NQF #0524 Pain Interventions Implemented During Short Term Episodes Of Care

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 #: 0524</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: Mar 31, 2009</td>
<td>Most Recent Endorsement Date: Mar 31, 2009</td>
</tr>
</tbody>
</table>

**BRIEF MEASURE INFORMATION**

<table>
<thead>
<tr>
<th>De.1 Measure Title:</th>
<th>Pain Interventions Implemented During Short Term Episodes Of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co.1.1 Measure Steward:</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
<tr>
<td>De.2 Brief Description of Measure:</td>
<td>Percentage of short term home health episodes of care during which pain interventions were included in the physician-ordered plan of care and implemented.</td>
</tr>
<tr>
<td>2a1.1 Numerator Statement:</td>
<td>Number of home health episodes of care during which pain interventions were included in the physician-ordered plan of care and implemented.</td>
</tr>
<tr>
<td>2a1.4 Denominator Statement:</td>
<td>Number of home health episodes of care ending during the reporting period, other than those covered by generic or measure-specific exclusions.</td>
</tr>
<tr>
<td>2a1.8 Denominator Exclusions:</td>
<td>Episodes in which the patient did not have pain since the last OASIS assessment, as evidenced by a formal assessment that indicated no pain. Long-term episodes (as indicated by the presence of a follow-up assessment between admission and transfer or discharge). Episodes ending in patient death.</td>
</tr>
<tr>
<td>1.1 Measure Type:</td>
<td>Process</td>
</tr>
<tr>
<td>2a1.25-26 Data Source:</td>
<td>Electronic Clinical Data</td>
</tr>
<tr>
<td>2a1.33 Level of Analysis:</td>
<td>Facility</td>
</tr>
<tr>
<td>1.2-1.4 Is this measure paired with another measure?</td>
<td>No</td>
</tr>
<tr>
<td>De.3 If included in a composite, please identify the composite measure (title and NQF number if endorsed):</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**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.*

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See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
### NQF #0524 Pain Interventions Implemented During Short Term Episodes Of Care

<table>
<thead>
<tr>
<th>(evaluation criteria)</th>
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</table>
| 1a. High Impact:  
H ☐  M ☐  L ☐  I ☐  
(The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.) |

**De.4 Subject/Topic Areas** (Check all the areas that apply):  
De.5 Cross Cutting Areas (Check all the areas that apply):  
Safety

1a.1 **Demonstrated High Impact Aspect of Healthcare:**  
Affects large numbers, Patient/societal consequences of poor quality

1a.2 **If “Other,” please describe:**

1a.3 **Summary of Evidence of High Impact** *(Provide epidemiologic or resource use data)*:  
Pain, both acute and chronic, has been identified as an area requiring health care provider intervention. Clinical practice guidelines identifying effective interventions for chronic pain include pharmacologic and non-pharmacologic and the combination of both approaches is recommended (1). There are no studies specifying the type or extent to which pain management interventions are implemented within home health care.

Studies focused on home health care nurse knowledge of pain management found room for improvement: In a study of 248 home health care nurses, Vallerand et al. (2) report that overall home health care nursing knowledge of pain was moderate (72% accuracy on a scale from 1-100%). The major areas where nurses were most concerned were “lack of knowledge about pain management, inadequate assessment skills, concerns about the likelihood of addiction, and concerns about opioid-induced respiratory depression.” In an older study done in 1998, Glajchen et al. (3) surveyed more than 4000 home health care nurses regarding pain management and found that nurses were more knowledgeable about pain assessment than treatment. There is one home health care-specific study focused on pain interventions where care for cancer patients was improved through an educational intervention directed to home health care nurses (4).

Pain interventions are a standard of care for all health care settings. There is insufficient evidence on the extent to which home health care patients report pain and unknown evidence of the types and effectiveness of home health care practice with pain interventions. There is a knowledge gap among home health care nurses for pain interventions. Thus there is likely to be room for improvement.

1a.4 **Citations for Evidence of High Impact cited in 1a.3:**  

**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:**  
OASIS-C supports three process measures related to pain: assessment using a standardized and validated tool, documentation of pain interventions in the plan of care, and implementation of the physician-ordered pain interventions. All three measures are reported to agencies for use in Quality Improvement efforts, and the assessment and intervention measures are publicly-reported. As noted above, studies focused on home health care nurse knowledge of pain management found room for improvement and other studies found that nurses knew more about pain assessment than pain treatment. It is envisioned that this measure will improve the level of pain management provided to home health patients, by encouraging home health agencies to provide adequate pain treatment interventions to patients and by providing information to home health agencies and consumers that will enable them to monitor the care received by patients with pain.

**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 although variation in this measure was
not high, agencies serving a higher proportion of minority beneficiaries had more room for improvement. Thus, they determined that measure was necessary for reducing health disparities. The majority of TEP members rated this measure as partially or completely 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 Avg  94%
Std Dev  9%
Skew  -3.81
Min  0%
10th  85%
25th  93%
50th  97%
75th  100%
90th  100%
Max  100%

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 Medicare certified agencies with at least 10 quality episodes to which the measure applies, collected 1/1/2010 to 9/1/2010. 81% of agencies (8,219) met the ten episode threshold for this measure. The measure applied to 59% of all quality episodes (1.71 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 implementation of pain intervention identified in our analysis of measure scores.

<table>
<thead>
<tr>
<th>Observed Rate (Numerator/Denominator) by Patient Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observed Rate (Numerator/Denominator) by Patient Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;65</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observed Rate (Numerator/Denominator) by Patient Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

Our review of the recent home health care-specific literature also did not find evidence of care disparities in pain interventions implemented in home health care. There is evidence that women have differential pain experiences, however it is not sufficient to support stratification.

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]

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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 ☐ If not a health outcome, rate the body of evidence.
Pain, both acute and chronic, have been identified as areas requiring health care provider intervention. Clinical practice guidelines identifying effective interventions for chronic pain include pharmacologic and non-pharmacologic and the combination of both approaches is recommended (1). There is a growing body of evidence that women have differential pain experiences, based on biological, physiological, and sociocultural factors (2). There are no studies specifying the type or extent to which pain management interventions are implemented within home health care. Studies focused on home health care nurse knowledge of pain management found room for improvement: In a study of 248 home health care nurses, Vallerand et al (3) report that overall home health care nursing knowledge of pain was moderate (72% accuracy on a scale from 1-100%). The major areas where nurses were most concerned were “lack of knowledge about pain management, inadequate assessment skills, concerns about the likelihood of addiction, and concerns about opioid-induced respiratory depression” (p. 834). In an older study done in 1998, Glajchen et al (4) surveyed more than 4000 home health care nurses regarding pain management and found that nurses were more knowledgeable about pain assessment than treatment. There is one home health care-specific study focused on pain interventions where care for cancer patients was improved through an educational intervention directed to home health care nurses (5). McDonald et al (6) reported that two interventions (one a simple email reminder, the other more comprehensive and including access to a clinical nurse specialist) focused on home health care nurses were associated with improved patient outcomes for home health care patients with unmanaged pain.

### 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 describes a care process, clinical interventions to monitor and mitigate assessed pain. Appropriate links are process-health outcome. The measure is based on generally accepted standards of care for identifying and addressing a major undetected and undertreated condition (pain). There is a very limited body of research focused on home health care patients and agency processes of care (noted below). However, the processes of care standards are applicable to home health care and performance of the processes of care as recommended in the clinical practice guidelines (as cited below) should result in fewer home health care patients with unmanaged pain.

### 1c.2-3 Type of Evidence

(Check all that apply):

- Clinical Practice Guideline
- Other
- Selected individual studies (rather than entire body of evidence)
- Systematic review of body of evidence (other than within guideline development)
- Other-expert-based consensus statement

### 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):

The central topic is assessment of pain in community-dwelling adults. The CPGs and expert consensus statement (lit review) are not specific to this population, but address adults (and, in some cases, elderly) in general, thus are relevant to the home health care population. In addition, much of the research on pain in community settings is in community dwelling older people and this is relevant to home health as many home health care patients are elderly.

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### 1c.5 Quantity of Studies in the Body of Evidence

(Total number of studies, not articles): 5 studies (as above) were found that were specific to home health care patients. The body of literature on pain in general is vast. For example, the interdisciplinary expert consensus statement on assessment of pain in older persons (7) referenced 410 articles.

### Table: NQF #0524 Pain Interventions Implemented During Short Term Episodes Of Care

<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>L</td>
<td>No</td>
</tr>
<tr>
<td>M-H</td>
<td>L</td>
<td>M-H</td>
<td>Yes</td>
</tr>
<tr>
<td>L-M-H</td>
<td>L-M-H</td>
<td>L</td>
<td>No</td>
</tr>
</tbody>
</table>

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

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See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
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).* Maxwell et al. (8) examined prevalence of pain in a cross-sectional study of 2779 patients over 65 years old who received services through Community Care Access Centers in Ontario, Canada during 1999-2001. Approximately 48% of home health care patients were found to have daily pain. This is consistent with other literature (a, 7). Reyes-Gibby (9) assessed 5807 community dwelling adults aged 70 and older using a survey methodology. Thirty-three percent of respondents reported having pain often. Presence of pain predicted fair/poor self-rated health (OR = 3.63). They noted that the widespread prevalence of pain in their study reinforced the need for adequate pain assessment and pharmacologic treatment.

Comprehensive literature reviews have identified a variety of approaches to pain management, both pharmacologic and nonpharmacologic. Nonpharmacologic approaches include use of cold and heat, acupuncture, transcutaneous electrical nerve stimulation, percutaneous electrical nerve stimulation, relaxation techniques (e.g., meditation, progressive muscle relaxation, etc.), biofeedback, guided imagery, hypnosis, and yoga and tai chi (10, 11). Pharmacologic treatments include non-opioid analgesia (e.g., NSAIDS, vitamin therapy, etc.), opioids, and opioids with adjuvant analgesia, and other drugs (e.g., corticosteroids, cannabinoids, etc.) (12, 10). Studies vary widely in design and rigor, however, this measure does not address specific clinical interventions but only the premise that interventions should be undertaken for assessed pain to prevent negative consequences that include depression, anxiety, decreased socialization, sleep disturbance, impaired ambulation and increased health care utilization and cost (a). Herr and Garand (c) noted that the major purpose of published CPGs is to address inadequate pain assessment and treatment.

The National Guideline Clearinghouse provides over one hundred evidence syntheses for pain management, with at least 10 for generic pain management in adults. The guidelines are similar in the recommendation for pain assessments. Three guidelines are discussed in detail below

1c.7 **Consistency of Results across Studies** *(Summarize the consistency of the magnitude and direction of the effect):* All research articles, literature reviews, and CPGs cite the importance of pain management.

1c.8 **Net Benefit** *(Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms):* Consequences of failure to manage pain include decreased quality of life, physiologic risks associated with untreated pain, depression, impaired cognitive function, sleep disturbance, impaired functional abilities, diminished socialization, and increased health care usage/costs (a, c). Potential harms of pain interventions include medication errors, under or overmedication, medication side effects/adverse drug reactions, etc. Pain in elderly patients often can be reliably detected and effectively treated. Although the recognition and treatment of pain in the long-term care setting presents challenges, a systematic effort is needed to do so.

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 studies cited were not graded.*

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

1c.12 If other, identify and describe the grading scale with definitions: *The studies cited were not graded.*

1c.13 **Grade Assigned to the Body of Evidence:** N/A

1c.14 **Summary of Controversy/Contradictory Evidence:** While the individual approaches to pain mitigation and management vary in terms of controversy and sufficient scientific evidence, the general notion that pain interventions should be implemented as a routine part of care delivery is not controversial and no contradictory evidence was cited.

1c.15 **Citations for Evidence other than Guidelines(Guidelines addressed below):**
For all CPGs, references were provided to support the guidelines.

1c.16 Quote verbatim, the specific guideline recommendation (Including guideline # and/or page #):
The guidelines are too extensive to quote verbatim, sections are quoted below.

a. For the American Geriatric Society Panel on Persistent Pain in Older Persons (2002), “All older patients with functional impairment or diminished quality of life as a result of persistent pain are candidates for pharmacologic therapy” (p. S216); “Other modalities (e.g., heat, cold, massage liniments, chiropractic, acupuncture, and transcutaneous electrical nerve stimulation) often offer temporary relief and can be used as adjunctive therapies (p. S220).

b. For the Institute for Clinical Systems Improvement CPG: Level I Core Principles Key Points:
   a. A written plan of care using the biopsychosocial model is the essential tool for ensuring a comprehensive approach to treatment of a patient with chronic pain.
   b. All patients with chronic pain should participate in an exercise fitness program to improve function and fitness.
   c. A cognitive behavioral approach with functional restoration may reduce pain and will improve function. Cognitive behavioral strategies and interventions can be organized by the primary care physician with the inclusion of a multidisciplinary plan of care. The members of the multidisciplinary team will vary depending on the resources in the community.
   d. The presence of psychological difficulties should in no way invalidate a patient’s complaint of pain nor should it eliminate the possibility that a general medical condition may also be present that is causing the pain.
   e. The medical decision-making for treatment of chronic pain needs an understanding of the patient’s ethnic and cultural background, age, gender and spirituality in order to work with the patient’s chronic pain symptomatology.
   f. Self-management insures active patient participation in the care plan and is essential.
   c. For the Acute Pain Management in Older Adults CPG: “Develop and document the pain management treatment plan as early in the course of the acute pain episode as possible (e.g., preoperatively). Pain management is a complex and multimodal process. A systematic comprehensive treatment plan is necessary to achieve adequate pain control. The pain management interventions to be implemented should be selected in collaboration with the older adult (VHA/DoD, 2002). Set realistic comfort-function goals in collaboration with the older person. Older adults will often accept too high a pain score as acceptable. It is important to carefully explain that pain creates stress, which can interfere with the healing process, and that determining what level of pain is acceptable (on the scale they have chosen to use) allows them to engage in activities comfortably (McCaffery & Pasero, 1999; Pasero & McCaffery, “Comfort-function goals,” 2004; VHA/DoD, 2002). Include multiple strategies in the comprehensive pain management plan including patient education, choice of pharmacologic and nonpharmacologic treatment options, and discharge plan. Specific recommendations regarding these different treatment options may be found in separate sections of this practice guideline including Education of the Older Adult and family, Pharmacologic Management, Nonpharmacological Management (AGS Panel on Persistent Pain in Older Persons, 2002; VHA/DoD, 2002).

1c.17 Clinical Practice Guideline Citation: a. American Geriatric Society Panel on Persistent Pain in Older Persons (2002). The management of persistent pain in older persons. JAGS, 50 (supp), S205-S224. [126 references]


c. Herr K, Bjoro K, Steffensmeier J, Rakel B. Acute pain management in older adults. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Translational and Dissemination Core; 2006 Jul. 113 p. [469 references]

Other citations:


1c.18 National Guideline Clearinghouse or other URL:
http://www.guideline.gov/content.aspx?id=15525&search=pain#Section420
http://www.guideline.gov/content.aspx?id=10198&search=pain

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: see 1c.22

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

1c.22 If other, identify and describe the grading scale with definitions: Has the recommendation been graded?


b. The body of evidence for the specific recommendation for pain assessment for the ICSI CPG was not graded (recommendations for specific pain management therapies were graded) (Institute for Clinical Systems Improvement (ICSI). Assessment and management of chronic pain. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2009 Nov)

c. The body of evidence for pain assessment was graded for the Acute Pain Management in Older Adults CPG.

System used for grading the strength of guideline recommendation:

a. The AGS Panel on Persistent Pain in Older Persons graded the evidence in their CPG on management of persistent pain in older persons, based on a grading system published along with the CPG, was developed by the AGS Panel on Persistent Pain in Older Persons

b. The body of evidence for specific ICSI recommendations for pain management therapies (not for pain assessment) were graded and two disclosures were made for the ICSI panel members for relationships with pharmaceutical companies. The rating system was published along with the CPG.

c. For the CPG for Acute Pain Management in Older Adults, the University of Iowa Gerontological Nursing Interventions Research Center Research Development and Dissemination Core graded the recommendations based on their own grading system published along with the CPG.

1c.23 Grade Assigned to the Recommendation: see below

1c.24 Rationale for Using this Guideline Over Others: As we are not citing the specific recommendations and each group used a different rating system, we are not citing the grades. The grades vary within each guideline based on the evidence available,
ranging from consensus agreement by experts to RCTs with large sample sizes and strong scientific rigor.

We do not recommend using one guideline over others as the CPGs included are sufficiently detailed to provide guidance to home health care agencies in the care of patients.

1c.25 notes: Quantity: High quantities of studies generally included in each CPG

1c.26. Quality: High to moderate quality of the studies used to develop each guideline. Pharmacologic intervention studies were typically more rigorous than those for nonpharmacologic measures. Additionally, few of the studies are focused on home health care patients although the recommendations apply to home health care patients.

1c.27. Consistency: High in terms of need to address pain with clinical interventions; moderate to high for specific recommendations for intervention strategies.

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

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.

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### 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 during which pain interventions were included in the physician-ordered plan of care and implemented.

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 end of episode OASIS-C item (M2400d)- Pain Intervention Plan implemented = 1 (yes)

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 OASIS-C((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 did not have pain since the last OASIS assessment, as evidenced by a formal assessment that indicated no pain. Long-term episodes (as indicated by the presence of a follow-up assessment between admission and transfer or discharge). Episodes ending in patient death.

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 end of episode:
- (M0100) Reason for Assessment = 8 (Death at home)
PLUS
Number of home health patient episodes of care where at end of episode:
- (M0100) Reason for Assessment = 6 or 7 (transfer to inpatient) or 9 (discharge) AND:
- (M2400d) Pain Intervention Plan implemented = NA - Formal assessment did not indicate pain since the last OASIS assessment
PLUS
Number of home health patient episodes of care where at least one assessment with (M0100) Reason for Assessment = 4 (Recertification follow-up reassessment) or 5 (Other follow-up) was completed between the start and end of the episode of care.

Explanation:
Episodes in which the patient had a formal assessment indicating no pain are excluded. The exclusion is justified as there is no need for intervention for episodes in which the patient had no pain.

Death exclusion: The information needed to calculate this measure is not collected if the home health episode ends in death. The measure cannot be calculated in excluded cases due to data limitations.

Long term episode exclusion: This exclusion was added by NQF reviewers during initial consideration of the measure in 2008. To avoid excessive burden to agencies related to reviewing records longer than 60 days, this implementation measure reports on care provided since the last OASIS assessment. However, restricting the measure to care since the most recent OASIS assessment raised concerns among NQF Steering Committee members that measures might not accurately reflect care for longer-stay patients, as some interventions may have been implemented prior to the most recent OASIS assessment. In response, measure specifications were changed so that home care episodes that require a recertification are not included in publicly-reported measures on implementation of evidence-based practices. The reports that CMS provide for agency use in quality improvement activities include separate break-outs for short-term episodes and long-term episodes, as well as a combined “all episodes” measure.

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.)*: Calculation algorithm available in the Technical Specifications at: https://www.cms.gov/HomeHealthQualityInits/Downloads/HHQITechnicalDocOfMeasures.pdf

2a1.21-23 **Calculation Algorithm/Measure Logic Diagram URL or attachment**: URL https://www.cms.gov/HomeHealthQualityInits/Downloads/HHQITechnicalDocOfMeasures.pdf

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**: URL https://www.cms.gov/HomeHealthQualityInits/Downloads/HHQI0ASISCAllTimePoint.pdf

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment:
URL

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, 8,224 agencies met the threshold for the measure Influenza Immunization Received. 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):
Distribution of Within National Reliability Scores

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.928</td>
</tr>
<tr>
<td>Min</td>
<td>0.290</td>
</tr>
<tr>
<td>10th</td>
<td>0.775</td>
</tr>
<tr>
<td>25th</td>
<td>0.914</td>
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<tr>
<td>50th</td>
<td>0.980</td>
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<tr>
<td>75th</td>
<td>0.998</td>
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<tr>
<td>90th</td>
<td>1.000</td>
</tr>
<tr>
<td>Max</td>
<td>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 0.914, 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).
Distribution of Within HRR Reliability Scores

Mean 0.903
Min 0.088
10th 0.697
25th 0.873
50th 0.969
75th 0.998
90th 1.000
Max 1.00

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 0.873, suggesting that between agency variation substantially exceeds within agency variation.

2b. VALIDITY. Validation, 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 consistent with the evidence that it is important to develop and document the pain management treatment plan as early in the course of the episode as possible, and implementation of a systematic comprehensive treatment plan is necessary to achieve adequate pain control. The target population and exclusions are based primarily on limitations related to data collection on the home health population.

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 outcome measures that could potentially be clinically related to each measure were selected from measures that are currently calculated as part of the Outcome-based Quality Improvement (OBQI) and Potentially Avoidable Event (PAE) home health reports. Improvement in Pain interfering with Activity and Increase in Improvement in Ambulation/Locomotion were the outcome measures that were initially identified as potentially clinically related to this measure. Improvement in pain interfering with activity, as an outcome, would be expected to be associated with “pain interventions implemented” as the implementation of pain measures, pharmacologic or non-pharmacologic, should be effective in addressing pain conditions that impair activity. Pain, as a 5th vital sign, is a high priority condition for health care and the high performance on this measure (94% of agencies) reflects this clinical priority.

Improvement in ambulation/locomotion, as an outcome, would be expected to be associated with “pain interventions implemented” as ambulation/locomotion is a critical ability for home health care patients in allowing them to remain safely at home. Thus, home health care agency staff, when addressing pain interfering with activity with pain interventions, are likely to focus on ability to ambulate as a key activity and address pain conditions that interfere with this critical ability.

For both of the identified measures, preliminary prediction models using most of the Agency Patient-Related Characteristic Report variables except race were developed. 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.

Face validity assessment:
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):
Observed Outcome (Improvement in Ambulation/Locomotion) v. Process Measure, 95% CI (Odds Ratio)
Bivariate Relationship, 95% CI (Odds Ratio): 1.078 – 1.124
Risk Adjusted Outcome: 1.007 – 1.096
Expected Relationship: Yes

Observed Outcome (Improvement in Pain interfering with Activity) v. Process Measure
Bivariate Relationship, 95% CI (Odds Ratio): 0.900 - 0.944
Risk Adjusted Outcome: 0.777 – 0.863
Expected Relationship: No

These results demonstrated the expected relationship between the Pain Interventions Implemented measure and Improvement in Ambulation/Locomotion, but did not demonstrate the expected relationship with the Improvement in Pain Interfering with Activity measure (95% confidence interval using logistic regression). We have postulated that there may be an issue with endogeneity, as patients receiving interventions may have more pain and be less likely to respond to treatment during the relatively brief period of most short-term episodes of home health. We also note that the outcome measures used in this analysis had only crude risk adjustment since the risk adjustment models for the outcome measures are still being developed.

TEP comments: 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 December 2010 TEP members that rated the measure (8 of 10) assessed it 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.

2b3.3 Results *(Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):*
The exclusions are supported by sufficient frequency of occurrence so that results would be distorted without the exclusions:
% of quality episodes excluded: 40%
# total of quality episodes excluded: 1,153,894
# excluded due to patient condition/diagnosis (formal assessment did not indicate pain): 660,701
# excluded due to type/timing of episode (long-term episode): 493,193
Additionally, 17,879 episodes ended in patient death at home.

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):*
NQF #0524 Pain Interventions Implemented During Short Term Episodes Of Care

2b.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

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

2b.5. Identification of Meaningful Differences in Performance. (The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.)

2b.5.1 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. 81% of agencies (8,219) met the ten episode threshold for this measure. The measure applied to 59% of all quality episodes (1.71 million out of 2.89 million).

2b.5.2 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.

2b.5.3 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</th>
<th>Avg</th>
<th>Std</th>
<th>Skew</th>
<th>Min</th>
<th>10th</th>
<th>25th</th>
<th>50th</th>
<th>75th</th>
<th>90th</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>94%</td>
<td>9%</td>
<td>-3.8</td>
<td>0%</td>
<td>85%</td>
<td>93%</td>
<td>97%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Meaningful Difference: 90th - 10th Percentile 15%
Meaningful Difference: 75th - 25th Percentile 7%

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: H M L I NA (If applicable, the measure specifications allow identification of disparities.)

2c.1 If measure is stratified for disparities, provide stratified results (Scores by stratified categories/cohorts): There were no disparities in care related to implementation of pain intervention identified in our analysis of measure scores.

Descriptive statistics of measure scores (distribution by race, age and gender)
NQF #0524 Pain Interventions Implemented During Short Term Episodes Of Care

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

Observed Rate (Numerator/Denominator) by Patient Age
<65  65-75  75-85  85+
95%    95%    94%    94%

Observed Rate (Numerator/Denominator) by Patient Gender
Male  Female
94%    95%

Our review of the recent home health care-specific literature also did not find evidence of care disparities in pain interventions implemented in home health care. There is evidence that women have differential pain experiences, however it is not sufficient to support stratification.

2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:
There is a growing body of evidence that women have differential pain experiences, based on biological, physiological, and sociocultural factors (Fillingim RB, King CD, Ribeiro-Dasilva MC, Rahim-Williams B, Riley JL, III. Sex, gender, and pain: a review of recent clinical and experimental findings. J Pain 2009; 10(5):447-485).
However no gender disparities were identified related to implementation of pain intervention identified in our analysis of measure scores.

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, Scientific Acceptability of Measure Properties, met? (Reliability 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 Purpose/ Use (Check all the purposes and/or 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:  H [ ]  M [x]  L [ ]  I [ ]
(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.]
Public Reporting: Medicare Home Health Compare

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: The CMS Center for Medicare contracted with L&M Policy Research (L&M) to help ensure that measures on the Home Health Compare (HHC) website are easy to understand and meet the needs of consumers.

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 home health measures website.

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):

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].
Quality Improvement: Home Health Quality Initiatives
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:

Data contained in the Home Health OBQI reports on the proportion of care episodes in which the pain interventions were implemented 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.

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 relevant orders and implementation.

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:

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?
NQF #0524 Pain Interventions Implemented During Short Term Episodes Of Care

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

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):

## CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner): Centers for Medicare & 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: Acumen LLC, 500 Airport Blvd, Suite 365, Burlingame, California, 94010

Co.4 Point of Contact: Keziah, Cook, PhD, kcook@acumenllc.com, 650-558-8882-247

Co.5 Submitter: Deborah, Deitz, BSN, Deborah_deitz@abtassoc.com, 617-520-3039-, Abt Associates Inc

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

## 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
Margherita Labson, R.N., Executive Director for the Home Care Program at The Joint Commission
Steve Landers MD, MPH - Director, Center for Home Care and Community Rehabilitation, Cleveland Clinic
Bruce Leff, MD – Associate Director, Elder House Call Program,
Barbara McCann, MSW - Chief Industry Officer, Interim Health Care
Jennifer S. Mensik PhD, RN, NEA-BC, FACHE - Director, Clinical Practices and Research, Banner Health, Arizona and Western Regions
Dana Mukamel, Professor, Department of Medicine, Division of General Internal Medicine & Primary Care, University of California.
<table>
<thead>
<tr>
<th>Ad.2</th>
<th>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:</th>
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<td><strong>Measure Developer/Steward Updates and Ongoing Maintenance</strong></td>
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<tr>
<td>Ad.3</td>
<td>Year the measure was first released: 2010</td>
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<td>Ad.4</td>
<td>Month and Year of most recent revision: 01, 2010</td>
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<td>Ad.5</td>
<td>What is your frequency for review/update of this measure? Annual</td>
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<td>When is the next scheduled review/update for this measure? 07, 2012</td>
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