NATIONAL
QUALITY FORUM

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 #: 2380
Corresponding Measures:
De.2. Measure Title: Rehospitalization During the First 30 Days of Home Health
Co.1.1. Measure Steward: Centers for Medicare & Medicaid Services
De.3. Brief Description of Measure: Percentage of home health stays in which patients who had an acute inpatient hospitalization in the 5 days before the start of their home health stay were admitted to an acute care hospital during the 30 days following the start of the home health stay.
1b.1. Developer Rationale: Using a three-year reporting period, CMS intends to publicly report the performance of Medicare-certified home health agencies (with at least 20 home health stays) on the rehospitalization measure under three categories: "better than expected," "same as expected," and "worse than expected." Additionally, to drive quality improvement amongst home health agencies, CMS intends to report each home health agency's performance rate on this measure confidentially in each home health agency's Certification And Survey Provider Enhanced Reports (CASPER), as applicable.

Rates of rehospitalization remain substantial with 13.3 percent of home health patients experiencing an unplanned rehospitalization in the first 30 days of care. Currently, home health agencies focus on measures of acute care hospitalization (applied to all home health patients) as a measure of their effectiveness. The Rehospitalization During the First 30 Days of Home Health measure will allow home health agencies to further target patients who entered home health after a hospitalization. CMS has provided support to the QIOs to address the high rates of rehospitalization. There are other national initiatives to address hospital readmissions, including work by the Institute for Healthcare Improvement, the National Priority Partnership and others. As described in the Evidence Submission Form, there are interventions that may be effective in reducing hospital readmission, including care transition models and telehealth. Thus, continued reporting is beneficial as hospital readmission is a national priority across sites of care and for which there is evidence of how to impact the measure.

S.4. Numerator Statement: Number of home health stays for patients who have a Medicare claim for an admission to an acute care hospital in the 30 days following the start of the home health stay.
S.6. Denominator Statement: Number of home health stays that begin during the relevant observation period for patients who had an acute inpatient hospitalization in the five days prior to the start of the home health stay. A home health stay is a sequence of home health payment episodes separated from other home health payment episodes by at least 60 days.
S.8. Denominator Exclusions: The measure denominator excludes several types of home health stays:

First, the measure denominator for the Rehospitalization During the First 30 Days of Home Health measure excludes the following home health stays that are also excluded from the all-patient claims-based NQF 0171 Acute Care Hospitalization measure: (i) Stays for patients who are not continuously enrolled in fee-for-service Medicare during the measure numerator window; (ii) Stays that begin with a Low-Utilization Payment Adjustment (LUPA). Stays with four or fewer visits to the beneficiary qualify for LUPAs; (iii) Stays in which the patient is transferred to another home health agency within a home health payment episode (60 days); and (iv) Stays in which the patient is not continuously enrolled in Medicare fee-for-service during the previous six months.

Second, to be consistent with the Hospital-Wide All-Cause Unplanned Readmission measure (as of January 2013), the measure denominator excludes stays in which the hospitalization occurring within 5 days of the start of home health care is not a qualifying inpatient stay. Hospitalizations that do not qualify as index hospitalizations include admissions for the medical treatment of cancer, primary psychiatric disease, or rehabilitation care, and admissions ending in patient discharge against medical advice.

Third, the measure denominator excludes stays in which the patient receives treatment in another setting in the 5 days between hospital discharge and the start of home health.

Finally, stays with missing payment-episode authorization strings (needed for risk-adjustment) are excluded.

De.1. Measure Type: Outcome
S.17. Data Source: Claims
S.20. Level of Analysis: Facility

IF Endorsement Maintenance – Original Endorsement Date: Dec 23, 2014 **Most Recent Endorsement Date:** Dec 09, 2016

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

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

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? The Rehospitalization During the First 30 Days of Home Health measure and the Emergency Department Use without Hospital Readmission During the First 30 Days of Home Health measure can be used in conjunction to evaluate home health care quality. They evaluate the outcomes of acute care rehospitalization and ED use without readmission, respectively, during the first 30 days of home health care for home health patients who were recently discharged from the hospital.

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

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

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form
Evidence_Rehospitalization-635271601335554881.docx
1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?
Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

1b. Performance Gap
    Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:
- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure *(e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)*
If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.
Using a three-year reporting period, CMS intends to publicly report the performance of Medicare-certified home health agencies (with at least 20 home health stays) on the rehospitalization measure under three categories: "better than expected," "same as expected," and "worse than expected." Additionally, to drive quality improvement amongst home health agencies, CMS intends to report each home health agency's performance rate on this measure confidentially in each home health agency's Certification And Survey Provider Enhanced Reports (CASPER), as applicable.

Rates of rehospitalization remain substantial with 13.3 percent of home health patients experiencing an unplanned rehospitalization in the first 30 days of care. Currently, home health agencies focus on measures of acute care hospitalization (applied to all home health patients) as a measure of their effectiveness. The Rehospitalization During the First 30 Days of Home Health measure will allow home health agencies to further target patients who entered home health after a hospitalization. CMS has provided support to the QIOs to address the high rates of rehospitalization. There are other national initiatives to address hospital readmissions, including work by the Institute for Healthcare Improvement, the National Priority Partnership and others. As described in the Evidence Submission Form, there are interventions that may be effective in reducing hospital readmission, including care transition

models and telehealth. Thus, continued reporting is beneficial as hospital readmission is a national priority across sites of care and for which there is evidence of how to impact the measure.

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

Using a three-year reporting period, CMS intends to publicly report the performance of Medicare-certified home health agencies (with at least 20 home health stays) on the rehospitalization measure under three performance categories: "better than expected," "same as expected," and "worse than expected" (each home health agency's expected rate is the average of the predicted rates across stays within the agency). Pursuing a categorical reporting method is consistent with condition-specific hospital readmission measures.

The goal of this method is to assign a home health agency to the "Better than Expected" category if the agency's rate of rehospitalization is lower than expected based on patient case mix by a statistically significant amount and to assign a home health agency to the "Worse than Expected" category if the agency's rate of rehospitalization is higher than expected based on patient case mix by a statistically significant amount. The size of the difference between a home health agency's observed rate and expected rate that is statistically significant at a specified level (e.g., 5 percent) depends on the number of home health stays eligible for the measure and the case-mix characteristics of the agency's specific patients.

The table below shows the number and percentage of home health agencies, by performance category and size, using home health stays beginning in the period from July 1, 2010 to June 30, 2013. Only agencies with at least 20 stays will have results publicly reported. With the categorical reporting method, consumers may see that most home health agencies in their area are average, but will be informed if a particular agency is outstanding (i.e., better than expected) or sub-standard (worse than expected). Additionally, consumers would not make false distinctions between agencies when both home health agencies are performing as expected, even if their observed rates are different.

Number of HHAs with "Better than Expected", "Same as Expected", or "Worse than Expected"

Rehospitalization Performance, by Number of Stays

Number of Stays	Better than Expected Count(% of Total)	Same as Expected Count(% of Total)	Worse than Expected Count(% of Total)	Total
<20	6(0.1%)	4,035(98.2%)	67(1.6%)	4,108
20-49	51(3.1%)	1,566(94.6%)	38(2.3%)	1,655
50-99	66(4.4%)	1,352(91.0%)	68(4.6%)	1,486
100-199	85(6.1%)	1,226(88.5%)	74(5.3%)	1,385
200-399	89(7.2%)	1,057(85.0%)	98(7.9%)	1,244
400-999	124(11.1%)	848(76.1%)	143(12.8%)	1,115
1000+	93(13.7%)	439(64.6%)	148(21.8%)	680
Total	514(4.4%)	10,523(90.1%)	636(5.4%)	11,673

CMS intends to pursue the categorical reporting described above, rather than publicly reporting home health agencies' risk-adjusted rates. 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, and small home health agencies experience large deviations between their observed and expected rates that are due to chance alone.

To understand why agencies' expected rates are not suitable for public reporting, consider the differences between home health agencies' observed and expected rates. The first and second tables show the distribution of observed and expected agency rates by agency size, respectively. Note that the range of expected rates is quite wide, suggesting that much of the variation in observed rates is due to variation in patient case-mix (and thus is accounted for in the expected rates). The third table shows the differences between the observed and expected agency rates, by agency size; the range of deviation is much larger for agencies with 20-49 stays than for agencies with 1000+ stays. This shows that risk adjusting by re-centering deviations from expected on the national mean rate will result in many small home health agencies having very small or very large risk-adjusted rates.

Distribution of Observed Agency Rates of Rehospitalization, By Agency Size

Total Stays	# HHAs	Mean	St. Dev.	Min	10th	25th	50th	75th	90th	Max	Interquartile Range
20-49	1655	13.9%	6.7%	0.0%	5.1%	9.1%	13.6%	18.2%	22.6%	40.0%	9.1%
50-99	1486	13.6%	4.9%	1.5%	7.4%	10.3%	13.4%	16.7%	20.2%	36.1%	6.4%
100–199	1385	13.3%	3.8%	1.7%	8.6%	10.8%	13.2%	15.8%	18.1%	30.2%	4.9%
200 – 399	1244	13.2%	3.3%	3.9%	9.0%	11.1%	13.3%	15.4%	17.3%	24.3%	4.3%
400 – 999	1115	13.1%	2.9%	3.2%	9.4%	11.2%	13.2%	15.0%	16.7%	22.3%	3.9%
1000+	680	13.2%	2.4%	3.7%	9.8%	11.9%	13.5%	14.9%	16.0%	19.2%	3.0%

Distribution of Expected Agency Rates of Rehospitalization, By Agency Size

Total Stays	# HHAs	Mean	St. Dev.	Min	10th	25th	50th	75th	90th	Max	Interquartile Range
20-49	1655	14.2%	2.6%	5.0%	11.1%	12.5%	14.2%	15.8%	17.4%	24.4%	3.3%
50-99	1486	13.6%	2.2%	6.0%	11.0%	12.3%	13.5%	15.0%	16.2%	24.3%	2.7%
100–199	1385	13.4%	1.9%	5.0%	11.0%	12.3%	13.4%	14.6%	15.8%	19.9%	2.3%
200 – 399	1244	13.1%	1.9%	5.4%	10.7%	12.1%	13.3%	14.3%	15.3%	20.1%	2.2%
400 – 999	1115	12.9%	1.8%	4.6%	10.7%	12.0%	13.2%	14.1%	14.9%	17.5%	2.1%
1000+	680	13.0%	1.6%	5.3%	10.9%	12.1%	13.2%	14.0%	14.7%	17.4%	1.9%

Differences Between Observed & Expected Agency Rates of Rehospitalization, By Agency Size*

Total Stays	# HHAs	Mean	St. Dev.	Min	10th	25th	50th	75th	90th	Max
20-49	1655	-0.3%	6.1%	-20.1%	-7.9%	-4.6%	-0.7%	3.8%	7.5%	24.0%
50-99	1486	0.0%	4.3%	-13.2%	-5.5%	-2.9%	0.0%	2.7%	5.6%	14.4%
100–199	1385	-0.1%	3.2%	-10.0%	-4.0%	-2.2%	-0.2%	2.0%	4.1%	14.6%
200 – 399	1244	0.1%	2.4%	-7.1%	-2.9%	-1.7%	0.1%	1.7%	3.2%	9.1%
400 – 999	1115	0.2%	2.0%	-6.0%	-2.3%	-1.2%	0.0%	1.4%	2.6%	9.3%
1000+	680	0.3%	1.4%	-4.1%	-1.5%	-0.7%	0.3%	1.3%	2.1%	6.0%

*We first calculated the difference between the observed rate and expected rate for each agency. Then we calculated the distribution of the differences by agency size.

1b.3. **If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.**
Not applicable; see data provided in 1b.2.

1b.4. **Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability.** (_This is required for maintenance of endorsement_. _Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.) For measures that show high levels of performance, i.e., "topped out", disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use._
To evaluate disparities in the measure performance, the measure developer calculated the percent of all home health stays beginning within 5 days of an inpatient discharge between July 1, 2010 to June 30, 2013 and that ended in a rehospitalization, by population group. The table below shows the unadjusted rates of rehospitalization by population group.

Unadjusted Rates of Rehospitalization During the First 30 Days of Home Health by Population Group

Population Group		Total Stays	Rehospitalization # of Stays(% of Stays)
National		2,889,894	384,857(13.3%)
Gender	Female	1,712,939	218,827(12.8%)
	Male	1,176,955	166,030(14.1%)
Race	Black	310,006	48,879(15.8%)
	Hispanic	59,306	8,691(14.7%)
	White	2,434,340	315,750(13.0%)

Other	86,242	11,537(13.4%)	
Age	<65	381,099	61,686(16.2%)
	65 - 74	900,504	106,446(11.8%)
	75 - 84	980,203	129,262(13.2%)
	85+	628,088	87,463(13.9%)
Medicaid Yes	654,587	105,326(16.1%)	
Status No	2,235,307	279,531(12.5%)	
Disabled Yes	674,764	105,372(15.6%)	
No	2,215,130	279,485(12.6%)	

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

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2. Reliability and Validity—Scientific Acceptability of Measure Properties

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

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

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

De.6. **Non-Condition Specific***(check all the areas that apply):*
Care Coordination, Care Coordination : Readmissions, Care Coordination : Transitions of Care, Safety : Overuse

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

S.1. **Measure-specific Web Page** *(Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)*
https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIQualityMeasures.html

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

S.2b. **Data Dictionary, Code Table, or Value Sets** *(and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)*
No data dictionary **Attachment:**

S.2c. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.
No, this is not an instrument-based measure **Attachment:**

S.2d. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.
Not an instrument-based measure

S.3.1. For maintenance of endorsement: Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.
No

S.3.2. For maintenance of endorsement, please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.
No significant changes.

S.4. Numerator Statement *(Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome) DO NOT include the rationale for the measure.*
IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).
Number of home health stays for patients who have a Medicare claim for an admission to an acute care hospital in the 30 days following the start of the home health stay.

S.5. Numerator Details *(All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*
IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).
The 30 day time window is calculated by adding 30 days to the "from" date in the first home health claim in the series of home health claims that comprise the home health stay. If the patient has at least one Medicare inpatient claim from short term or critical access hospitals (identified by the CMS Certification Number ending in 0001-0879, 0800-0899, or 1300-1399) during the 30 day window, then the stay is included in the measure numerator.

Numerator Exclusions: Inpatient claims for planned hospitalizations are excluded from the rehospitalization measure numerator. Planned hospitalizations are defined using the same criteria as the Hospital-Wide All-Cause Unplanned Readmission Measure as of January 2013. Specifically, a small set of readmissions, defined using Agency for Healthcare Research and Quality (AHRQ) Procedure and Diagnosis Clinical Classification Software (CCS), are always considered "planned." An additional set of admissions are categorized as "potentially planned" and are also excluded from being counted as unplanned admissions in the measure numerator unless they have a discharge condition category considered "acute or complication of care," which is defined using AHRQ Diagnosis CCS.

S.6. Denominator Statement *(Brief, narrative description of the target population being measured)*
Number of home health stays that begin during the relevant observation period for patients who had an acute inpatient hospitalization in the five days prior to the start of the home health stay. A home health stay is a sequence of home health payment episodes separated from other home health payment episodes by at least 60 days.

S.7. Denominator Details *(All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)*
IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).
The algorithm for computing patient-level outcomes is based on a 12-month observation period and produces both monthly and yearly numerator and denominator counts; to include all valid home health stays over a three-year period for public reporting purposes, CMS will merge the data for the most recent 12-month observation period with the data from the preceding two 12-month observation periods.

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 claim, so home health stays are constructed from claims data using the following procedure:

1. First, retrieve home health 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) minus Stay_End_Date(n-1) is greater than 60 days for all adjacent stays.

5. Fifth, drop stays that begin before the 12-month observation window.

6. Finally, only stays that begin within 5 days of discharge from a short-term inpatient hospital are included in the denominator as follows:
i. Link to Part A claims for 6 months prior to Stay_Start_Date for each beneficiary.
ii. Define Hosp_Discharge_DT = Thru_Dt of the inpatient claim with the latest through date (thru_Dt) prior to Stay_Start_Date,.
iii. Limit to home health stays where the Stay_Start_Date minus the Hosp_Discharge_DT is equal to or less than 5. Exclude stays where the IP claim is from a provider type that is not a short stay hospital . Short term hospitals are defined using the following CCN ranges in the third through sixth positions: 0001-0879, 0880-0899, and 1300-1399.

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.

S.8. **Denominator Exclusions** (Brief narrative description of exclusions from the target population)
The measure denominator excludes several types of home health stays:

First, the measure denominator for the Rehospitalization During the First 30 Days of Home Health measure excludes the following home health stays that are also excluded from the all-patient claims-based NQF 0171 Acute Care Hospitalization measure: (i) Stays for patients who are not continuously enrolled in fee-for-service Medicare during the measure numerator window; (ii) Stays that begin with a Low-Utilization Payment Adjustment (LUPA). Stays with four or fewer visits to the beneficiary qualify for LUPAs; (iii) Stays in which the patient is transferred to another home health agency within a home health payment episode (60 days); and (iv) Stays in which the patient is not continuously enrolled in Medicare fee-for-service during the previous six months.

Second, to be consistent with the Hospital-Wide All-Cause Unplanned Readmission measure (as of January 2013), the measure denominator excludes stays in which the hospitalization occurring within 5 days of the start of home health care is not a qualifying inpatient stay. Hospitalizations that do not qualify as index hospitalizations include admissions for the medical treatment of cancer, primary psychiatric disease, or rehabilitation care, and admissions ending in patient discharge against medical advice.

Third, the measure denominator excludes stays in which the patient receives treatment in another setting in the 5 days between hospital discharge and the start of home health.

Finally, stays with missing payment-episode authorization strings (needed for risk-adjustment) are excluded.

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

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

1. Stays excluded from the denominator of the all-patient claims-based NQF 0171 Acute Care Hospitalization measure:

i. Home health stays for patients who are not continuously enrolled in fee-for-service Medicare during the measure numerator window (30 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). These stays lack full information about the patient's utilization of health care services and so it cannot determined if care was sought in an emergency department during the numerator window.

ii. 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. Home health stays designated as LUPAs are excluded because it is unclear that the initial home health agency had an opportunity to impact the patient's health outcomes.

iii. Home health stays in which the patient receives service from multiple agencies during the first 30 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. These home health stays are excluded because it is unclear that the initial home health agency had an opportunity to impact the patient's health outcomes.

iv. Home health stays for patients who are not continuously enrolled in fee-for-service Medicare for the six months prior to the start of the home health stay. Enrollment status is identified using the Medicare Enrollment Database (EDB). These stay are excluded because we lack information about the patient's health status prior to the beginning of home health that is needed for risk adjustment.

2. In addition, the following four types of prior admissions are excluded from being the index hospitalization:

i. Admissions for the treatment of cancer. Exclude admissions with discharge diagnosis for treatment of cancer. AHRQ Diagnosis CCS are used to define cancer discharge condition categories. AHRQ Diagnosis CCS considered cancer include:

AHRQ Diagnosis CCS	Description
11	Cancer of head and neck
12	Cancer of esophagus
13	Cancer of stomach
14	Cancer of colon
15	Cancer of rectum and anus
16	Cancer of liver and intrahepatic bile duct
17	Cancer of pancreas
18	Cancer of other GI organs; peritoneum
19	Cancer of bronchus; lung
20	Cancer; other respiratory and intrathoracic
21	Cancer of bone and connective tissue
22	Melanomas of skin
23	Other non-epithelial cancer of skin
24	Cancer of breast
25	Cancer of uterus
26	Cancer of cervix
27	Cancer of ovary
28	Cancer of other female genital organs
29	Cancer of prostate
30	Cancer of testis
31	Cancer of other male genital organs
32	Cancer of bladder
33	Cancer of kidney and renal pelvis
34	Cancer of other urinary organs

35	Cancer of brain and nervous system
36	Cancer of thyroid
37	Hodgkin's disease
38	Non-Hodgkin's lymphoma
39	Leukemias
40	Multiple myeloma
41	Cancer; other and unspecified primary
42	Secondary Malignancies
43	Malignant neoplasm without specification of site
44	Neoplasms of unspecified nature or uncertain behavior
45	Maintenance chemotherapy; radiotherapy

ii. Admissions for the treatment of primary psychiatric diseases. Exclude admissions with discharge diagnosis for treatment of psychiatric disease. AHRQ Diagnosis CCS are used to define psychiatric disease discharge condition categories. AHRQ Diagnosis CCS considered psychiatric disease include:

AHRQ Diagnosis CCS	Description
650	Adjustment disorders
651	Anxiety disorders
652	Attention-deficit, conduct, and disruptive behavior disorders
654	Developmental disorders
655	Disorders usually diagnosed in infancy, childhood, or adolescence
656	Impulse control disorders, NEC
657	Mood disorders
658	Personality disorders
659	Schizophrenia and other psychotic disorders
662	Suicide and intentional self-inflicted injury
670	Miscellaneous disorders

iii. Admissions for rehabilitation care and the fitting of prostheses and adjustment devices. Exclude admissions with admitting diagnosis of "rehabilitation care; fitting of prostheses and adjustment devices." The AHRQ Diagnosis CCS 254 is used to define rehabilitation care.

iv. Admission ending in patient discharge against medical advice. Exclude admissions with "Stus_cd"=07.

Admissions for cancer have very different mortality and readmission rates than the remainder of the population. Admissions for psychiatric diseases are treated in separate psychiatric facilities not comparable to treatment received in acute care hospitals, and admissions for rehabilitation care typically do not occur in an acute care setting. Finally, admissions that end in patient discharge against medical advice are excluded because the hospital did not have a full opportunity to treat the patient.

3. Home health stays for patients who receive intervening care in the window between the index hospital discharge and the start of home health care. Intervening care is identified as any inpatient hospital use (which includes care received at inpatient rehabilitation facilities and long-term care hospitals), emergency department use without hospitalization, and skilled nursing facility treatment. These home health stays are excluded because patients' health outcomes may be affected by the care they receive between hospital discharge and the start of home care.

4. Home health stays with missing payment-episode authorization strings. These stays do not include all the information needed for risk adjustment.

S.10. Stratification Information *(Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)*
The measure is not stratified.

S.11. **Risk Adjustment Type** (Select type. Provide specifications for risk stratification in measure testing attachment)
Statistical risk model
If other:

S.12. **Type of score:**
Other (specify):
If other: Categorical for public reporting (i.e., categories are "Better than Expected", "Same as Expected", and "Worse than Expected´); rate for confidential reporting (better quality [all else equal] = lower rates)

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

S.14. **Calculation Algorithm/Measure Logic** (*Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.*)
The following algorithm is used to compute the "Rehospitalization During the First 30 Days of Home Health" measure and the "Emergency Department Use without Hospital Readmission During the First 30 Days of Home Health" measure:
1. Construct home health stays from HH claims.

2. Link stays to enrollment data by beneficiary.

3. Identify numerator window (30 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.

4. Exclude stays that begin with a LUPA or that involve a provider change during the numerator window.

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. Link to Part A and Part B claims for 6 months prior to Stay_Start_Date for each beneficiary.

7. Calculate demographic risk factors for each stay (age, sex, etc.) using enrollment data.

8. Limit to home health stays where the Stay_Start_Date minus the Thru_Dt of an Inpatient (IP) claims is equal to or less than 5. Exclude stays where the IP claim is not for a short-term hospital or has an AHRQ Diagnosis CCS or stus_cd that excludes it from being an index admission. Retain the DRG of the index admission as a risk factor.

9. Calculate prior care setting indicators, ADLs, HCCs, and HCC interactions.

10. Exclude stays that have prior care setting indicators whose claim Thru_Dt is in between the Thru_Dt of the index hospitalization and the Stay_Start_Dt.

11. Link to Inpatient (IP) claims from Short Stay and Critical Access hospitals for numerator window (30 days following Stay_Start_Date).

12. Link to Outpatient claims with revenue center codes indicating emergency department use for the numerator window (30 days following Stay_Start_Date).

13. Calculate measure flags for each stay:
a. Set Hospital Admission indicator (Hosp_Admit = 1) if any IP claims are linked to the stay in step 11.

14. Using coefficients from the multinomial logit risk model and risk factors calculated in steps 7 through 9, 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 to 5) and call these values

National_Pred_Hosp.

15. Calculate observed and expected rates for the measure at each home health agency (Initial_Provider):
a. Observed Rates:
i. 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. Expected Rates:
i. Calculate the agency expected 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.

16. For each agency, simulate the distribution of expected rates:
a. For each stay, randomly choose an outcome (i.e. no outcome, re-hospitalization, or ED use without hospital readmission) using the stay-level predicted probability of hospitalization (Pred_Hosp). Repeat simulation 20,000 times. Call these values X1 – X20,000.

b. For each simulation, calculate the agency predicted rate of hospitalization by taking the average of all stays with that agency. Call these values Agency_sim_Hosp1 – Agency_sim_Hosp20000.

17. Classify agencies as "Better than Expected" if fewer than 5% of the Agency_sim_hosp values are less than or equal to Agency_Obs_Hosp. Classify agencies as "Worse than Expected" if fewer than 5% of the Agency_sim_Hosp values are greater than or equal to Agency_Obs_Hosp. Classify all other agencies as "Same as Expected" (See Appendix for additional technical details about assigning categories).

S.15. Sampling *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*
IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.
Not applicable.

S.16. Survey/Patient-reported data *(If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)*
Specify calculation of response rates to be reported with performance measure results.
Not applicable.

S.17. Data Source *(Check ONLY the sources for which the measure is SPECIFIED AND TESTED).*
If other, please describe in S.18.
 Claims

S.18. Data Source or Collection Instrument *(Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)*
IF instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.
Medicare claims data.

Identification of Short Term Hospitals: https://www.cms.gov/transmittals/downloads/R29SOMA.pdf

General Medicare Data Documentation: http://www.resdac.org/ddvh/index.asp

S.19. Data Source or Collection Instrument *(available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*
No data collection instrument provided

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

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

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

2. Validity – See attached Measure Testing Submission Form
Testing_Rehospitalization_02052014-635277314728459488.docx

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

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

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

3. Feasibility

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

3a. Byproduct of Care Processes
 For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.
Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)
If other:

3b. Electronic Sources
 The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

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

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

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-

specific URL. Please also complete and attach the NQF Feasibility Score Card.
Attachment:

3c. Data Collection Strategy
Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Required for maintenance of endorsement. Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.
IF instrument-based, consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.
Implementing claims-based measures such as this one requires extensive familiarity with Medicare claims and enrollment data. Because multiple types of claims are used, beneficiaries must be linked across claim types and enrollment files. Additionally, different types of claims suffer from different submission lags. Thus it is important to use the most up-to-date claims data possible in calculating claims based measures. For public reporting, this measure will be updated quarterly on a rolling basis. While the latest quarter in the observation window may have slightly lower rates of rehospitalization due to claims delay, these events will be captured in the subsequent quarterly update.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified *(e.g., value/code set, risk model, programming code, algorithm)*.
None.

4. Usability and Use

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

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

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

Specific Plan for Use	Current Use (for current use provide URL)

4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:
- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

Not applicable; this measure is not in current use for public reporting.

4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (*e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?*)
Not applicable; this is a newly developed measure. CMS began reporting the measure on confidential agency reports in January 2014 and intends to publicly report (using categorical reporting) on Home Health Compare in 2015.

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

CMS plans to publicly report the measure (using categorical reporting) on Home Health Compare starting in 2015. This plan was finalized in the CMS Home Health Prospective Payment System final rule for CY2014.

4a2.1.1. **Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.**
How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.

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.

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

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. Additionally, home health quality reporting program training was held in 2017.

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

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. No questions were received in 2017 related to this measure.

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

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. No questions were received on this measure in 2017.

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

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

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

Not applicable for 2017.

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

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

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

The Rehospitalization During the First 30 Days of Home Health measure could be used to achieve high quality care for home health patients. Rates of rehospitalization remain substantial with 13.3 percent of home health patients experiencing an unplanned rehospitalization in the first 30 days of care. Currently, home health care agencies focus on measures of acute care hospitalization (applied to all home health patients) as a measure of their effectiveness; introducing the Rehospitalization During the First 30 Days of Home Health measure will allow home health agencies to further target patients who entered home health after a hospitalization. CMS has provided support to the QIOs to address the high rates of rehospitalization. There are other national initiatives to address hospital readmissions, including work by the Institute for Healthcare Improvement, the National Priority Partnership and others. As described in the "Importance" section, there are interventions that may be effective in reducing hospital readmission, including care transition models and telehealth. Thus, continued reporting is beneficial as this is one outcome that is a national priority across sites of care and for which there is evidence of how to impact the measure. CMS intends to publicly report this outcome measure on Home Health Compare in 2015 (using categorical reporting).

4b2. Unintended Consequences

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

4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.
None.

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

5. Comparison to Related or Competing Measures

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

5. Relation to Other NQF-endorsed Measures
Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.
Yes

5.1a. List of related or competing measures (selected from NQF-endorsed measures)
0171 : Acute Care Hospitalization During the First 60 Days of Home Health
1789 : Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)

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

5a. Harmonization of Related Measures
The measure specifications are harmonized with related measures;
OR
The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):
Are the measure specifications harmonized to the extent possible?
No

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

interpretability and data collection burden.

The home health rehospitalization measures (i.e., Rehospitalization During the First 30 Days of Home Health, and ED Use without Hospital Readmission During the First 30 Days of Home Health) are harmonized with other post-acute rehospitalization measures and with CMS' Hospital-Wide All-Cause Unplanned Readmission measure (HWR) in the types of initial hospitalizations included and 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 ED use as an outcome. The differences arise due to the unique nature of home health care as a post-acute setting. The specifications for the home health rehospitalization measures were developed by restricting the NQF-endorsed claims-based Acute Care Hospitalization (ACH) and ED Use without Hospitalization (ED Use) measures (NQF numbers 171 and 173, respectively) to home health stays that begin within five days of an acute care hospital discharge. HH stays – sequences of home health payment episodes – are defined in the same way as in the ACH and ED Use measures. The initial hospital discharge must meet the criteria for the hospital HWR measure. Home health stays are included in the measure numerator if an unplanned hospital readmission to the inpatient setting or an ED visit occurs during the first 30 days of home care. Certain home health stays, such as those in which multiple home health agencies care for the same patient, are excluded. Finally, the measures are risk adjusted using patient-level predicted probabilities calculated from a multinomial logistic regression. Risk factors that are accounted for include demographics and health status as measured by both CMS' Hierarchical Condition Categories (HCCs) found on claims in the previous six months, the Activities of Daily Living (ADL) fields on the Outcome and Assessment Information Set (OASIS) assessment of the initial home health stay after the index hospitalization, and the Diagnosis-Related Group (DRG) on the initial inpatient claim. The home health rehospitalization measures differ from other post-acute measures in three key ways. First, while other measures exclude patients with a gap between hospital discharge and post-acute admission, the home health measures allow a gap of up to five days. Unlike other post-acute settings, HH is provided in the patient's home, and thus the patient returns to their home after hospital discharge. This results in some gap between hospital discharge and the initial visit from a home health agency. The Medicare Conditions of Participation for home health agencies require home health care to begin within 48 hours of hospital discharge or on the physician-ordered start of care date (which is usually within 1-3 days of hospital discharge). Thus, the measures as specified apply to 91 percent of patients who begin home health within 30 days of hospital discharge. Second, the other measures use different risk factors and a different functional form for risk adjustment. For consistency with the ACH and ED Use measures, which apply to all home health stays, the developer recommends using a similar set of risk factors and the same multinomial logistic form for the home health rehospitalization measures. Third, the risk-adjusted rates for the home health rehospitalization measures would not be publicly reported. 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. Pursuing a categorical reporting method is consistent with condition-specific hospital readmission measures. While the rehospitalization and emergency department use without hospital readmission measures differ from other post-acute 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.The home health rehospitalization measures (i.e., Rehospitalization During the First 30 Days of Home Health, and ED Use without Hospital Readmission During the First 30 Days of Home Health) are harmonized with other post-acute rehospitalization measures and with CMS' Hospital-Wide All-Cause Unplanned Readmission measure (HWR) in the types of initial hospitalizations included and 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 ED use as an outcome. The differences arise due to the unique nature of home health care as a post-acute setting. The specifications for the home health rehospitalization measures were developed by restricting the NQF-endorsed claims-based Acute Care Hospitalization (ACH) and ED Use without Hospitalization (ED Use) measures (NQF numbers 171 and 173, respectively) to home health stays that begin within five days of an acute care hospital discharge. HH stays – sequences of home health payment episodes – are defined in the same way as in the ACH and ED Use measures. The initial hospital discharge must meet the criteria for the hospital HWR measure. Home health stays are included in the measure numerator if an unplanned hospital readmission to the inpatient setting or an ED visit occurs during the first 30 days of home care. Certain home health stays, such as those in which multiple home health agencies care for the same patient, are excluded. Finally, the measures are risk adjusted using patient-level predicted probabilities calculated from a multinomial logistic regression. Risk factors that are accounted for include demographics and health status as measured by both CMS' Hierarchical Condition Categories (HCCs) found on claims in the previous six months, the Activities of Daily Living (ADL) fields on the Outcome and Assessment Information Set (OASIS) assessment of the initial home health stay after the index hospitalization, and the Diagnosis-Related Group (DRG) on the initial inpatient claim. The home health rehospitalization measures differ from other post-acute measures in three key ways. First, while other measures exclude patients with a gap between hospital discharge and post-acute admission, the home health measures allow a gap of up to five days. Unlike other post-acute settings, HH is provided in the patient's home, and thus the patient returns to their home after hospital discharge. This results in some gap between hospital discharge and the initial visit from a home health agency. The Medicare Conditions of Participation for home health agencies require home health care to begin within 48 hours of hospital discharge or on the physician-

ordered start of care date (which is usually within 1-3 days of hospital discharge). Thus, the measures as specified apply to 91 percent of patients who begin home health within 30 days of hospital discharge. Second, the other measures use different risk factors and a different functional form for risk adjustment. For consistency with the ACH and ED Use measures, which apply to all home health stays, the developer recommends using a similar set of risk factors and the same multinomial logistic form for the home health rehospitalization measures.   Third, the risk-adjusted rates for the home health rehospitalization measures would not be publicly reported. 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. Pursuing a categorical reporting method is consistent with condition-specific hospital readmission measures.   While the rehospitalization and emergency department use without hospital readmission measures differ from other post-acute 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.

5b. Competing Measures

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

OR

Multiple measures are justified.

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

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

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

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.
Attachment **Attachment:** CategorizationMethod_02052014-635272030851249021.pdf

Contact Information

Co.1 **Measure Steward (Intellectual Property Owner):** Centers for Medicare & Medicaid Services
Co.2 **Point of Contact:** Corette, Byrd, MMSSupport@Battelle.org, 202-786-1158-
Co.3 **Measure Developer if different from Measure Steward:** Acumen, LLC
Co.4 **Point of Contact:** Keziah, Cook, kcook@acumenllc.com, 650-558-8882-247

Additional Information

Ad.1 **Workgroup/Expert Panel involved in measure development**
Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.
The Technical Expert Panel (TEP) reviewed the measure specifications and public comments received on the Rehospitalization During the First 30 Days of Home Health measure, and provided recommendations on measure development. The TEP included the following members:

Mary Carr, RN,MPH, Associate Director for Regulatory Affairs, National Association for Home Care & Hospice

Richard H. Fortinsky, PhD, Professor and Physicians Health Services Chair in Geriatrics and Gerontology, Center on Aging, University of Connecticut Health Center

Barbara Gage, PhD - Deputy Director of Aging, Disability, and Long-term Care, Post-Acute Care Research Lead, Research Triangle Institute

Margherita C. Labson, R.N., M.S.H.S.A, C.P.H.Q, C.C.M, C.G.B., Executive Director Home Care Program, The Joint Commission

Steven Landers, MD, MPH, Director, Cleveland Clinic Center for Home Care and Community Rehabilitation

Bruce Leff, MD, Professor of Medicine, Johns Hopkins University School of Medicine Joint appointment, Department of Health Policy and Management, Johns Hopkins University Bloomberg School of Public Health

Barbara A. McCann, BSW, MA - Chief Industry Officer, Interim HealthCare, Sunrise FL

Dana B. Mukamel, Ph.D. - Professor, Department of Medicine, Senior Fellow, Health Policy Research Institute, University of California, Irvine

Jennifer S. Mensik, PhD, RN, NEA-BC, FACHE -UCLA Health System

Robert J. Rosati Ph.D. - Vice President of Clinical Informatics Center for Home Care Policy and Research Visiting Nurse Service of New York

Judith A. Sangl, Sc.D. - Health Scientist Administrator, Agency for Healthcare Research and Quality (AHRQ) Center for Patient Safety and Quality Improvement (CQuIPS)

Measure Developer/Steward Updates and Ongoing Maintenance
Ad.2 Year the measure was first released:
Ad.3 Month and Year of most recent revision:
Ad.4 What is your frequency for review/update of this measure? Not applicable
Ad.5 When is the next scheduled review/update for this measure?

Ad.6 Copyright statement: Not applicable.
Ad.7 Disclaimers: Not applicable.

Ad.8 Additional Information/Comments: Once the measure is NQF-endorsed, CMS will follow the NQF measure maintenance/update schedule to review/update the measure.