQF staff with any questions. Check for resources at the [Submitting Standards webpage](#).
- For information on the most updated guidance on how to address social risk factors variables and testing in this form refer to the release notes for the [2021 Measure Evaluation Criteria and Guidance](#).

Note: The information provided in this form is intended to aid the Standing Committee and other stakeholders in understanding to what degree the testing results for this measure meet NQF's evaluation criteria for testing.

2a. Reliability testing demonstrates 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. For instrument-based measures (including PRO-PMs) and composite performance measures, reliability should be demonstrated for the computed performance score.

2b1. Validity testing demonstrates that the measure data elements are correct and/or the measure score correctly reflects the quality of care provided, adequately identifying differences in quality. For instrument based measures (including PRO-PMs) and composite performance measures, validity should be demonstrated for the computed performance score.

2b2. Exclusions are supported by the clinical evidence and are of sufficient frequency to warrant inclusion in the specifications of the measure;

AND

If patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that the exclusion impacts performance on the measure; in such cases, the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

2b3. For outcome measures and other measures when indicated (e.g., resource use):

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified; is based on patient factors (including clinical and social risk factors) that influence the measured outcome and are present at start of care; 14,15 and has demonstrated adequate discrimination and calibration

OR

- rationale/data support no risk adjustment/ stratification.

2b4. Data analysis of computed measure scores demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful 16 differences in performance;

OR

there is evidence of overall less-than-optimal performance.

2b5. If multiple data sources/methods are specified, there is demonstration they produce comparable results.

2b6. Analyses 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 non-responders) and how the specified handling of missing data minimizes bias.

2c. For composite performance measures, empirical analyses support the composite construction approach and demonstrate that:

2c1. the component measures fit the quality construct and add value to the overall composite while achieving the related objective of parsimony to the extent possible; and

2c2. the aggregation and weighting rules are consistent with the quality construct and rationale while achieving the related objective of simplicity to the extent possible.

(if not conducted or results not adequate, justification must be submitted and accepted)

Definitions

Reliability testing applies to both the data elements and computed measure score. Examples of reliability testing for data elements include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing of the measure score addresses precision of measurement (e.g., signal-to-noise).

Validity testing applies to both the data elements and computed measure score. Validity testing of data elements typically analyzes agreement with another authoritative source of the same information. Examples of validity testing of the measure score include, but are not limited to: testing hypotheses that the measures scores indicate quality of care, e.g., measure scores are different for groups known to have differences in quality assessed by another valid quality measure or method; correlation of measure scores with another valid indicator of quality for the specific topic; or relationship to conceptually related measures (e.g., scores on process measures to scores on outcome measures). Face validity of the measure score as a quality indicator may be adequate if accomplished through a systematic and transparent process, by identified experts, and explicitly addresses whether performance scores resulting from the measure as specified can be used to distinguish good from poor quality. The degree of consensus and any areas of disagreement must be provided/discussed.

Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, variability of exclusions across providers, and sensitivity analyses with and without the exclusion.

Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

Risk factors that influence outcomes should not be specified as exclusions.

With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74 percent v. 75 percent) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v.\$5,025) is practically meaningful. Measures with overall less-than-optimal performance may not demonstrate much variability across providers.

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous (Year) Submission:

Testing from the previous submission here.

2a.01. Select only the data sources for which the measure is tested.

[Response Begins]

[Response Ends]

2a.02. 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).

[Response Begins]

[Response Ends]

2a.03. Provide the dates of the data used in testing.

Use the following format: "MM-DD-YYYY - MM-DD-YYYY"

[Response Begins]

[Response Ends]

2a.04. Select the levels of analysis for which the measure is tested.

Testing must be provided for all the levels specified and intended for measure implementation, e.g., individual clinician, hospital, health plan.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- Clinician: Clinician
- Population: Population

[Response Begins]

[Response Ends]

2a.05. List the measured entities 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.

[Response Begins]

[Response Ends]

2a.06. Identify the number and descriptive characteristics of patients included in the analysis (e.g., age, sex, race, diagnosis), separated by level of analysis and data source; if a sample was used, describe how patients were selected for inclusion in the sample.

If there is a minimum case count used for testing, that minimum must be reflected in the specifications.

[Response Begins]

[Response Ends]

2a.07. 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.

[Response Begins]

[Response Ends]

2a.08. List 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.

[Response Begins]

[Response Ends]

Note: If accuracy/correctness (validity) of data elements was empirically tested, separate reliability testing of data elements is not required – in 2a.09 check patient or encounter-level data; in 2a.010 enter “see validity testing section of data elements”; and enter “N/A” for 2a.11 and 2a.12.

2a.09. Select the level of reliability testing conducted.

Choose one or both levels.

[Response Begins]

[Response Ends]

2a.10. For each level of reliability testing 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.

[Response Begins]

[Response Ends]

2a.11. For each level of reliability testing checked above, what were the statistical results from reliability testing?

For example, provide the percent agreement and kappa for the critical data elements, or distribution of reliability statistics from a signal-to-noise analysis. For score-level reliability testing, when using a signal-to-noise analysis, more than just one overall statistic should be reported (i.e., to demonstrate variation in reliability across providers). If a particular method yields only one statistic, this should be explained. In addition, reporting of results stratified by sample size is preferred (pg. 18, [NQF Measure Evaluation Criteria](#)).

[Response Begins]

[Response Ends]

2a.12. Interpret the results, in terms of how they demonstrate reliability.

(In other words, what do the results mean and what are the norms for the test conducted?)

[Response Begins]

[Response Ends]

2b.01. Select the level of validity testing that was conducted.

[Response Begins]

[Response Ends]

2b.02. 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.

[Response Begins]

[Response Ends]

2b.03. Provide the statistical results from validity testing.

Examples may include correlations or t-test results.

[Response Begins]

[Response Ends]

2b.04. Provide 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?)

[Response Begins]

[Response Ends]

2b.05. 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 in Importance to Measure and Report: Gap in Care/Disparities.

[Response Begins]

[Response Ends]

2b.06. Describe the statistical results from testing the ability to identify statistically significant and/or clinically/practically meaningful differences in performance measure scores across measured entities.

Examples may include 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.

[Response Begins]

[Response Ends]

2b.07. Provide 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.

In other words, what do the results mean in terms of statistical and meaningful differences?

[Response Begins]

[Response Ends]

2b.08. Describe the method of testing conducted to identify the extent and distribution of missing data (or non-response) and demonstrate that performance results are not biased due to systematic missing data (or differences between responders and non-responders). Include how the specified handling of missing data minimizes bias.

Describe the steps—do not just name a method; what statistical analysis was used.

[Response Begins]

[Response Ends]

2b.09. Provide the overall frequency of missing data, the distribution of missing data across providers, and the results from testing related to missing data.

For example, provide results of sensitivity analysis of the effect of various rules for missing data/non-response. If no empirical sensitivity analysis was conducted, identify the approaches for handling missing data that were considered and benefits and drawbacks of each).

[Response Begins]

[Response Ends]

2b.10. Provide 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 non-responders), and how the specified handling of missing data minimizes bias.

In other words, 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 was conducted, justify the selected approach for missing data.

[Response Begins]

[Response Ends]

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 eQMs). 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.

2b.11. Indicate whether there is more than one set of specifications for this measure.

[Response Begins]

[Response Ends]

2b.12. 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. Indicate what statistical analysis was used.

[Response Begins]

[Response Ends]

2b.13. Provide the statistical results from testing comparability of performance scores for the same entities when using different data sources/specifications.

Examples may include correlation, and/or rank order.

[Response Begins]

[Response Ends]

2b.14. Provide your interpretation of the results in terms of the differences in performance measure scores for the same entities across the different data sources/specifications.

In other words, what do the results mean and what are the norms for the test conducted.

[Response Begins]

[Response Ends]

2b.15. Indicate whether the measure uses exclusions.

[Response Begins]

[Response Ends]

2b.16. Describe the method of testing exclusions and what was tested.

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?

[Response Begins]

[Response Ends]

2b.17. Provide 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.

[Response Begins]

[Response Ends]

2b.18. Provide your interpretation of the results, in terms of demonstrating that exclusions are needed to prevent unfair distortion of performance results.

In other words, 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.

[Response Begins]

[Response Ends]

2b.19. Check all methods used to address risk factors.

[Response Begins]

[Response Ends]

2b.20. If using statistical risk models, provide detailed risk model specifications, including the risk model method, risk factors, risk factor data sources, coefficients, equations, codes with descriptors, and definitions.

[Response Begins]

[Response Ends]

2b.21. If an outcome or resource use measure is not risk-adjusted or stratified, provide rationale and analyses to demonstrate that controlling for differences in patient characteristics (i.e., case mix) is not needed to achieve fair comparisons across measured entities.

[Response Begins]

[Response Ends]

2b.22. Select all applicable resources and methods used to develop the conceptual model of how social risk impacts this outcome.

[Response Begins]

[Response Ends]

2b.23. Describe the conceptual and statistical methods and criteria used to test and select patient-level risk factors (e.g., clinical factors, social risk factors) used in the statistical risk model or for stratification by risk.

Please be sure to address the following: potential factors identified in the literature and/or expert panel; regression analysis; statistical significance of $p < 0.10$ or other statistical tests; correlation of x or higher. Patient factors should be present at the start of care, if applicable. Also discuss any “ordering” of risk factor inclusion; note whether social risk factors are added after all clinical factors. Discuss any considerations regarding data sources (e.g., availability, specificity).

[Response Begins]

[Response Ends]

2b.24. Detail the statistical results of the analyses used to test and select risk factors for inclusion in or exclusion from the risk model/stratification.

[Response Begins]

[Response Ends]

2b.25. Describe the analyses and interpretation resulting in the decision to select or not select social risk factors.

Examples may include prevalence of the factor across measured entities, availability of the data source, empirical association with the outcome, contribution of unique variation in the outcome, or assessment of between-unit effects and within-unit effects. Also describe the impact of adjusting for risk (or making no adjustment) on providers at high or low extremes of risk.

[Response Begins]

[Response Ends]

2b.26. 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 control for differences in patient characteristics (i.e., case mix) below. If stratified ONLY, enter “N/A” for questions about the statistical risk model discrimination and calibration statistics.

Validation testing should be conducted in a data set that is separate from the one used to develop the model.

[Response Begins]

[Response Ends]

2b.27. Provide risk model discrimination statistics.

For example, provide c-statistics or R-squared values.

[Response Begins]

[Response Ends]

2b.28. Provide the statistical risk model calibration statistics (e.g., Hosmer-Lemeshow statistic).

[Response Begins]

[Response Ends]

2b.29. Provide the risk decile plots or calibration curves used in calibrating the statistical risk model.

The preferred file format is .png, but most image formats are acceptable.

[Response Begins]

[Response Ends]

2b.30. Provide the results of the risk stratification analysis.

[Response Begins]

[Response Ends]

2b.31. Provide your interpretation of the results, in terms of demonstrating adequacy of controlling for differences in patient characteristics (i.e., case mix).

In other words, what do the results mean and what are the norms for the test conducted?

[Response Begins]

[Response Ends]

2b.32. Describe any additional testing conducted to justify the risk adjustment approach used in specifying the measure.

Not required but would provide additional support of adequacy of the risk model, e.g., testing of risk model in another data set; sensitivity analysis for missing data; other methods that were assessed.

[Response Begins]

[Response Ends]

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.

3.01. Check all methods below that are used to generate the data elements needed to compute the measure score.

[Response Begins]

Coded by someone other than person obtaining original information (e.g., DRG, ICD-10 codes on claims)

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

[Response Ends]

3.02. Detail to what extent the specified data elements are available electronically in defined fields.

In other words, indicate whether data elements that are needed to compute the performance measure score are in defined, computer-readable fields.

[Response Begins]

ALL data elements are in defined fields in electronic clinical data (e.g., clinical registry, nursing home MDS, home health OASIS)

[Response Ends]

3.03. 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 data elements not from electronic sources.

[Response Begins]

[Response Ends]

3.04. Describe any efforts to develop an eCQM.

[Response Begins]

[Response Ends]

3.06. 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.

[Response Begins]

[Response Ends]

Consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

3.07. Detail 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),

Attach the fee schedule here, if applicable.

[Response Begins]

The Measures, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes (e.g., use by healthcare providers in connection with their practice). Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and The Johns Hopkins University and the University of California, San Francisco.

[Response Ends]

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.

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making.

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 demonstrating performance improvement.

4a.01. Check all current uses. For each current use checked, please provide:

Name of program and sponsor

URL

Purpose

Geographic area and number and percentage of accountable entities and patients included

Level of measurement and setting

[Response Begins]

Public Reporting

Payment Program

Professional Certification or Recognition Program

Quality Improvement with Benchmarking (external benchmarking to multiple organizations)

Quality Improvement (Internal to the specific organization)

[Response Ends]

4a.02. Check all planned uses.

[Response Begins]

Public reporting

[Response Ends]

4a.03. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing), explain why the measure is not in use.

For example, do policies or actions of the developer/steward or accountable entities restrict access to performance results or block implementation?

[Response Begins]

N/A

[Response Ends]

4a.04. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes: used in any accountability application within 3 years, and publicly reported within 6 years of initial endorsement.

A 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.

[Response Begins]

According to the CY 2019 Quality Payment Program final rule, CMS intends to “make all measures under MIPS quality performance category available for public reporting on Physician Compare in the transition year of the Quality Payment Program, as technically feasible.” These measures include those reported via all available submission methods for MIPS-eligible clinicians and groups.

[Response Ends]

4a.05. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

Detail 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.

[Response Begins]

The measure development and maintenance process used by the measure developers was a rigorous, evidence-based process that adhered to several key principles, including the following which underscore the role those being measured have played in the development and maintenance process and in providing feedback based on measure implementation: (1)

Collaborative Approach to Measure Development

The measure was developed and maintained through iterative involvement by and input from clinical practices, research (2-5), as well as cross-specialty, multi disciplinary technical expert panels. Representatives of relevant clinical practices of home-based primary care and home-based palliative care, and the specialties of geriatrics, palliative medicine, internal medicine and family medicine participated in our expert panels to advise us throughout the measure development process and as questions arose during measure implementation. Additionally, stakeholders participated in our panels as equal contributors to the measure development process, including stakeholders from relevant professional societies (The American Academy of Home Care Medicine, The American Geriatrics Society, and the American Academy of Hospice and Palliative Medicine). The measure developers also included on its panels individuals representing the perspectives of patients, consumers, private health plans, and employers, including organizations such as the Kaiser Family Foundation, the AARP Public Policy Institute, and the National Partnership for Women and Families. Measure methodologists and coding and informatics experts are also considered important members of the expert panel and were included. This broad-based approach to measure development maximizes the input from those being measured and other stakeholders to develop evidence-based, feasible and clinically meaningful measures.

Data from the registry has been shared with the 220 providers involved in submitting data. They receive monthly reports of their performance to assist with their implementation. In addition, the measure developers work with providers and practices to engage in practice-based quality improvement activities using performance data from these measures.

Members of measure development technical expert panel:

Gresham Bayne, MD, Nant Health; Lynn Beatty, MD, Visiting Physicians Association; Peter A. Boling, MD, Virginia

Commonwealth University; Tom Cornwell, MD, Home Centered Care Institute; Eric De Jonge, MD, Medstar Washington Hospital Center Medical House Call Program; Tom Edes, MD, FACP, U.S. Department of Veterans Affairs; Lynn Friss Feinberg, AARP Public Policy Institute; Alanna Goldstein, MPH, American Geriatrics Society; Jen Hayashi, MD, Johns Hopkins Elder House Call Program; Benneth Husted, DO, Housecall Providers; Julia Jung, CPA, House Call Doctors; Tricia Neuman, ScD, Kaiser Family Foundation; Patricia Tomsco Nay, MD, CMD, American Academy of Hospice and Palliative Medicine; Tom Reed, Senior Advocate Resources; Constance Row, American Academy of Home Care Medicine; Christine Broderick, National Partnership For Women & Families; Theresa Soriano, MD, MPH, Mount Sinai Visiting Doctors Program; Robert Sowislo, Visiting Physicians Association.

Members of the measure validity testing technical panel:

Eric De Jonge, MD, Jen Hayashi, MD, Linda DeCherrie, MD, Steven Landers, MD, Mattan Schuchman, MD, Carla Perissinotto, MD, Thomas Cornwell, MD, Sharon Levine, MD, Carlos Weiss, MD, Mia Yang, MD, Eliza Shulman, DO, MPH

1. Leff B, Carlson CM, Saliba D, Ritchie C. The invisible homebound: setting quality-of-care standards for home-based primary and palliative care. *Health Aff (Millwood)*. 2015;34:21-9.
2. Huber K, Patel K, Garrigues S, Leff B, Ritchie C. Interdisciplinary Teams and Home-Based Medical Care: Secondary Analysis of a National Survey. *J Am Med Dir Assoc*. 2019 Epub ahead of print PubMed PMID: 30738821.
3. Ritchie CS, Leff B, Garrigues SK, Perissinotto C, Sheehan OC, Harrison KL. A Quality of Care Framework for Home-Based Medical Care. *J Am Med Dir Assoc*. 2018;818-823.
4. Sheehan OC, Ritchie CS, Fathi R, Garrigues SK, Saliba D, Leff B. Development of Quality Indicators to Address Abuse and Neglect in Home-Based Primary Care and Palliative Care. *J Am Geriatr Soc*. 2016;64:2577-2584.
5. Fathi R, Sheehan OC, Garrigues SK, Saliba D, Leff B, Ritchie CS. Development of an Interdisciplinary Team Communication Framework and Quality Metrics for Home-Based Medical Care Practices. *J Am Med Dir Assoc*. 2016;:725-729.

[Response Ends]

4a.06. Describe the process for providing measure results, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

[Response Begins]

As indicated in 4a2.1.1 above: Data from the registry has been shared with the 220 providers involved in submitting data. They receive monthly reports of their performance to assist with their implementation. In addition, the measure developers work with providers and practices to engage in practice-based quality improvement activities using performance data from these measures.

[Response Ends]

4a.07. Summarize the feedback on measure performance and implementation from the measured entities and others. Describe how feedback was obtained.

[Response Begins]

Feedback Mechanisms

There are several mechanisms to receive measure-related comments and questions from implementers. Comments may be received via email inquiries sent to the developers via the website of the National Home-based Primary Care and Palliative Care Consortium, which has developed a learning community of practices to use the measures and the QCDR to engage in quality improvement activities using the measure. In addition, comments

may be sent via the QCDR portal. Finally, the CMS annual QCDR self nomination process is a feedback mechanism. As comments and questions are received, they are reviewed by the developers and, if needed, changes are made in the measure. If comments or questions require expert input, these are shared with the development team and technical expert panel to determine if measure modifications may be warranted.

Feasibility Assessments

The developers have obtained feedback from practices via the QCDR on measure feasibility in the following domains: data availability, data accuracy, data standards, and workflow to guide future modifications to the measure. During this process, we regularly receive recommendations to improve the experience of those implementing and reporting on this measure and we follow up on any questions or concerns received by those completing the feasibility assessment. Doing so addresses any issues with interpretation and serves as an important step in the measure development process.

[Response Ends]

4a.08. Summarize the feedback obtained from those being measured.

[Response Begins]

No substantive feedback was received. The measure was well received by the community.

[Response Ends]

4a.09. Summarize the feedback obtained from other users.

[Response Begins]

No substantive feedback was received. The measure was well received by the community.

[Response Ends]

4a.10. Describe how the feedback described has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

[Response Begins]

No substantive feedback was received. The measure was well received by the community.

[Response Ends]

4b.01. You may refer to data provided in Importance to Measure and Report: Gap in Care/Disparities, 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, provide an explanation. 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.

[Response Begins]

The intent of this measure is to improve the care of patients receiving home-based primary care and / or palliative care who have high prevalence of cognitive impairment. (1) In the years 2016, 2017, and 2018, the number of providers reporting on the measure were 303, 271, and 246, respectively, with rates of measure completion at 39.2%, 58.5%, and 31.8%, respectively. These represent a variable trend in reporting and performance. The variable trend may be related to practice management-related issues, including turnover in practice management, need to focus on completion of other quality measures in the context of the need for practices to prioritize their quality improvement focus on measures identified by practice leadership in the context of performance reporting for various CMS quality programs. However, reporting rates represent but one facet of the quality improvement

process.

While the measure developer created the measure with an ultimate goal of improving the quality of care, measurement is a mechanism to drive improvement but does not equate with improvement. Measurement can help identify opportunities for improvement with actual improvement requiring making changes to health care processes and/or structure. In order to promote improvement, quality measurement systems need to provide feedback to front-line clinical staff in as close to real time as possible and at the point of care whenever possible.
(2)

1.Ornstein KA, Leff B, Covinsky KE, Ritchie CS, Federman AD, Roberts L, Kelley AS, Siu AL, Szanton SL. Epidemiology of the Homebound Population in the United States. JAMA Intern Med. 2015 Jul;175(7):1180-6.

2. Conway PH, Mostashari F, Clancy C. The future of quality measurement for improvement and accountability. JAMA. 2013 Jun 5;309(21):2215-6.

[Response Ends]

4b.02. Explain any unexpected findings (positive or negative) during implementation of this measure, including unintended impacts on patients.

[Response Begins]

We have not received reports of unexpected findings resulting from the implementation of this measure. The measure developer has various mechanisms in place for measure users to provide feedback and to identify issues related to the maintenance and implementation of this measure as noted above. We convened several topic-specific technical expert panels comprised of various stakeholders including those being measured to advise us regarding any unexpected findings and actions that can be taken to mitigate them.

[Response Ends]

4b.03. Explain any unexpected benefits realized from implementation of this measure.

[Response Begins]

No unexpected benefits

[Response Ends]

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.

If you are updating a maintenance measure submission for the first time in MIMS, please note that the previous related and competing data appearing in question 5.03 may need to be entered in to 5.01 and 5.02, if the measures are NQF endorsed. Please review and update questions 5.01, 5.02, and 5.03 accordingly.

5.01. Search and select all NQF-endorsed related measures (conceptually, either same measure focus or target population).

(Can search and select measures.)

[Response Begins]

[Response Ends]

5.02. Search and select all NQF-endorsed competing measures (conceptually, the measures have both the same measure focus or target population).

(Can search and select measures.)

[Response Begins]

[Response Ends]

5.03. If there are related or competing measures to this measure, but they are not NQF-endorsed, please indicate the measure title and steward.

[Response Begins]

[Response Ends]

5.04. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s), indicate whether the measure specifications are harmonized to the extent possible.

[Response Begins]

Yes

[Response Ends]

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

[Response Begins]

[Response Ends]

5.06. Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality). Alternatively, justify endorsing an additional measure.

Provide analyses when possible.

[Response Begins]

One measure was identified as conceptually related to the current measure. The related measure (NQF 2872e-Dementia: Cognitive Assessment) is intended to ensure an annual cognitive evaluation is completed on patients with an existing diagnosis of dementia. This is different from the current measure, which is intended to ensure an annual cognitive evaluation is completed for all patients enrolled in home-based primary care and palliative care, regardless of diagnosis.

[Response Ends]

Appendix

Supplemental materials may be provided in an appendix.:

No appendix

Contact Information

Measure Steward (Intellectual Property Owner): American Academy of Home Care Medicine

Measure Steward Point of Contact: Feorene, Brent, bfeorene@aahcm.org

Measure Developer if different from Measure Steward: Johns Hopkins University School of Medicine

Measure Developer Point(s) of Contact: Leff, Bruce, bleff@jhmi.edu

Additional Information

1. Provide any supplemental materials, if needed, as an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be collated one file with a table of contents or bookmarks. If material pertains to a specific criterion, that should be indicated.

[Response Begins]

No appendix

[Response Ends]

2. List the workgroup/panel members' names and organizations.

Describe the members' role in measure development.

[Response Begins]

Measures are developed and maintained under the aegis of topic-specific technical expert panels (TEPs). The TEPs are comprised of clinicians and other healthcare professionals representing medical specialty societies and other stakeholders. The TEPs provide clinical expertise as well as advice on methodologic questions and review the measures annually to ensure accuracy and adherence to the most current evidence.

Members of measure development technical expert panel:

Gresham Bayne, MD, Nant Health; Lynn Beatty, MD, Visiting Physicians Association; Peter A. Boling, MD, Virginia Commonwealth University; Tom Cornwell, MD, Home Centered Care Institute; Eric De Jonge, MD, Medstar Washington Hospital Center Medical House Call Program; Tom Edes, MD, FACP, U.S. Department of Veterans Affairs; Lynn Friss Feinberg, AARP Public Policy Institute; Alanna Goldstein, MPH, American Geriatrics Society; Jen Hayashi, MD, Johns Hopkins Elder House Call Program; Benneth Husted, DO, Housecall Providers; Julia Jung, CPA, House Call Doctors; Tricia Neuman, ScD, Kaiser Family Foundation; Patricia Tomsco Nay, MD, CMD, American Academy of Hospice and Palliative Medicine; Tom Reed, Senior Advocate Resources; Constance Row, American Academy of Home Care Medicine; Christine Broderick, National Partnership For Women & Families; Theresa Soriano, MD, MPH, Mount Sinai Visiting Doctors Program; Robert Sowislo, Visiting Physicians Association.

Members of the measure validity testing technical panel:

Eric De Jonge, MD, Jen Hayashi, MD, Linda DeCherrie, MD, Steven Landers, MD, Mattan Schuchman, MD, Carla Perissinotto, MD, Thomas Cornwell, MD, Sharon Levine, MD, Carlos Weiss, MD, Mia Yang, MD, Eliza Shulman, DO, MPH.

[Response Ends]

3. Indicate the year the measure was first released.

[Response Begins]

[Response Ends]

4. Indicate the month and year of the most recent revision.

[Response Begins]

[Response Ends]

5. Indicate the frequency of review, or an update schedule, for this measure.

[Response Begins]

Supporting guidelines, specifications, and coding for this measure are reviewed annually

[Response Ends]

6. Indicate the next scheduled update or review of this measure.

[Response Begins]

[Response Ends]

7. Provide a copyright statement, if applicable. Otherwise, indicate "N/A".

[Response Begins]

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[Response Ends]

8. State any disclaimers, if applicable. Otherwise, indicate "N/A".

[Response Begins]

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[Response Ends]

9. Provide any additional information or comments, if applicable. Otherwise, indicate "N/A".

[Response Begins]

[Response Ends]