



## 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 #:** 0171

**Corresponding Measures:**

**Measure Title:** Acute Care Hospitalization During the First 60 Days of Home Health

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

**sp.02. Brief Description of Measure:** Percentage of home health stays in which patients were admitted to an acute care hospital during the 60 days following the start of the home health stay.

**1b.01. Developer Rationale:** see attachment "Importance to Report" for a tabular presentation of these data

Hospital readmissions are a national priority for Medicare recipients, based on evidence that 20% of all Medicare beneficiaries who were hospitalized had a return hospital stay within 30 days. In 2004, this cost the Medicare program \$17.4 billion (1). Within home health care, an analysis of Medicare claims shows that 14 percent of home health patients are rehospitalized within 30 days of the start of home health care. There is limited research on the extent to which these hospital readmissions are avoidable within home health care. One study reporting on patients with heart failure found that more than 40% of the 30 day rehospitalizations may have been avoidable (2). In addition, studies of Medicare patients in general provided evidence for interventions that reduce the need for hospital care within a substantial proportion of these Medicare beneficiaries (1;3). Moreover, there are a number of national initiatives, both governmental (e.g. Quality Improvement Organizations, National Priorities Partnership and CMS) and through private foundations (e.g. Institute for Healthcare Improvement), addressing this issue. Thus there is room for improvement and this is a national priority issue.

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**sp.12. Numerator Statement:** Number of home health stays for patients who have a Medicare claim for an unplanned admission to an acute care hospital in the 60 days following the start of the home health stay.

**sp.14. Denominator Statement:** Number of home health stays that begin during the 12-month observation period.

**sp.16. Denominator Exclusions:** The following are excluded:

- 1) Home health stays for patients who are not continuously enrolled in fee-for-service Medicare for the 60 days following the start of the home health stay or until death.
- 2) Home health stays that begin with a Low Utilization Payment Adjustment (LUPA) claim.
- 3) Home health stays in which the patient receives service from multiple agencies during the first 60 days.
- 4) Home health stays for patients who are not continuously enrolled in fee-for-service Medicare for the 6 months prior to the home health stay.

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**Measure Type:** Outcome

**sp.28. Data Source:**

Claims

**sp.07. Level of Analysis:**

Facility

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**IF Endorsement Maintenance – Original Endorsement Date:** 2009-03-31 12:00 AM

**Most Recent Endorsement Date:** 12/9/2016 1:03:16 PM

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**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. Provide evidence that the target population values the measured outcome, process, or structure and finds it meaningful.**

*Describe how and from whom input was obtained.*

[Response Begins]

[Response Ends]

**1a.03. Provide empirical data demonstrating the relationship between the outcome (or PRO) and at least one healthcare structure, process, intervention, or service.**

[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]**

see attachment "Importance to Report" for a tabular presentation of these data

Hospital readmissions are a national priority for Medicare recipients, based on evidence that 20% of all Medicare beneficiaries who were hospitalized had a return hospital stay within 30 days. In 2004, this cost the Medicare program \$17.4 billion (1). Within home health care, an analysis of Medicare claims shows that 14 percent of home health patients are rehospitalized within 30 days of the start of home health care. There is limited research on the extent to which these hospital readmissions are avoidable within home health care. One study reporting on patients with heart failure found that more than 40% of the 30 day rehospitalizations may have been avoidable (2). In addition, studies of Medicare patients in general provided evidence for interventions that reduce the need for hospital care within a substantial proportion of these Medicare beneficiaries (1;3). Moreover, there are a number of national initiatives, both governmental (e.g. Quality Improvement Organizations, National Priorities Partnership and CMS) and through private foundations (e.g. Institute for Healthcare Improvement), addressing this issue. Thus there is room for improvement and this is a national priority issue.

**[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]**

see attachment "Importance to Report" for a tabular presentation of these data

No performance scores reported in the literature

**[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]**

see attachment "Importance to Report" for a tabular presentation of these data

Care coordination is one strategy that has been identified nationally by the National Priorities Partnership to address these high rates of hospital care. Models of care coordination and transitional care have been identified and tested in RCTs and are currently being tested in national demonstration projects with expectations that health care reform activities will incorporate care coordination for persons at high risk of hospitalization and rehospitalization (4). While there has been limited testing of these models within the existing home health care system, there is evidence of effectiveness: Daley reported a small study (N = 89 patients with heart failure [HF]) where care coordination resulted in a reduction in hospitalization rate beyond that expected (15% versus 20%) (5). Russell and colleagues provide preliminary findings on a care transition project within home health care that provided a 57% less likely need for hospital care for persons with HF (6). Finally Markley and colleagues, as part of the CMS Care Transitions project, identified that home health care agencies using care coordination, had 30 day rehospitalization rates of 16.5%, 5% lower than the average overall rate for the community. (7)

In addition to care transition interventions, there is evidence that strategies like telehealth (TH) may be beneficial in reducing hospitalizations among home health care patients although the evidence on effectiveness of TH is more mixed in meta-analyses (8-12). Complicating the understanding of effectiveness of TH in home health care is that much TH research is done outside the existing home health care system. Another strategy that reduces the likelihood of rehospitalization for home health care patients is prompt physician follow up after a hospital stay. Wolff et al (13) found that 77.6% of home health recipients who received at least one physician evaluation and management visit during their home health stay were discharged to the community (rather than transferred to an inpatient facility) while only 70.6% of patients who did not receive physician visits were discharged to the community, suggesting that increasing physician visits may be cost effective.

One study tested the use of the Care Transitions Measure (CTM), as used in hospital discharge planning, to try to predict rehospitalization in 495 patients from one home health care agency. The CTM did not predict rehospitalization (14). Another study examined the use of frontloading in reducing rehospitalization among 4500 randomly selected patients from 5 home health care agencies. Propensity scoring was used to address confounding variables. The researchers found that frontloading had no impact on the rate of rehospitalization (15).

- (1) Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med* 2009 Apr 2;360(14):1418-28.
- (2) Madigan EA, Gordon NH, Fortinsky RH, Koroukian SM, Pina I, Riggs JS. Rehospitalization in a national population of home health care patients with heart failure. *Health Serv Res* 2012 Dec;47(6):2316-38.
- (3) Schade CP, Esslinger E, Anderson D, Sun Y, Knowles B. Impact of a national campaign on hospital readmissions in home care patients. *Int J Qual Health Care* 2009 Jun;21(3):176-82.
- (4) Boulton C, Green AF, Boulton LB, Pacala JT, Snyder C, Leff B. Successful models of comprehensive care for older adults with chronic conditions: evidence for the Institute of Medicine's "retooling for an aging America" report. *J Am Geriatr Soc* 2009 Dec;57(12):2328-37.
- (5) Daley CM. A hybrid transitional care program. *Crit Pathw Cardiol* 2010 Dec;9(4):231-4.
- (6) Russell D, Rosati RJ, Sobolewski S, Marren J, Rosenfeld P. Implementing a transitional care program for high-risk heart failure patients: findings from a community-based partnership between a certified home healthcare agency and regional hospital. *J Healthc Qual* 2011 Nov;33(6):17-24.
- (7) Markley J, Sabharwal K, Wang Z, Bigbee C, Whitmire L. A community-wide quality improvement project on patient care transitions reduces 30-day hospital readmissions from home health agencies. *Home Healthc Nurse* 2012 Mar;30(3):E1-E11.
- (8) Bowles KH, Holland DE, Horowitz DA. A comparison of in-person home care, home care with telephone contact and home care with telemonitoring for disease management. *J Telemed Telecare* 2009;15(7):344-50.
- (9) Polisena J, Coyle D, Coyle K, McGill S. Home telehealth for chronic disease management: a systematic review and an analysis of economic evaluations. *Int J Technol Assess Health Care* 2009 Jul;25(3):339-49.
- (10) Polisena J, Tran K, Cimon K, Hutton B, McGill S, Palmer K. Home telehealth for diabetes management: a systematic review and meta-analysis. *Diabetes Obes Metab* 2009 Oct;11(10):913-30.
- (11) Polisena J, Tran K, Cimon K, Hutton B, McGill S, Palmer K, et al. Home telehealth for chronic obstructive pulmonary disease: a systematic review and meta-analysis. *J Telemed Telecare* 2010;16(3):120-7.
- (12) Polisena J, Tran K, Cimon K, Hutton B, McGill S, Palmer K, et al. Home telemonitoring for congestive heart failure: a systematic review and meta-analysis. *J Telemed Telecare* 2010;16(2):68-76.
- (13) Wolff JL, Meadow A, Boyd CM, Weiss CO, Leff B. Physician evaluation and management of Medicare home health patients. *Med Care* 2009 Nov;47(11):1147-55.
- (14) Ryvicker M, McDonald MV, Trachtenberg M, Peng TR, Sridharan S, Feldman PH. Can the care transitions measure predict rehospitalization risk or home health nursing use of home healthcare patients? *J Healthc Qual* 2013;35:32-40.
- (15) O'Connor M, Hanlon A, Bowles KH. Impact of frontloading of skilled nursing visits on the incidence of 30-day hospital readmission. *Geriatr Nurs* 2014;35:S37-S44.

**[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]**

see attachment "Importance to Report" for a tabular presentation of these data

**[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]**

see attachment "Importance to Report" for a tabular presentation of these data

Not reported in literature.

**[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]**

No

**[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]**

No significant changes.

**[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]**

Acute Care Hospitalization During the First 60 Days of Home Health

**[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 home health stays in which patients were admitted to an acute care hospital during the 60 days following the start of the home health stay.

**[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]**

Care Coordination

Safety: Overuse

**[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]**

Elderly (Age >= 65)

**[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]**

Facility

**[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

**[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]**

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/Home-Health-Quality-Measures.html>

**[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]**

For the question below: state the outcome being measured. Calculation of the risk-adjusted outcome should be described in sp.22.

**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]**

Number of home health stays for patients who have a Medicare claim for an unplanned admission to an acute care hospital in the 60 days following the start of the home health stay.

**[Response Ends]**

For the question below: describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in sp.22.

**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]**

The 60 day time window is calculated by adding 60 days to the “from” date in the first home health claim in the series of home health claims that comprise the home health stay. Acute care hospitalization occurs (and the home health stay is included in the numerator) if the patient has at least one Medicare inpatient claim from short term or critical access hospitals (identified by CMS Certification Number ending in 0001-0879, 0800-0899, or 1300-1399) during the 60 day window.

Inpatient claims for planned hospitalizations are excluded from the measure numerator. Planned hospitalizations are defined using the same criteria as the Yale Hospital-Wide All-Cause Unplanned Readmission Measure. Specifically, admissions are categorized as “planned” based on AHRQ Procedure and Condition CCS as well as other sets of ICD-9-CM procedure codes. These admissions are excluded unless they have a discharge condition category considered “acute or complication of care,” which is defined using AHRQ Condition CCS. The definitions of AHRQ CCS can be found here:

<http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp#download>

The AHRQ CCS that define planned hospitalizations are found below and are AHRQ Procedure CCS unless otherwise noted.

AHRQ CCS Description

45 PTCA  
254 Rehabilitation (Condition CCS)  
84 Cholecystectomy and common duct exploration  
157 Amputation of lower extremity  
44 CABG  
78 Colorectal resection  
51 Endarterectomy; vessel of head and neck  
113 Transurethral resection of prostate  
99 Other OR Gastrointestinal therapeutic procedures  
48 Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator  
45 Maintenance chemotherapy (Condition CCS)  
211 Therapeutic radiology for cancer treatment  
3 Laminectomy; excision intervertebral disc  
43 Heart valve procedures  
152 Arthroplasty knee  
158 Spinal fusion  
55 Peripheral vascular bypass  
52 Aortic resection; replacement or anastomosis  
36 Lobectomy or pneumonectomy  
153 Hip replacement; total and partial  
60 Embolectomy and endarterectomy of lower limbs  
85 Inguinal and femoral hernia repair  
104 Nephrectomy; partial or complete  
1 Incision and excision of CNS  
124 Hysterectomy; abdominal and vaginal  
167 Mastectomy  
10 Thyroidectomy; partial or complete  
114 Open prostatectomy  
74 Gastrectomy; partial and total

119 Ooporectomy; unilateral and bilateral  
154 Arthroplasty other than hip or knee  
ICD-9-CM procedure codes 30.5, 31.74, 34.6 Radial laryngectomy, revision of tracheostomy, scarification of pleura  
166 Lumpectomy; quadrantectomy of breast  
64 Bone marrow transplant  
105 Kidney transplant  
176 Other organ transplantation  
ICD-9-CM procedure codes 94.26, 94.27 Electroshock therapy

Discharge AHRQ Condition CCS considered “acute or complication of care” are listed below.

AHRQ CCS Description

237 Complications of device; implant or graft  
106 Cardiac dysrhythmias  
Condition CCS 207, 225, 226, 227, 229, 230, 231, 232 Fracture  
100 Acute myocardial infarction  
238 Complications of surgical procedures or medical care  
108 Congestive heart failure; nonhypertensive  
2 Septicemia (except in labor)  
146 Diverticulosis and diverticulitis  
105 Conduction disorders  
109 Acute cerebrovascular disease  
145 Intestinal obstruction without hernia  
233 Intracranial injury  
116 Aortic and peripheral arterial embolism or thrombosis  
122 Pneumonia (except that caused by TB or sexually transmitted disease)  
131 Respiratory failure; insufficiency; arrest (adult)  
157 Acute and unspecified renal failure  
201 Infective arthritis and osteomyelitis (except that caused by TB or sexually transmitted disease)  
153 Gastrointestinal hemorrhage  
130 Pleurisy; pneumothorax; pulmonary collapse  
97 Peri-; endo-; and myocarditis; cardiomyopathy  
127 Chronic obstructive pulmonary disease and bronchiectasis  
55 Fluid and electrolyte disorders  
159 Urinary tract infection  
245 Syncope  
139 Gastroduodenal ulcer (except hemorrhage)  
160 Calculus of urinary tract  
112 Transient cerebral ischemia

**[Response Ends]**

For the question below: state the target population for the outcome. Calculation of the risk-adjusted outcome should be described in sp.22.

**sp.15. State the denominator.**

*Brief, narrative description of the target population being measured.*

**[Response Begins]**

Number of home health stays that begin during the 12-month observation period.

**[Response Ends]**

For the question below: describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in sp.22.

**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]**

A home health stay is a sequence of home health payment episodes separated from other home health payment episodes by at least 60 days. Each home health payment episode is associated with a Medicare home health (HH) claim, so home health stays are constructed from claims data using the following procedure.

- 1.First, retrieve HH claims with a “from” date (FROM\_DT) during the 12-month observation period or the 120 days prior to the beginning of the observation period and sequence these claims by “from” date for each beneficiary.
- 2.Second, drop claims with the same “from” date and “through” date (THROUGH\_DT) and claims listing no visits and no payment. Additionally, if multiple claims have the same “from” date, keep only the claim with the most recent process date.
- 3.Third, set Stay\_Start\_Date(1) equal to the “from” date on the beneficiary’s first claim. Step through the claims sequentially to determine which claims begin new home health stays. If the claim “from” date is more than 60 days after the “through” date on the previous claim, then the claim begins a new stay. If the claim “from” date is within 60 days of the “through” date on the previous claim, then the claim continues the stay associated with the previous claim.
- 4.Fourth, for each stay, set Stay\_Start\_Date(n) equal to the “from” date of the first claim in the sequence of claims defining that stay. Set Stay\_End\_Date(n) equal to the “through” date on the last claim in that stay. Confirm that Stay\_Start\_Date(n+1) – Stay\_End\_Date(n) > 60 days for all adjacent stays.
- 5.Finally, drop stays that begin before the 12-month observation window.

Note the examining claims from the 120 days before the beginning of the 12-month observation period is necessary to ensure that stays beginning during the observation period are in fact separated from previous home health claims by at least 60 days.

**[Response Ends]**

**sp.17. Describe the denominator exclusions.**

*Brief narrative description of exclusions from the target population.*

**[Response Begins]**

The following are excluded:

- 1) Home health stays for patients who are not continuously enrolled in fee-for-service Medicare for the 60 days

following the start of the home health stay or until death.

2) Home health stays that begin with a Low Utilization Payment Adjustment (LUPA) claim.

3) Home health stays in which the patient receives service from multiple agencies during the first 60 days.

4) Home health stays for patients who are not continuously enrolled in fee-for-service Medicare for the 6 months prior to the home health stay.

**[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]**

Four types of home health stays are excluded from the measure denominator:

1.Home health stays for patients who are not continuously enrolled in fee-for-service Medicare for the 6 months prior to the start of the home health stay, for the 60 days following the start of the home health stay, or until death.

- Both enrollment status and beneficiary death date are identified using the Medicare Enrollment Database (EDB).

2.Home health stays that begin with a Low Utilization Payment Adjustment (LUPA) claim.

- Exclude the stay if LUPAIND = L for the first claim in the home health stay.

3.Home health stays in which the patient receives service from multiple agencies during the first 60 days.

- Define Initial\_Provider = PROVIDER on the first claim in the home health stay.
- If Initial\_Provider does not equal PROVIDER for a subsequent claim in the home health stay AND if the “from” date of the subsequent claim is within 60 days of Stay\_Start\_Date, then exclude the stay.

4.Home health stays for patients who are not continuously enrolled in fee-for-service Medicare for the 6 months prior to the start of the home health stay.

- Enrollment status is identified using the Medicare Enrollment Database (EDB).

**[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]**

Not applicable

**[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]**

Statistical risk model

**[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 = Lower 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]**

1. Construct Home Health Stays from HH Claims (see 2a1.7 for details)
2. Identify numerator window (60 days following Stay\_Start\_Date) for each stay and exclude stays for patients who are not continuously enrolled in fee-for-service Medicare during the numerator window or until patient death.
3. Exclude stays that begin with a LUPA or that involve a provider change during the numerator window
4. Link stays to enrollment data by beneficiary.
5. Exclude stays for patients who are not continuously enrolled in fee-for-service Medicare during the 6 months prior to Stay\_Start\_Date.
6. Calculate demographic risk factors for each stay (age, gender, etc.) using enrollment data.
7. Link to Part A and Part B claims for 6 months prior to Stay\_Start\_Date for each beneficiary
8. Calculate prior care setting indicators, HCCs, and HCC interactions.
9. Link to Inpatient (IP) claims from Short Stay and Critical Access hospitals (excluding planned hospitalizations - see 2a1.3 for details) for numerator window (60 days following Stay\_Start\_Date)
10. Set Hospital Admission indicator (Hosp\_Admit = 1) if any IP claims are linked to the stay in step 9.
11. Using coefficients from the multinomial logit risk model and risk factors calculated in steps 6 and 8, calculate the predicted probability of being included in the measure numerator for each stay (Pred\_Hosp). Additionally calculate the average of Pred\_Hosp across all stays that are included in the measure denominator (not excluded in steps 3 or 5) and call this value National\_pred\_Hosp.
12. Calculate observed and risk adjusted rates for each home health agency (Initial\_Provider):
  - a. Calculate the observed rate of Acute Care Hospitalization as the fraction all (non-excluded) HH Stays with that agency as Initial\_Provider that are also included in the measure numerator (Hosp\_Admit = 1). Call the value

Agency\_obs\_Hosp.

b. Calculate the agency predicted rate of Acute Care Hospitalization by taking the average of Pred\_Hosp across all (non-excluded) stays with that agency as Initial\_Provider. Call this value Agency\_pred\_Hosp.

c. Calculate the risk adjusted rate of Acute Care Hospitalization using the following formula:  $\text{Agency\_riskadj\_Hosp} = \text{National\_pred\_Hosp} + (\text{Agency\_obs\_Hosp} - \text{Agency\_pred\_Hosp})$ . If an agency's calculated risk adjusted rate is negative, that agency will have a publicly reported rate of 0%. If the agency's calculated risk adjusted rate is greater than 100%, the agency will have a publicly reported rate of 100%.

**[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

**[Response Ends]**

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

**[Response Begins]**

Claims

**[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]**

Denominator: Medicare Home Health Claims

Numerator: Medicare Inpatient Claims

Exclusions: Medicare Home Health Claims, Medicare Enrollment Data

Risk Factors: Medicare Enrollment Data, Medicare Part A & B Claims

**[Response Ends]**

**sp.32. Provide the data collection instrument.**

**[Response Begins]**

**[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]

[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 claims

[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]

Not applicable

**[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]

[Response Ends]

### 4a.02. Check all planned uses.

[Response Begins]

[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]

Not applicable

[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]

Not applicable

**[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]**

All home health agencies with at least 20 qualifying episodes receive quarterly measure reports on all of their publicly-reported measures. In addition, providers can run on-demand, confidential reports showing individual measure results and national averages, through CMS' CASPER system. There is an email box that HHAs may submit questions to as well as a website on which the latest measure updates are posted.

**[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]**

All home health agencies with at least 20 qualifying episodes receive quarterly measure reports on all of their publicly-reported measures. In addition, providers can run on-demand, confidential reports showing individual measure results and national averages, through CMS' CASPER system. There is an email box that HHAs may submit questions to as well as a website on which the latest measure updates are posted. The Outcome-Based Quality Monitoring Manual (OBQM) describes the OASIS-based reports that are available as well as the sources of information for the reports. Instructions on using the reports for quality monitoring are provided, illustrated with sample reports from a hypothetical home care agency. It is designed to help home health agencies make use of the reports for monitoring and improving quality of care.

**[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]**

Home health agencies receive quarterly measure reports on all of their measures. There is an email box that HHAs may submit questions to as well as a website on which the latest measure updates are posted.

**[Response Ends]**

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

**[Response Begins]**

There is an email box that HHAs may submit regarding quality measures; all questions and responses are captured in an Access database for analysis and CMS receives quarterly reports on questions submitted. Thematic issues arising from the mailbox inform guidance to providers.

**[Response Ends]**

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

**[Response Begins]**

There haven't been any requests for measure modification, nor any modifications made.

**[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]**

Not applicable for 2018.

**[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 small increase in the Acute Care Hospitalizations is likely to be attributed to agency activities in prior years that have resulted in performance plateaus or slight increases. In other words, agencies took the actions that had the most impact earlier and there has been a slight adverse change. There are anecdotal reports that the "average" home health care patient in the US is older than in the past and there are more women, living alone, with multiple chronic conditions. All of these factors increase the likelihood of rehospitalization.

**[Response Ends]**

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

**[Response Begins]**

A key issue in using this measure to accurately identify performance at the home health agency level regards attribution. Two decisions were made to assure proper attribution. First, the numerator window was synchronized to the length of home health prospective payment episodes (60 days) and home health stays beginning with low utilization payment episodes were excluded. This means that stays included in the measure were those in which the HHA was paid to provide appropriate home health care to the patient during the measurement period. Second, stays in which the patient changed home health providers during the numerator window were also excluded from measurement. Although provider switches often follow acute care utilization (ED use or hospitalization) and may reflect patient or caregiver dissatisfaction with the initial provider, we chose to exclude all HH stays with multiple providers during the numerator window. This ensures that agencies that do not have sufficient time to impact a patient's health are not penalized for that patient's outcomes.

**[Response Ends]**

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

**[Response Begins]**

**[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.

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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]**

**[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]**

The home health (HH) Acute Care Hospitalization (ACH) and Emergency Department Use (ED-Use) without Hospitalization measures are harmonized with the Rehospitalization measures (NQF numbers 2505 and 2380) and with CMS' Hospital-Wide All-Cause Unplanned Readmission (HWR) measure (NQF 1789) in the definition of unplanned hospitalizations. They differ from other post-acute hospital readmission measures, however, in the definition of eligible post-acute stays, in the risk adjustment approach, and by measuring emergency department use as an outcome. The differences arise due to the unique nature of home health care as a post-acute setting. The ACH and ED-Use measures were initially developed and later leveraged to construct the Rehospitalization measures by further restricting the ACH and ED-Use measures' eligible population by requiring a prior proximal inpatient hospital stay within 5 days from the start of HH. Finally, both pairs of measures are risk adjusted using patient-level predicted probabilities calculated from a multinomial logistic regression. Risk factors that are accounted for in both pairs of measures include demographics and health status as measured by both CMS'



Hierarchical Condition Categories (HCCs) found on claims in the previous six months. The Rehospitalization measures leverage the prior proximal inpatient hospital claim to obtain the patient's Diagnosis Related Group (DRG) and also risk adjust for the Activities of Daily Living (ADL) fields on the Outcome and Assessment Information Set (OASIS) assessment of the initial home health stay. The risk-adjusted rates for the ACH and ED-Use measures are publicly reported. However, due to a large number of relatively small home health agencies treating previously hospitalized patients, the measure developer determined that reporting home health agencies' risk-adjusted rates could lead to misleading conclusions, since small home health agencies' risk-adjusted rates tend to be unstable. Therefore, the risk-adjusted rates for the home health Rehospitalization measures are publicly reported as categorizations (i.e., "Better than Expected", "Same as Expected", and "Worse than Expected"). While the Acute Care Hospitalization and Emergency Department Use without Hospitalization measures differ from other post-acute care measures in some regards, these differences arise from the unique nature of home care as well as from a desire for harmonization across home health quality measures.

**[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]**

Not applicable; there are no other measures that report acute care hospitalization rates for home health patients.

**[Response Ends]**

## Appendix

Supplemental materials may be provided in an appendix.:

## Contact Information

**Measure Steward (Intellectual Property Owner):** Centers for Medicare & Medicaid Services

**Measure Steward Point of Contact:** , , Helen.Dollar-Maples@cms.hhs.gov

, , Helen.Dollar-Maples@cms.hhs.gov

**Measure Developer if different from Measure Steward:**

**Measure Developer Point(s) of Contact:**

## 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]

[Response Ends]

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

*Describe the members' role in measure development.*

[Response Begins]

[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]

annual

[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]

[Response Ends]

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

[Response Begins]

[Response Ends]

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

**[Response Begins]**

Continuation of response to S2b:

Enrollment Database:

<https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/IdentifiableDataFiles/DenominatorFile.html>

Note: The Denominator File contains data on all Medicare beneficiaries enrolled and/or entitled in a given year. It is an abbreviated version of the Enrollment Data Base (EDB) (selected data elements).

Following is in response to NQF's comment on February 12, 2016 that the ICD-10 code conversion is missing from the January 29, 2016 submission:

The specifications for measure 0171 depend on AHRQ CCS codes for specific denominator exclusions and HCCs and DRGs for risk adjustment. All three code groupings already have ICD-10 specifications; therefore, it was not necessary for the measure developer to construct a crosswalk from specific ICD-9 to ICD-10 codes.

Continuation of response 4.1:

Planned Use:

Proposed to be used in the HH VBP program as part of outcome measures:

<http://www.wha.org/Data/Sites/1/reimbursement/2016HHAProposedRuleBrief.pdf>

Response to 5.a1 under "Related and Competing Measures" tab:

Yes, the measure specifications are harmonized with 2380 Rehospitalization During the First 30 Days of Home Health.

No, the measure specifications are not harmonized with 1789 : Hospital-Wide All-Cause Unplanned Readmission Measure (HWR).

**[Response Ends]**