**NATIONAL QUALITY FORUM**

**Measure Submission and Evaluation Worksheet 5.0**

This form contains the information submitted by measure developers/stewards, organized according to NQF’s measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the [submitting standards web page](#).

<table>
<thead>
<tr>
<th>NQF #: 0537</th>
<th>NQF Project: Patient Safety Measures-Complications Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>(for Endorsement Maintenance Review)</td>
<td></td>
</tr>
<tr>
<td>Original Endorsement Date: Aug 05, 2009</td>
<td>Most Recent Endorsement Date: Aug 05, 2009</td>
</tr>
</tbody>
</table>

### BRIEF MEASURE INFORMATION

**De.1 Measure Title:** Multifactor Fall Risk Assessment Conducted in Patients 65 and Older

**Co.1.1 Measure Steward:** Centers for Medicare and Medicaid Services

**De.2 Brief Description of Measure:** Percentage of home health episodes of care in which patients 65 and older had a multi-factor fall risk assessment at start/resumption of care.

**2a1.1 Numerator Statement:** Number of home health episodes of care in which patients 65 and older had a multi-factor fall risk assessment at start/resumption of care.

**2a1.4 Denominator Statement:** Number of home health episodes of care ending during the reporting period, other than those covered by generic or measure-specific exclusions.

**2a1.8 Denominator Exclusions:** Episodes in which the patient's age was less than 65 at the time of assessment.

**1.1 Measure Type:** Process

**2a1.25-26 Data Source:** Electronic Clinical Data

**2a1.33 Level of Analysis:** Facility

**1.2-1.4 Is this measure paired with another measure?** No

**De.3 If included in a composite, please identify the composite measure (title and NQF number if endorsed):**

### STAFF NOTES (issues or questions regarding any criteria)

**Comments on Conditions for Consideration:**

**Is the measure untested?** Yes [ ] No [ ] If untested, explain how it meets criteria for consideration for time-limited endorsement:

1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (check De.5):

5. Similar/related [endorsed] or submitted measures (check 5.1):

**Other Criteria:**

**Staff Reviewer Name(s):**

### 1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT

Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See [guidance on evidence](#).

**Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria)**
Falls among older people are high risk events associated with mortality, injury, and substantial amounts of health care resource use. Rates of falls for American home health care patients are under-studied: the most recent and only study specific to home health patients reports an annual rate of 28.5% among home health care patients aged 65 and older in one state in the Midwest (1). Other studies of community dwelling older people report falls rates ranging from 11% (Canadian home health care patients in Quebec) (2) to 25% (community dwelling older adults in three European countries) (3) to 49% (very old, age 85 and older, Finnish people) (4). A Cochrane review of 111 RCTs reports a 30% fall rate among community dwelling older people with evidence that multifactorial assessment and interventions reduce the rate of falls but not the risk of falls (5). There is variation in provider behavior on falls risk assessment. Prior to implementation of the OASIS-C assessment, Fortinsky et al. reported that nurses and rehabilitation therapists, despite having received in-service training on the benefits of performing falls risk assessment, reported clinician level follow-up on falls risk assessment elements ranging from 51% for medication history to 81% for assessment of postural hypotension (6). Peel et al. reported that among home health physical therapists responding to a survey of their practice, 98% and 100% (respectively) asked about a history of falls and identified risk factors for falling (7). However, this study was limited by response bias, implying that the true rates of falls risk assessment are most likely much lower than those reported in the Peel et al. study. Thus, the current literature illustrates that there is evidence of high rates of falls among home health care patients (28.5% based on the most recent U.S. home health care study) and variation in clinician practice, even following an in-service educational program. This measure will encourage home health agencies to promote patient safety by conducting fall risk assessments for patients aged 65 or older and by providing information to home health agencies and consumers that will enable them to monitor the care received by patients at risk of falls.


1a.1 Summary of Evidence of High Impact (Provide epidemiologic or resource use data):
Falls among older people are high risk events associated with mortality, injury, and substantial amounts of health care resource use. Rates of falls for American home health care patients are under-studied: the most recent and only study specific to home health patients reports an annual rate of 28.5% among home health care patients aged 65 and older in one state in the Midwest (1). Other studies of community dwelling older people report falls rates ranging from 11% (Canadian home health care patients in Quebec) (2) to 25% (community dwelling older adults in three European countries) (3) to 49% (very old, age 85 and older, Finnish people) (4). A Cochrane review of 111 RCTs reports a 30% fall rate among community dwelling older people with evidence that multifactorial assessment and interventions reduce the rate of falls but not the risk of falls (5). There is variation in provider behavior on falls risk assessment. Prior to implementation of the OASIS-C assessment, Fortinsky et al. reported that nurses and rehabilitation therapists, despite having received in-service training on the benefits of performing falls risk assessment, reported clinician level follow-up on falls risk assessment elements ranging from 51% for medication history to 81% for assessment of postural hypotension (6). Peel et al. reported that among home health physical therapists responding to a survey of their practice, 98% and 100% (respectively) asked about a history of falls and identified risk factors for falling (7). However, this study was limited by response bias, implying that the true rates of falls risk assessment are most likely much lower than those reported in the Peel et al. study. Thus, the current literature illustrates that there is evidence of high rates of falls among home health care patients (28.5% based on the most recent U.S. home health care study) and variation in clinician practice, even following an in-service educational program. This measure will encourage home health agencies to promote patient safety by conducting fall risk assessments for patients aged 65 or older and by providing information to home health agencies and consumers that will enable them to monitor the care received by patients at risk of falls.


1b. Opportunity for Improvement: H□ M□ L□ I□ (There is a demonstrated performance gap - variability or overall less than optimal performance)

1b.1 Briefly explain the benefits (improvements in quality) envisioned by use of this measure:
As noted above, studies have demonstrated that older people receiving home health care have relatively high rates of falls, which are in turn associated with mortality, injury, and substantial amounts of health care resource use. The current literature indicates there is significant variation in provider behavior on falls risk assessment and thus a need for a more systematic way of assessing and encouraging home health providers to conduct fall risk assessments, in order to prevent the high rates of falls in older individuals. This measure will encourage home health agencies to promote patient safety by conducting fall risk assessments for patients aged 65 or older. It will also provide home health agencies and consumers with information that will enable them to monitor
the care received by patients at risk of falls.

TEP Comments:
In December 2010, a Technical Expert Panel (TEP) was convened to review the analysis conducted on the home health measures that received NQF time-limited endorsement. The TEP was asked to rate the measure importance (is the measurement and reporting important for making significant gains in health care quality). Members noted that variation in this measure was not high, and the variation will become even more limited over time. Approximately half of TEP members rated the measure as moderately meeting the criterion for importance.

1b.2 Summary of Data Demonstrating Performance Gap (Variation or overall less than optimal performance across providers):

For Maintenance – Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.]

Agency Average 95%
Std. Dev. 11%
Skew (-4.69)
Min 1%
10th 88%
25th 96%
50th 99%
75th 100%
90th 100%
Max 100%

TEP comments:
In December 2010, a Technical Expert Panel (TEP) was convened to review analysis conducted on the home health measures that received NQF time limited endorsement. When asked to rate importance to measure (is the measurement and reporting important for making significant gains in health care quality - safety, timeliness, effectiveness, efficiency, equity, patient-centeredness- and improving health outcomes for a specific high impact aspect of healthcare), the majority of the members of the December 2010 TEP members rated the measure as partially or completely meeting the criteria. Some members noted that the data has not been collected long enough to be able to assess the measure’s value.

1b.3 Citations for Data on Performance Gap: [For Maintenance – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

OASIS-C data from 1/1/2010 - 9/30/2010 from Medicare certified agencies with at least 10 quality episodes to which the measure applies. 85% of agencies (8,653) met the ten episode threshold for this measure. The measure applied to 82% of all quality episodes (2.38 million out of 2.89 million). As less than 12 months of data were available for testing, we relaxed the public reporting constraint of 20 episodes per agency in 12 months to 10 episodes per agency in 9 months.

1b.4 Summary of Data on Disparities by Population Group: [For Maintenance –Descriptive statistics for performance results for this measure by population group]

There were no disparities in care related to falls risk assessment identified in our analysis of measure scores.

Descriptive statistics of measure scores (distribution by race, age and gender)

<table>
<thead>
<tr>
<th>Observed Rate (Numerator/Denominator) by Patient Race</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>94%</td>
<td>94%</td>
<td>96%</td>
<td>95%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observed Rate (Numerator/Denominator) by Patient Age</th>
<th>&lt;65</th>
<th>65-75</th>
<th>75-85</th>
<th>85+</th>
</tr>
</thead>
<tbody>
<tr>
<td>94%</td>
<td>94%</td>
<td>94%</td>
<td>94%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observed Rate (Numerator/Denominator) by Patient Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>94%</td>
<td>94%</td>
<td></td>
</tr>
</tbody>
</table>
There is also no evidence of disparities in care related to falls risk assessment identified in our review of the home health care-specific literature.

1b.5 Citations for Data on Disparities Cited in 1b.4: [For Maintenance – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

OASIS-C data from 1/1/2010 - 9/30/2010 from Medicare certified agencies with at least 10 quality episodes to which the measure applies. 85% of agencies (8,653) met the ten episode threshold for this measure. The measure applied to 82% of all quality episodes (2.38 million out of 2.89 million). As less than 12 months of data were available for testing, we relaxed the public reporting constraint of 20 episodes per agency in 12 months to 10 episodes per agency in 9 months.

1c. Evidence (Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.)

Is the measure focus a health outcome?  

Yes [ ]  No [x]  

If not a health outcome, rate the body of evidence.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Quality</th>
<th>Consistency</th>
<th>Does the measure pass subcriterion 1c?</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-H</td>
<td>M-H</td>
<td>M-H</td>
<td>Yes [ ]</td>
</tr>
<tr>
<td>L</td>
<td>M-H</td>
<td>M</td>
<td>IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No [x]</td>
</tr>
<tr>
<td>M-H</td>
<td>L</td>
<td>M-H</td>
<td>Yes [ ] IF potential benefits to patients clearly outweigh potential harms: otherwise No [x]</td>
</tr>
<tr>
<td>L-M-H</td>
<td>L-M-H</td>
<td>L</td>
<td>No [x]</td>
</tr>
</tbody>
</table>

Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service

Does the measure pass subcriterion 1c?  

Yes [ ] IF rationale supports relationship

1c.1 Structure-Process-Outcome Relationship (Briefly state the measure focus, e.g., health outcome, intermediate clinical outcome, process, structure; then identify the appropriate links, e.g., structure-process-health outcome; process-health outcome; intermediate clinical outcome-health outcome):

The measure is a process measure. There is a very limited body of research focused on home health care patients and agency processes of care (noted below). However, the process of care related to a multifactorial falls risk assessment is applicable to home health care and performance of the process of care as recommended in the clinical practice guideline (as cited below) should result in fewer home health care patients with falls.

1c.2-3 Type of Evidence (Check all that apply):

Clinical Practice Guideline, Selected individual studies (rather than entire body of evidence), Systematic review of body of evidence (other than within guideline development)

1c.4 Directness of Evidence to the Specified Measure (State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population):

Three types of evidence are being reported here: individual research studies, systematic reviews and clinical practice guidelines. Individual research study: There are no individual research studies specific to US home health care patients that focus on falls risk assessment. A search of PubMed and CINAHL using the terms “falls risk assessment” and “home care services” returned no results; neither did “falls risk assessment” and “home health care.” The only study reporting on a population similar to OASIS-C is that of Spoelstra and colleagues who report on a community-based long term care (CBLTC) population in one state for rates of falls and predictors of falls. The MDS, as modified for use in CBLTC, was used. The researchers report a 28.5% rate of falls and identified individual patient factors associated with falls but did not study the prevalence of use of or the effect of a multifactor falls risk assessment.

Systematic reviews: There are no systematic reviews that are specific to home health care practice. The closest and most recent systematic reviews are reported here; these systematic reviews focus on community-dwelling older people. Michael et al used the USPSTF criteria to rate 19 RCTs focused on multifactorial assessment and interventions. The evidence quality was rated as “fair” with issues of concern related primarily to identification of who was considered a faller. The risk ratio associated with multifactorial
risk assessments and interventions was 0.94 (95% CI 0.87 to 1.02) suggesting a protective effect. However, it was not possible to separate interventions from assessments. There was minimal evidence of harms and these were related to the interventions, not assessments. As of September 2011, the USPSTF has not finalized recommendations for interventions to prevent falls in older adults.

A Cochrane Review from 2009 included 111 trials and identified that a multifactorial risk assessment and intervention reduced the rates of falls (RR = 0.75, 95% CI 0.65 to 0.86) in community dwelling older people (15 trials). The Cochrane Review included interventions as well as assessment and it was not possible to separate assessment from intervention.

There is one clinical practice guideline that applies to the assessment of falls risk in home health care from the American Geriatrics Society and the British Geriatrics Society; it is described below. The CPGs available from AHRQ National Guideline Clearinghouse are for institutional use (i.e. acute care and nursing home settings) or are from non-US sources and of lower quality.

1c.5 Quantity of Studies in the Body of Evidence (Total number of studies, not articles): One individual study is reported above but is not directly relevant. The CPG does not indicate the number of studies used to develop the CPG but has an extensive reference list and uses the USPSTF guidelines to analyze and grade the evidence. The systematic reviews do indicate the number of studies used to make the recommendations: Michael et al used 19 RCTs; the Cochrane Review included 15 RCTs.

1c.6 Quality of Body of Evidence (Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events): The estimates of benefits and harms identified in the systematic reviews are the most relevant and were identified only by Michael et al (2010) and described above. The evidence has been described as “fair quality” with limitations from reporting (e.g. retrospective reports using patient recall) and issues with measurement (defining a fall and who is a faller).

1c.7 Consistency of Results across Studies (Summarize the consistency of the magnitude and direction of the effect): The systematic reviews report on combined effects from assessment and intervention and it is not possible to separate the two. There is heterogeneity in the findings from both systematic reviews but generally a beneficial effect from assessment and intervention.

1c.8 Net Benefit (Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms): There is not a specific estimate of net benefit although Michael et al identify that the benefits outweigh the harms because of the minor nature of the harms. (The harms were related to the interventions and use musculoskeletal effects from exercise as an example.)

1c.9 Grading of Strength/Quality of the Body of Evidence. Has the body of evidence been graded? No

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: The study cited was not graded. The systematic reviews identify the strengths of the RCTs included. The CPG was graded using the USPSTF criteria. For the systematic reviews, the evidence was graded by the authors of the systematic reviews. Disclosures regarding bias were present in both systematic reviews.

1c.11 System Used for Grading the Body of Evidence: Other

1c.12 If other, identify and describe the grading scale with definitions: USPSTF criteria used for the Michael et al systematic review Cochrane reviews used the Cochrane criteria.

1c.13 Grade Assigned to the Body of Evidence: The Michael review was a multicomponent review. The evidence quality for assessment and intervention was identified as “fair.” The Cochrane review did not grade the body of evidence for the combined multifactorial assessment and intervention component of the review. Problems with the quality of the evidence were identified (e.g. definition of what constitutes a fall).

1c.14 Summary of Controversy/Contradictory Evidence: No controversies were identified in the body of research about the benefits of a multifactorial falls risk assessment. The two systematic reviews include assessment and intervention and do not
The two components in their evaluation of the evidence or their recommendations. Both systematic reviews identify benefit from the multifactorial assessment.

1c.15 Citations for Evidence other than Guidelines (Guidelines addressed below):

1c.16 Quote verbatim, the specific guideline recommendation (Including guideline # and/or page #):
"The 2010 guidelines, although recommending a multifactorial fall risk assessment for all older adults who present with a fall or who have gait and balance problems, also calls for a multifactorial falls risk assessment for individuals who simply report difficulties with gait or balance. A falls risk assessment is not considered necessary for older persons reporting only a single fall without reported or demonstrated difficulty or unsteadiness. The history of fall circumstances is more specific in the 2010 guidelines, including questions about frequency of falling, symptoms at time of fall, and injuries from fall. New specific recommendations for assessment include examination of the feet and footwear, functional assessment (assessment of activity of daily living skills, including use of adaptive equipment and mobility aids, as appropriate); assessment of the individual’s perceived functional ability and fear related to falling; and environmental assessment, including home safety." Page 2

“RECOMMENDATIONS: SCREENING AND ASSESSMENT
All older individuals should be asked whether they have fallen (in the past year).
1. An older person who reports a fall should be asked about the frequency and circumstances of the fall(s).
2. Older individuals should be asked whether they experience difficulties with walking or balance.
3. Older persons who present for medical attention because of a fall, report recurrent falls in the past year, or report difficulties in walking or balance (with or without activity curtailment) should have a multifactorial fall risk assessment.
4. Older persons who cannot perform or perform poorly on a standardized gait and balance test should be given a multifactorial fall risk assessment.
5. Older persons who report a single fall in the past year should be evaluated for gait and balance.
6. Older persons who have fallen should have an assessment of gait and balance using one of the available evaluations.
7. Older persons who have difficulty or demonstrate unsteadiness during the evaluation require a multifactorial fall risk assessment.
8. Older persons reporting only a single fall in the past year and reporting or demonstrating no difficulty or unsteadiness during the evaluation do not require a fall risk assessment.
9. A clinician (or clinicians) with appropriate skills and training should perform the multifactorial fall risk assessment.
10. The multifactorial fall risk assessment should include the following.
   A. Focused History
      (i) History of falls: detailed description of the circumstances of the fall(s), frequency, symptoms at time of fall, injuries, other consequences
      (ii) Medication review: all prescribed and over-the-counter medications with dosages
      (iii) History of relevant risk factors: acute or chronic medical problems (e.g., osteoporosis, urinary incontinence, cardiovascular disease)
   B. Physical Examination
      (i) Detailed assessment of gait, balance, and mobility levels and lower extremity joint function
      (ii) Neurological function: cognitive evaluation, lower extremity peripheral nerves, proprioception, reflexes, tests of cortical, extrapyramidal and cerebellar function
      (iii) Muscle strength (lower extremities)
      (iv) Cardiovascular status, heart rate and rhythm, postural pulse and postural blood pressure, and if appropriate heart rate and blood pressure responses to carotid sinus stimulation
      (v) Assessment of visual acuity
(vi) Examination of the feet and footwear

C. Functional Assessment

(i) Assessment of activity of daily living skills, including use of adaptive equipment and mobility aids, as appropriate
(ii) Assessment of the individual’s perceived functional ability and fear related to falling (assessment of current activity levels with attention to the extent to which concerns about falling are protective (appropriate given abilities) or contributing to deconditioning or compromised quality of life (individual is curtailing involvement in activities he or she is safely able to perform due to fear of falling))” (page 7)


1c.18 National Guideline Clearinghouse or other URL:

1c.19 Grading of Strength of Guideline Recommendation. Has the recommendation been graded? Yes

1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: While other recommendations in the report are graded, the assessment recommendation is not graded.

1c.21 System Used for Grading the Strength of Guideline Recommendation: USPSTF

1c.22 If other, identify and describe the grading scale with definitions:

1c.23 Grade Assigned to the Recommendation: While other recommendations in the report are graded, the assessment recommendation is not graded.

1c.24 Rationale for Using this Guideline Over Others: The AGS/BGS CPG is the most rigorous guideline and most detailed in its description of how the recommendations were derived. The bodies constituting the review group are internationally recognized for their expertise.

Sufficiently high quantities of studies generally included in the CPG

Moderate quality of the studies used to develop the guideline—there are common problems with insufficient sample sizes, lack of randomization, recall bias or the use of single sites for the studies. Many of the recommendations rely on expert opinion because there is insufficient research to use for some of the recommendations. Additionally, few of the studies are focused on home health care patients although the recommendations apply to home health care patients.

As there is only one guideline being recommended, consistency is not evaluated.

Notes on 1c25, 1c26, 1c27

Quantity - Sufficiently high quantities of studies generally included in the CPG

Quality - Quantity

Sufficiently high quantities of studies generally included in the CPG

1c.26. Quality

Moderate quality of the studies used to develop the guideline—there are common problems with insufficient sample sizes, lack of randomization, recall bias or the use of single sites for the studies. Many of the recommendations rely on expert opinion because there is insufficient research to use for some of the recommendations. Additionally, few of the studies are focused on home health care patients although the recommendations apply to home health care patients.

Consistency - there is only one guideline being recommended, so consistency is not an issue.

Moderate quality of the studies used to develop the guideline—there are common problems with insufficient sample sizes, lack of randomization, recall bias or the use of single sites for the studies. Many of the recommendations rely on expert opinion because
there is insufficient research to use for some of the recommendations. Additionally, few of the studies are focused on home health care patients although the recommendations apply to home health care patients.

1c.27. Consistency
As there is only one guideline being recommended, consistency is not evaluated.

Based on the NQF descriptions for rating the evidence, what was the developer’s assessment of the quantity, quality, and consistency of the body of evidence?
1c.25 Quantity: High  1c.26 Quality: Moderate  1c.27 Consistency: High
1c.28 Attach evidence submission form:
1c.29 Attach appendix for supplemental materials:

Was the threshold criterion, Importance to Measure and Report, met?
(1a & 1b must be rated moderate or high and 1c yes)  Yes [ ] No [ ]
Provide rationale based on specific subcriteria:

For a new measure if the Committee votes NO, then STOP.
For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)

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 field. Supplemental materials may be referenced or attached in item 2.1. See guidance on measure testing.

S.1 Measure Web Page (In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained). Do you have a web page where current detailed specifications for this measure can be obtained? Yes [ ]


2a. RELIABILITY. Precise Specifications and Reliability Testing:  H [ ] M [ ] L [ ] I [ ]

2a1. Precise Measure Specifications. (The measure specifications precise and unambiguous.)

2a1.1 Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome):
Number of home health episodes of care in which patients 65 and older had a multi-factor fall risk assessment at start/resumption of care.

2a1.2 Numerator Time Window (The time period in which the target process, condition, event, or outcome is eligible for inclusion): CMS systems report data on episodes that end within a rolling 12 month period, updated quarterly.

2a1.3 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, codes with descriptors, and/or specific data collection items/responses:
Number of home health patient episodes of care where at start of episode:
- (M1910) Has patient had a Multi-factor Fall Risk Assessment = 1 (yes - found no risk) or 2 (yes - found risk)

2a1.4 Denominator Statement (Brief, narrative description of the target population being measured):
Number of home health episodes of care ending during the reporting period, other than those covered by generic or measure-specific exclusions.

2a1.5 Target Population Category (Check all the populations for which the measure is specified and tested if any): Adult/Elderly Care
2a1.6 **Denominator Time Window** *(The time period in which cases are eligible for inclusion):*
CMS systems report data on episodes that end within a rolling 12 month period, updated quarterly.

2a1.7 **Denominator Details** *(All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):*
Number of home health patient episodes of care, defined as:
A start/resumption of care assessment ((M0100) Reason for Assessment = 1 (Start of care) or 3 (Resumption of care)) paired with a corresponding discharge/transfer assessment ((M0100) Reason for Assessment = 6 (Transfer to inpatient facility – not discharged), 7 (Transfer to inpatient facility – discharged), 8 (Death at home), or 9 (Discharge from agency)), other than those covered by denominator exclusions.

2a1.8 **Denominator Exclusions** *(Brief narrative description of exclusions from the target population):*
Episodes in which the patient's age was less than 65 at the time of assessment.

2a1.9 **Denominator Exclusion Details** *(All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):*
**Measure Specific Exclusions:**
Number of home health patient episodes of care where at start of episode:
-(M0100) Reason for Assessment = 1 (Start of care) AND
-(M0030) Start of care date minus (M0066) Patient Birth date is less than 65 years
PLUS
Number of home health patient episodes of care where at start of episode:
-(M0100) Reason for Assessment = 3 (Resumption of care) AND
-(M0032) Resumption of care date minus (M0066) Patient Birth date is less than 65 years

**Generic Exclusions:** Medicare-certified home health agencies are currently required to collect and submit OASIS data only for adult (aged 18 and over) non-maternity Medicare and Medicaid patients who are receiving skilled home health care. Therefore, maternity patients, patients less than 18 years of age, non-Medicare/Medicaid patients, and patients who are not receiving skilled home services are all excluded from the measure calculation. However, the OASIS items and related measures could potentially be used for other adult patients receiving services in a community setting, ideally with further testing. The publicly-reported data on CMS' Home Health Compare web site also repress cells with fewer than 20 observations, and reports for home health agencies in operation less than six months.

2a1.10 **Stratification Details/Variables** *(All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses):*
N/A - measure not stratified.

2a1.11 **Risk Adjustment Type** *(Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13):*
No risk adjustment or risk stratification

2a1.12 **If "Other," please describe:**

2a1.13 **Statistical Risk Model and Variables** *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note: risk model development should be addressed in 2b4):*
N/A - process measure.

2a1.14-16 **Detailed Risk Model Available at Web page URL** *(or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:

2a1.17-18. **Type of Score:** Rate/proportion
2a1.19 **Interpretation of Score** *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score):* Better quality = Higher score

2a1.20 **Calculation Algorithm/Measure Logic** *(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; aggregating data; risk adjustment; etc.):*


2a1.21-23 **Calculation Algorithm/Measure Logic Diagram URL or attachment:**

2a1.24 **Sampling (Survey) Methodology.** If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):
Not applicable, completion of OASIS-C assessments is mandated by CMS and all completed assessments are used to calculate measure.

2a1.25 **Data Source** *(Check all the sources for which the measure is specified and tested). If other, please describe:*
Electronic Clinical Data

2a1.26 **Data Source/Data Collection Instrument** *(Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):* OASIS-C

2a1.27-29 **Data Source/data Collection Instrument Reference Web Page URL or Attachment:**

2a1.30-32 **Data Dictionary/Code Table Web Page URL or Attachment:**

2a1.33 **Level of Analysis** *(Check the levels of analysis for which the measure is specified and tested):* Facility

2a1.34-35 **Care Setting** *(Check all the settings for which the measure is specified and tested):* Home Health

2a2. **Reliability Testing.** *(Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.)*

2a2.1 **Data/Sample** *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):*

All agencies with at least 20 quality episodes beginning and ending between 1/1/2010 and 12/31/2010 were included in the reliability analysis, because only information for agencies with at least 20 episodes is publicly reported. Of these, 8,546 agencies met the threshold for the measure Fall Risk Assessment Conducted. For the national analysis, a beta-binomial distribution was fitted using all agencies. For the HHR (hospital referral region) analysis described below, separate beta-binomials were fitted for each of 306 HHRs, using only those agencies in the HHR. It is worth noting that even the agencies that are in HRRs with only two agencies have high reliability scores, because these small HRR agencies tend to service many episodes relative to the rest of the country.

2a2.2 **Analytic Method** *(Describe method of reliability testing & rationale):*

Based on guidance received from NQF in April 2011, we conducted additional reliability analysis of this measure using the beta-binomial method described in “The Reliability of Provider Profiling: A Tutorial” by John L. Adams. The beta-binomial method was developed for provider level measures reported as rates, and it allows one to calculate an agency level “reliability score,” interpreted as the percent of variance due to the difference in measure score among providers. Thus, a reliability score of .80 signifies that 80% of the variance is due to differences among providers, and 20% of the variance is due to measurement error or sampling.
uncertainty. A high reliability score implies that performance on a measure is unlikely to be due to measurement error or insufficient sample size, but rather due to true differences between the agency and other agencies. Each agency receives an agency specific reliability score which depends on both agency size, agency performance on the measure, and measure variance for the relevant comparison group of agencies.

In addition to calculating reliability scores at the national level, we also calculated agency reliability scores at the level of hospital referral regions (HRRs), because the HRR grouping more adequately captures the types of comparisons health care consumers are likely to make. HRRs are region designations determined in the Dartmouth Atlas of Health Care study, and they represent regional health care markets for tertiary medical care that generally requires the service of a major referral center. They are aggregated hospital service areas (HSAs) and thus aggregated local health care markets. The HRRs are used to determine categories of sufficient size to make comparisons while still capturing the local set of HHA choices available to a beneficiary.

2a2.3 Testing Results (Reliability statistics, assessment of adequacy in the context of norms for the test conducted):

<table>
<thead>
<tr>
<th>Distribution of Within National Reliability Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 0.959</td>
</tr>
<tr>
<td>Min 0.330</td>
</tr>
<tr>
<td>10th 0.875</td>
</tr>
<tr>
<td>25th 0.966</td>
</tr>
<tr>
<td>50th 0.995</td>
</tr>
<tr>
<td>75th 1.000</td>
</tr>
<tr>
<td>90th 1.000</td>
</tr>
<tr>
<td>Max 1.00</td>
</tr>
</tbody>
</table>

The distribution of national reliability scores (percent of variance due to the difference in measure score among providers at the national level) shows that at least 75% of agencies have a reliability score greater than .966, implying that their performance can likely be distinguished from other agencies (i.e., performance on this measure is unlikely to be due to measurement error or insufficient sample size, but is instead due to true differences between the agency and other agencies as it substantially exceeds within agency variation).

<table>
<thead>
<tr>
<th>Distribution of Within HRR Reliability Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 0.930</td>
</tr>
<tr>
<td>Min 0.074</td>
</tr>
<tr>
<td>10th 0.779</td>
</tr>
<tr>
<td>25th 0.934</td>
</tr>
<tr>
<td>50th 0.991</td>
</tr>
<tr>
<td>75th 1.000</td>
</tr>
<tr>
<td>90th 1.000</td>
</tr>
<tr>
<td>Max 1.00</td>
</tr>
</tbody>
</table>

The distribution of HRR reliability scores (percent of variance due to the difference in measure score among providers at the HRR level) for this measure also shows that at least 75% of agencies have a reliability score greater than .934, suggesting that between agency variation substantially exceeds within agency variation.

2b. VALIDITY. Validity, Testing, including all Threats to Validity |

2b1.1 Describe how the measure specifications (measure focus, target population, and exclusions) are consistent with the evidence cited in support of the measure focus (criterion 1c) and identify any differences from the evidence:
The measure focus is a process of care related to a multifactorial falls risk assessment which is applicable to home health care and performance of the process of care as recommended in the clinical practice guidelines. Specifications (other than for exclusion of patients under 65) are consistent with our data analysis (see 2b3.3.) and the TEP’s assessment of face validity. However, the evidence indicates the measure is not specified to capture the most inclusive target population and we request that NQF consider removing the requirement of excluding home health patients under the age of 65, made when time-limited endorsement was granted.

2b2. Validity Testing. (Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)

2b2.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

OASIS-C quality episodes from 1/1/2010 – 9/30/2010 for all beneficiaries at Medicare Certified agencies. A 20% sample (about
500,000 episodes), chosen at random, was used to identify patient characteristics correlated to outcomes. A different 20% sample was used to validate the predictive models.

2b2.2 Analytic Method (Describe method of validity testing and rationale; if face validity, describe systematic assessment): Relationship between process and observed outcomes:
- Two measures that could potentially be clinically related to this measure were selected from measures that are currently calculated as part of the Outcome-based Quality Improvement and Potentially Avoidable Event home health reports. They were Acute Care Hospitalization and Emergent care for injury caused by a fall. For each of these measures, preliminary prediction models using most of the Agency Patient-Related Characteristic Report variables except race were developed. Acute care hospitalization, as an outcome, would be expected to be associated with “multifactor fall risk assessment conducted” as falls with injuries are common among older people and a substantial cause of hospitalization. Thus identifying those at high risk for falls should allow home health care agencies to include preventive measures to reduce the risk of falls with injuries that require hospital care. Emergent care for injury caused by a fall, as an outcome, would be expected to be associated with “multifactor fall risk assessment conducted” as those patients at high risk are identified and preventive measures are instituted.

A bivariate relationship (95% confidence interval using logistic regression) and the relationship between the TLE PBQI measure and the preliminary risk adjusted target outcome measure (95% confidence interval using logistic regression) were computed. Predictive validity analysis was conducted at the individual quality episode level. Odds ratios for both a bivariate relationship between the process and outcome and for the multivariate relationship between the process, patient risk-factors, and the outcome were reported.

Face validity assessment:

Also, in December 2010, a Technical Expert Panel (TEP) was convened to review the analysis conducted on the home health measures that received NQF time limited endorsement, and asked to rate face validity.

2b2.3 Testing Results (Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment):

The predictive validity analysis showed the degree of correlation between the Falls Risk Assessment measure and the tested outcome measures was insignificant. Members of the Technical Expert Panel convened to review the measures in December 2010 noted that the limited variation in data (i.e. high use of the process) may explain the lack of relationship between the Falls Risk Assessment Measure and a reduction in ACH or emergent care related to falls. A number of TEP members said the lack of a relationship was not surprising since the analysis was being conducted on all patients who were assessed versus patients assessed and found to be at risk.

When asked to rate face validity (the extent to which the measure reflects the quality of care for the specific topic and whether the measure focus is the most important aspect of quality for the specific topic), the majority of TEP members (7 of 12) rated the measure as partially or completely meeting the criteria.

POTENTIAL THREATS TO VALIDITY. (All potential threats to validity were appropriately tested with adequate results.)

2b3. Measure Exclusions. (Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.)

2b3.1 Data/Sample for analysis of exclusions (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

All quality episodes (2.89 million) from 1/1/2010 to 9/30/2010.
- 2.02 million episodes ending in discharge not to an inpatient facility;
- 855,705 episodes ending in transfer to an inpatient facility;
- 2.39 million short-term episodes
- 17,879 episodes ending in patient death at home.

2b3.2 Analytic Method (Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference):

Frequency of exclusions by type;
Comparison of patient characteristics for excluded and non-excluded episodes

2b3.3 Results (Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):
Currently, this measure excludes episodes in which the patient is under 65. This exclusion was added by NQF reviewers during initial consideration of the measure in 2008. The research that has been conducted has been predominantly among persons age 65 and older although there are studies specific to disease populations that are not home health care specific (i.e. persons with Parkinson's disease).

However, the measure stewards, the clinical experts conducting the OASIS measure development and testing, and members of the Technical Expert Panel convened to review the home health measures in December 2010 have all expressed the opinion that all patients who require skilled services to be delivered in the home, including those under the age of 65, should be assessed for falls risk. There is concern that restricting the measure to patients 65 and over sends the message to home health care providers that patients under 65 would not benefit from this assessment. Descriptive statistics calculated both with and without the exclusion (see testing results below) indicate that a significant proportion of home health patient under 65 share many of the characteristics which indicate falls risk with the 65 and older population. Also, comparison of distribution of falls risk assessment for all patients versus patients 65 and over indicate little variation in agency behavior for these 2 groups.

# of episodes excluded due to patient condition/diagnosis (age less than 65): 503,367

% of episodes excluded due to patient condition/diagnosis (age less than 65): 17%

Breakdown of Falls Risk Factors by Patient Age

<table>
<thead>
<tr>
<th>Table of Falls Risk Measures By Age</th>
<th>Patient &lt; 65</th>
<th>Patient 65 or &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td># episodes</td>
<td>% episodes</td>
<td># episodes</td>
</tr>
<tr>
<td>On 5+ Medications</td>
<td>391,502</td>
<td>78%</td>
</tr>
<tr>
<td>With Frailty</td>
<td>106,144</td>
<td>21%</td>
</tr>
<tr>
<td>With History of Falls</td>
<td>95,845</td>
<td>19%</td>
</tr>
<tr>
<td>None of Above</td>
<td>82,962</td>
<td>17%</td>
</tr>
</tbody>
</table>

Agency Descriptive Statistics for Multifactor Fall Risk Assessment Conducted for All Patients

| Agency Descriptive Statistics for Multifactor Fall Risk Assessment Conducted for All Patients |
|-----------------------------------------------|-------------------------------|
| Agency | Std | Skew | Min | 10th | 25th | 50th | 75th | 90th | Max | 95% | 11% | -4.41 | 0% | 87% | 95% | 99% | 100% | 100% | 100% |
| Avg    | Dev |

Agency Descriptive Statistics for Multifactor Fall Risk Assessment Conducted for Patients 65 and >

| Agency Descriptive Statistics for Multifactor Fall Risk Assessment Conducted for Patients 65 and > |
|-----------------------------------------------|-------------------------------|
| Agency | Std. | Skew | Min | 10th | 25th | 50th | 75th | 90th | Max | 95% | 11% | -4.69 | 1% | 88% | 96% | 99% | 100% | 100% | 100% |
| Avg.   | Dev |

2b4. Risk Adjustment Strategy. (For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.)

2b4.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
N/A - process measure

2b4.2 Analytic Method (Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables):
N/A - process measure
2b4.3 Testing Results (Statistical risk model): Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata:
N/A - process measure

2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment: N/A - process measure

2b5. Identification of Meaningful Differences in Performance. (The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.)

2b5.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
OASIS-C data from Medicare certified agencies with at least 10 quality episodes to which the measure applies. 85% of agencies (8,653) met the ten episode threshold for this measure. The measure applied to 82% of all quality episodes (2.38 million out of 2.89 million)

2b5.2 Analytic Method (Describe methods and rationale to identify statistically significant and practically meaningfully differences in performance):
Difference in performance between 90th percentile agency and 10th percentile agency was calculated and reviewed by Technical Expert Panel to identify magnitude of difference that might be considered meaningful.

2b5.3 Results (Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):

<table>
<thead>
<tr>
<th>Agency Average</th>
<th>95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. Dev</td>
<td>11%</td>
</tr>
<tr>
<td>Skew</td>
<td>-4.69</td>
</tr>
<tr>
<td>Min</td>
<td>1%</td>
</tr>
<tr>
<td>10th 88%</td>
<td></td>
</tr>
<tr>
<td>25th 96%</td>
<td></td>
</tr>
<tr>
<td>50th 99%</td>
<td></td>
</tr>
<tr>
<td>75th 100%</td>
<td></td>
</tr>
<tr>
<td>90th 100%</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td>100%</td>
</tr>
</tbody>
</table>

- Meaningful Difference: 90th - 10th Percentile 12%
- Meaningful Difference: 75th - 25th Percentile 4%

2b6. Comparability of Multiple Data Sources/Methods. (If specified for more than one data source, the various approaches result in comparable scores.)

2b6.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
N/A - Single data source, OASIS C

2b6.2 Analytic Method (Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure):
N/A - Single data source, OASIS C

2b6.3 Testing Results (Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted):
N/A - Single data source, OASIS C
2c. Disparities in Care:  

<table>
<thead>
<tr>
<th>2c.1 If measure is stratified for disparities, provide stratified results (Scores by stratified categories/cohorts): N/A - no evidence of disparities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:</td>
</tr>
<tr>
<td>There were no disparities in care related to falls risk assessment identified in our analysis of measure scores.</td>
</tr>
</tbody>
</table>

Descriptive statistics of measure scores (distribution by race, age and gender)

**Observed Rate (Numerator/Denominator) by Patient Race**
- White: 94%
- Black: 94%
- Hispanic: 96%
- Other: 95%

**Observed Rate (Numerator/Denominator) by Patient Age**
- <65: N/A
- 65-75: 94%
- 75-85: 94%
- 85+: 94%

**Observed Rate (Numerator/Denominator) by Patient Gender**
- Male: 94%
- Female: 94%

There is also no evidence of disparities in care related to falls risk assessment identified in our review of the home health care-specific literature.

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, Scientific Acceptability of Measure Properties, met? 
(Repeatability and Validity must be rated moderate or high) Yes [ ] No [x]

Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

3. USABILITY

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. (evaluation criteria)

C.1 Intended Actual/Planned Use (Check all the planned uses for which the measure is intended): Public Reporting, Quality Improvement with Benchmarking (external benchmarking to multiple organizations)

3.1 Current Use (Check all that apply; for any that are checked, provide the specific program information in the following questions): Public Reporting, Quality Improvement with Benchmarking (external benchmarking to multiple organizations)

3a. Usefulness for Public Reporting:  

(The measure is meaningful, understandable and useful for public reporting.)

3a.1. Use in Public Reporting - disclosure of performance results to the public at large (If used in a public reporting program, provide name of program(s), locations, Web page URL(s)). If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: [For Maintenance – If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.]
Measure is publicly-reported on the Medicare Home Health Compare website http://www.medicare.gov/HomeHealthCompare/search.aspx

3a.2. Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting. If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results: Data contained in the Home Health OBQI reports on the proportion of care episodes in which a falls risk assessment was conducted provides agencies with a tool to evaluate the quality of their care and investigate how changes to processes of care impact patient outcomes related to pain.

3.2 Use for other Accountability Functions (payment, certification, accreditation). If used in a public accountability program, provide name of program(s), locations, Web page URL(s): N/A

3b. Usefulness for Quality Improvement: H M L I (The measure is meaningful, understandable and useful for quality improvement.)

3b.1. Use in QI. If used in quality improvement program, provide name of program(s), locations, Web page URL(s): [For Maintenance – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement].

The measure is used in the Home Health Quality Initiatives QI program: https://www.cms.gov/HomeHealthQualityInits/01_Overview.asp#TopOfPage

3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement. If usefulness was demonstrated (e.g., QI initiative), describe the data, method and results:
The CMS Center for Medicare has current contracts with L&M Policy Research (L&M) to help ensure that measures reported on the Home Health Compare (HHC) website, including Multifactor Fall Risk Assessment Conducted in Patients 65 and Older, are easy to understand and meet the needs of consumers. CMS’ contractor, L&M possesses extensive knowledge of public health care issues and is experienced in qualitative and quantitative research methods and health services management and operations, including health communications. L & M also has plain language experts that are skilled in crafting straightforward language that allows CMS to provide beneficiaries, caregivers, health care professionals, and information intermediaries a better understanding of information on choice tools, such as HHC, which allows for more informed decisions on health related issues. L&M’s work during 2009-2010 with CMS includes an environmental scan of home health public reporting initiatives and a literature review of published and unpublished research relating to consumers’ comprehension and use of home health quality measures. L&M independently convened its external advisory workgroup, comprised of representatives of consumer advocacy organizations, professional associations, quality improvement professionals, and experts in public reporting, to provide guidance on the organization, content, and usability of the website.

Information on the consumer interpretability and usability of CMS’s Home Health Quality Initiative Process and Outcome measures derived from the environmental scan, literature review and the external advisory workgroup usability, as well as discussion with CMS’ internal plain language experts resulted in a language descriptor that is used in the Medicare Home Health Compare website. For this process measure, the plain language descriptor is: “How often the home health team checked patients’ risk of falling.”

Overall, to what extent was the criterion, Usability, met? H M L I Provide rationale based on specific subcriteria:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

4a. Data Generated as a Byproduct of Care Processes: H M L I

4a.1-2 How are the data elements needed to compute measure scores generated? (Check all that apply). Data used in the measure are:

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition, Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)

4b. Electronic Sources: H M L I
4b.1 Are the data elements needed for the measure as specified available electronically (Elements that are needed to compute measure scores are in defined, computer-readable fields):  ALL data elements are in a combination of electronic sources

4b.2 If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources:

| 4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: | H | M | L | I |

4c.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results:

Inaccuracies may result either due to confusion on the part of the clinician completing the OASIS or intentionally, to manipulate scores on quality measures. CMS has created and disseminated manuals and training materials to maximize accurate reporting of this data. Data accuracy could be audited through a review of medical records for evidence of the results of falls risk assessment.

All home health agencies serving adult, non-maternity Medicare and/or Medicaid patients must submit their OASIS assessment data to their respective state OASIS repository in a standard format. The repository software passes each incoming OASIS assessment record through an extensive set of quality edits. These include internal range and logic checks that assure that assessment items include only allowable values and that they are consistent with each other. When there are significant errors in an assessment, it is not accepted by the repository and the erroneous data are not available to be included in any published quality information. Data accuracy is also supported by the state survey process. Surveyors use OASIS to characterize each agency’s caseload and to select sample patients to be interviewed. They also review and assess the accuracy of the agency’s OASIS assessments. In addition, CMS payment contractors assess the accuracy of a sample of the OASIS assessments as part of their medical review processes. We are unable to provide results of these audit activities as we do not currently have access to the findings of the CMS surveyors, the data repository or CMS contractors regarding OASIS data accuracy.

| 4d. Data Collection Strategy/Implementation: | H | M | L | I |

A.2 Please check if either of the following apply (regarding proprietary measures):

4d.1 Describe what you have learned/modified 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 (e.g., fees for use of proprietary measures):

OASIS data are collected by the home health agency during the care episode as part of the Conditions of Participation, and transmitted electronically to the state and CMS national OASIS repository. No issues regarding availability of data, missing data, timing or frequency of data collection, patient confidentiality, time or cost of data collection, feasibility or implementation have become apparent since OASIS-C was implemented 1/1/2010.

Overall, to what extent was the criterion, Feasibility, met?  H | M | L | I

Provide rationale based on specific subcriteria:

OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement?  Yes □ No □

Rationale:

If the Committee votes No, STOP.

If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.

5. COMPARISON TO RELATED AND 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 before a final recommendation is made.

5.1 If there are related measures (either same measure focus or target population) or competing measures (both the same measure focus and same target population), list the NQF # and title of all related and/or competing measures:

0101: Fall: Screening for Future Fall Risk
### 5a. Harmonization

| 5a.1 If this measure has EITHER the same measure focus OR the same target population as NQF-endorsed measure(s): Are the measure specifications completely harmonized? | No |

| 5a.2 If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden: | Measure 0101 defines falls risk as the patient having experienced 2 or more falls in the past year or any fall with injury in the past year, whereas the HH measure requires a multi-factor falls risk that has been validated and standardized. |

### 5b. Competing Measure(s)

| 5b.1 If this measure has 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): | N/A - there are no measures that are both the same measure focus and the same target population. |

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### CONTACT INFORMATION

**Co.1 Measure Steward (Intellectual Property Owner):** Centers for Medicare and Medicaid Services, 7500 Security Boulevard, Mail Stop S3-01-02, Baltimore, Maryland, 21244-1850

**Co.2 Point of Contact:** Robin, Dowell, BSN, robin.dowell@cms.hhs.gov, 410-786-0060-

**Co.3 Measure Developer if different from Measure Steward:** Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Baltimore, Maryland, 21244

**Co.4 Point of Contact:** Robin, Dowell, Robin.Dowell@CMS.hhs.gov, 410-786-6738-

**Co.5 Submitter:** Keziah, Cook, kcook@acumenllc.com, 410-786-6738-, Centers for Medicare & Medicaid Services

**Co.6** Additional organizations that sponsored/participated in measure development:
- Abt Associates, Inc.
- Case Western Reserve University
- University of Colorado at Denver, Division of Health Care Policy and Research

**Co.7 Public Contact:** Robin, Dowell, BSN, robin.dowell@cms.hhs.gov, 410-786-0060-, Centers for Medicare & Medicaid Services

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### ADDITIONAL INFORMATION

**Workgroup/Expert Panel involved in measure development**

Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

In December 2010, a Technical Expert Panel (TEP) was convened to review the analysis conducted on the home health measures that received NQF time limited endorsement (including PPV Ever Received). The TEP was comprised of individuals selected by CMS for their expertise and perspectives related to the panel objectives, from a pool of individuals who were nominated in response to the September 2010 Call for TEP notice.

**2010 HH TLE Measure Review TEP Members:**
- Mary Carr RN, MPH - Associate Director for Regulatory Affairs, National Association of Home Care and Hospice
- Rick Fortinsky, PhD - Professor of Medicine, Physicians Health Services Endowed Chair in Geriatrics and Gerontology, UConn Center for Health Services Research
- Barbara Gage, PhD - Deputy Director of Aging, Disability, and Long-term Care, Post-Acute Care Research Lead, Research Triangle Institute
<table>
<thead>
<tr>
<th>Measure Developer/Steward Updates and Ongoing Maintenance</th>
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<tbody>
<tr>
<td><strong>Ad.2</strong> If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:</td>
</tr>
<tr>
<td><strong>Ad.3</strong> If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:</td>
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<tr>
<td><strong>Ad.4</strong> Year the measure was first released: 2010</td>
</tr>
<tr>
<td><strong>Ad.5</strong> Month and Year of most recent revision: 01, 2009</td>
</tr>
<tr>
<td><strong>Ad.6</strong> What is your frequency for review/update of this measure? annual</td>
</tr>
<tr>
<td><strong>Ad.7</strong> When is the next scheduled review/update for this measure? 06, 2012</td>
</tr>
</tbody>
</table>

**Copyright statement:**

**Disclaimers:**

**Additional Information/Comments:** We would like to confer with NQF about whether the NQF-recommended exclusion of patients < 65 years of age should be maintained based on our analysis and expert input.

**Date of Submission (MM/DD/YY):** 09/14/2011