**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 #:</th>
<th>0326</th>
<th>NQF Project:</th>
<th>Care Coordination Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>(for Endorsement Maintenance Review)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original Endorsement Date:</td>
<td>Nov 05, 2007</td>
<td>Most Recent Endorsement Date:</td>
<td>Nov 05, 2007</td>
</tr>
</tbody>
</table>

**BRIEF MEASURE INFORMATION**

<table>
<thead>
<tr>
<th>De.1 Measure Title:</th>
<th>Advance Care Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co.1.1 Measure Steward:</td>
<td>National Committee for Quality Assurance</td>
</tr>
<tr>
<td>De.2 Brief Description of Measure:</td>
<td>Percentage of patients aged 65 years and older who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan</td>
</tr>
<tr>
<td>2a1.1 Numerator Statement:</td>
<td>Patients who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan</td>
</tr>
<tr>
<td>2a1.4 Denominator Statement:</td>
<td>All patients aged 65 years and older</td>
</tr>
<tr>
<td>2a1.8 Denominator Exclusions:</td>
<td>N/A</td>
</tr>
<tr>
<td>1.1 Measure Type:</td>
<td>Process</td>
</tr>
<tr>
<td>2a1.25-26 Data Source:</td>
<td>Administrative claims, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry</td>
</tr>
<tr>
<td>2a1.33 Level of Analysis:</td>
<td>Clinician : Individual</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:**

<table>
<thead>
<tr>
<th>Is the measure untested?</th>
<th>Yes [ ] No [ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>If untested, explain how it meets criteria for consideration for time-limited endorsement:</td>
<td></td>
</tr>
</tbody>
</table>

| 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: |

<table>
<thead>
<tr>
<th>Staff Reviewer Name(s):</th>
</tr>
</thead>
</table>

**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.**
**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):**

- Care Coordination

**De.5 Cross Cutting Areas (Check all the areas that apply):**

**1a.1 Demonstrated High Impact Aspect of Healthcare:**

- Affects large numbers
- Frequently performed procedure
- High resource use

**1a.2 If “Other,” please describe:**

**1a.3 Summary of Evidence of High Impact (Provide epidemiologic or resource use data):**

According to the 2000 U.S. Census report, there were 35 million people over the age of 65 in the year 2000, representing a 12-fold increase since 1990. The most rapid growth over the last decade occurred in the population 85 and older with a 38% increase to 4.2 million people (U.S. Census, 2007). As the elderly population ages, physical function decreases, pain increases and cognitive ability can decrease. Generally as individuals get older, consideration should be given to their choices for end-of-life care and an advance care plan should be executed.

**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:**

As people age, consideration should be given to their treatment wishes in the event that they lose the ability to manage their care. A large discrepancy exists between the wishes of dying patients and their actual end-of-life care. Advance directives (AD) are widely recommended as a strategy to improve compliance with patient wishes at the end of life, and thereby ensure appropriate use of health care resources at the end of life. A recent systematic review found only a few studies, all of which were conducted in the United States concerning advanced care planning in palliative care. Although the results were promising, more high-quality studies need to be conducted (Hall, et al., 2011).

- Hall S, Kolliakou A, Petkova H, Foggatt K, & Higginson IJ. (2011). Interventions for Improving Palliative Care for Older People Living in Nursing Homes. Cochrane Database of Systematic Reviews;3:[no page #].

**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.

This measure was used in the CMS Physician Quality Reporting Initiative/System (PQRI/S), in the claims option (2007, 2008, 2009, 2010) and the registry option (2009, 2010).

The most recent data available is from CMS PQRI, the claims option. The data below shows the gap in care. There is a gap in care as shown by this 2008 data; 72.99% of patients reported on did not meet the measure.

- 10th percentile:  0.35 %
- 25th percentile:  3.30 %
- 50th percentile:  14.26 %
- 75th percentile:  44.68 %
- 90th percentile:  75.00 %

**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

Section 1b.2 references data from the most recent year of measurement for PQRI. The data in Section 1b.2 includes percentiles.
1b.4 Summary of Data on Disparities by Population Group: [For Maintenance – Descriptive statistics for performance results for this measure by population group]

The measure is not stratified by patient groups or cohorts that could potentially be affected by disparities in care, NCQA has participated with IOM and others in attempting to include information on disparities in measure data collection. However, at the present time, this data, at all levels (claims data, paper chart review, and electronic records), is not coded in a standard manner, and is incompletely captured. There are no consistent standards for what entity (physician, group, plan, and employer) should capture and report this data. While “requiring” reporting of the data could push the field forward, it has been our position that doing so would create substantial burden without generating meaningful results. We believe that the measure specifications should NOT require this unless absolutely necessary since the data needed to determine disparities cannot be ascertained from the currently available sources.

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]
N/A

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.

<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>Yes[ ] IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No[ ]</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[ ]</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

<table>
<thead>
<tr>
<th>Does the measure pass subcriterion 1c?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes[ ] IF rationale supports relationship</td>
</tr>
</tbody>
</table>

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):

Advance care planning encompasses communication and discussion regarding treatment preferences that should start before a patient is seriously ill. It provides patients with an opportunity to consider, discuss, and plan their future care with health professionals. Numerous policy documents recommend that ACP should be available to all with life-limiting illness (Barnes 2011). Advance care planning can include deciding on a surrogate decision maker and advance directives. Instructional advance directives, such as living wills and do-not-resuscitate orders, specify the types of interventions that a patient does or does not want in particular circumstances. Proxy directives, such as healthcare proxy and a durable power of attorney for health, authorize another person to make medical decisions if the patient is unable (Basanta 2002).

Only a minority of subjects initiated ACP. The findings suggest the need for interventions aimed at enhancing ACP completion rates, particularly among older adults with cognitive impairment, since these individuals may have a time-limited opportunity to plan for future medical, financial, and other major life decisions (Garand 2011). Indeed, for people with severe dementia, advance care planning should be a necessary intervention, and the reluctance of caretakers to write plans should be explored further (Sampson 2011).

This measure would be consistent with a legislative mandate affecting Medicare beneficiaries, the Patient Self Determination Act (PSDA), approved in 1990. The act requires that beneficiaries be informed about their rights to self determination and the use of advance directives, and identifies particular facilities accountable for providing the information. Despite this, a recent cancer research study had found that most patients had not spoken extensively to health professionals or close persons about the future.
Patients’ concerns related to experiencing distressing symptoms or worrying how family members would cope. Some patients wished for more accurate information and were unaware of their options for care. Many felt it was doctors’ responsibility to initiate such discussions, but perceived that their doctors were reluctant to do so. However, some patients felt that the time was not yet right for these conversations (Barnes 2011). Furthermore, a recent meta-analysis found that awareness of patients’ and surrogates’ decision-making characteristics and communication styles can help clinicians identify potential barriers and variations in patterns of communication. To that end, the authors contend that initial and ongoing assessments of patients’ and surrogates’ communication style and characteristics must be incorporated into the plan of care (Melhado 2011).

Physicians are often unable to guide patients through the advance care planning (ACP) process due time constraints. A recent interventional study found that when physicians utilized a computerized clinical decision maker at the time of the medical health exam, patients were five times more likely to complete an ACP than those who only received an ACP education packet (Tung 2011). A cross-sectional study out of Oklahoma found that among community dwelling older persons, a living will is a positive first step towards healthcare planning and designating a power of attorney. They also found that the state’s effort to increase the use of advance directives among older residents was successful, indicating that organizations have the power to influence people with respect ACP (Mcauley 2008). An observational study from La Crosse County, Wisconsin found that a system for ACP can be managed in a geographic region so that, at the time of death, almost all adults have an advance care plan that is specific and available and treatment is consistent with their plan. The data from this study suggest that quality efforts have improved the prevalence, clarity, and specificity of ACPs (Hammes 2010).

1c.2-3 Type of Evidence (Check all that apply):
Clinical Practice Guideline, Selected individual studies (rather than entire body of evidence)

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 studies relate directly to advance care planning, though the population under consideration in a few studies additionally includes all terminal adults.

1c.5 Quantity of Studies in the Body of Evidence (Total number of studies, not articles): >25

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 studies directly relate to advanced care planning. The measure is in alliance with the guidelines for advanced care planning set forth by the National Hospice and Palliative Care Organization.

1c.7 Consistency of Results across Studies (Summarize the consistency of the magnitude and direction of the effect): Studies consistently demonstrated the advantages of advanced care planning, though at least one study noted that some patients are more reluctant to engage in ACP.

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 a net benefit; studies have demonstrated that quality efforts to increase ACP have been effective and increased the compliance of end-of-life care with the patient's wishes.

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: N/A

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

1c.12 If other, identify and describe the grading scale with definitions: The evidence has not been graded.
1c.13 Grade Assigned to the Body of Evidence: N/A

1c.14 Summary of Controversy/Contradictory Evidence: A recent article by Sanders, Schepp, and Baird found that the limited literature available regarding partial do-not-resuscitate order(s) (PDNROs) suggests the practice is clinically and ethically problematic. Not much is known about the prevalence of these orders, but some clinicians believe the partial orders are a growing phenomenon. Medical and bioethics organizations have produced guidelines and recommendations on the use of full do-not-resuscitate order(s) with little mention of PDNROs. PDNROs are designed based on the patient’s anticipated need for resuscitation and are intended to manage dying in a tolerable manner based on what the decision maker believes is “best.” Through an analysis of the medical literature, the authors proposed that a PDNRO contradicts this “best” management intention because it is impossible for the decision maker, or care providers, to anticipate all possible prearrest and arrest situations. The authors further state that discouraging PDNROs order may help promote more accurate and comprehensive advance care planning (Sanders 2011).

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 National Hospice and Palliative Care Organization provides the Caring Connection web site (www.caringinfo.org). This web site provides resources and information on end-of-life care, including a national repository of state by state advance directives.

Advance directives are designed to respect patient's autonomy and determine his/her wishes about future life-sustaining medical treatment if unable to indicate wishes. Key interventions and treatment decisions to include in advance directives are: resuscitation procedures, mechanical respiration, chemotherapy, radiation therapy, dialysis, simple diagnostic tests, pain control, blood products, transfusions, and intentional deep sedation.

Oral statements
• Conversations with relatives, friends, and clinicians are most common form; should be thoroughly documented in medical record for later reference.
• Properly verified oral statements carry same ethical and legal weight as those recorded in writing.

Instructional advance directives (DNR orders, living wills)
• Written instructions regarding the initiation, continuation, withholding, or withdrawal of particular forms of life-sustaining medical treatment.
• May be revoked or altered at any time by the patient.
• Clinicians who comply with such directives are provided legal immunity for such actions.
Durable power of attorney for health care or health care proxy
• A written document that enables a capable person to appoint someone else to make future medical treatment choices for him or her in the event of decisional incapacity.

1c.17 Clinical Practice Guideline Citation: National Hospice and Palliative Care Organization. www.caringinfo.org

1c.18 National Guideline Clearinghouse or other URL: www.caringinfo.org

1c.19 Grading of Strength of Guideline Recommendation. Has the recommendation been graded? No

1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:

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

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

1c.23 Grade Assigned to the Recommendation: N/A

1c.24 Rationale for Using this Guideline Over Others: It is NCQA policy to use guidelines that are evidence-based, applicable to physicians and other healthcare providers, and developed by a national specialty organization or government agency. NCQA and AMA-PCPI convened an expert panel of diverse stakeholders to review the evidence for this measure. The panel determined the measure was scientifically sound using the full body of evidence for this measure concept.

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: High  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.

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

S.2 If yes, provide web page URL: http://www.ama-assn.org/ama1/pub/upload/mm/pcri/geriatrics-ws.pdf

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
Patients who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan.

**2a1.2 Numerator Time Window** *(The time period in which the target process, condition, event, or outcome is eligible for inclusion):*

A twelve month measurement year

**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:)*

- Report the CPT Category II codes designated for this numerator:
  - 1123F: Advance care planning discussed and documented; advance care plan or surrogate decision maker documented in the medical record.
  - 1124F: Advance care planning discussed and documented in the medical record; patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan.

Documentation that patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan may also include, as appropriate, the following: That the patient’s cultural and/or spiritual beliefs preclude a discussion of advance care planning, as it would be viewed as harmful to the patient’s beliefs and thus harmful to the physician-patient relationship.

**2a1.4 Denominator Statement** *(Brief, narrative description of the target population being measured):*

All patients aged 65 years and older

**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):*

A twelve month measurement year

**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:)*

- **Denominator Criteria (Eligible Cases):**
  - Patients aged ≥ 65 years on date of encounter
  - Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99218, 99219, 99220, 99221, 99222, 99223, 99231, 99232, 99233, 99234, 99235, 99236, 99291*, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99356, 99397, 99401, 99402, 99403, 99404

*Clinicians indicating the place of service as the emergency department will not be included in this measure.

**2a1.8 Denominator Exclusions** *(Brief narrative description of exclusions from the target population):*

N/A

**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):*

N/A

**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

**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

### 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.):

Step 1: Determine the eligible population. The eligible population is all the patients aged 65 years and older.

Step 2: Determine number of patients meeting the denominator criteria as specified in Section 2a1.7 above.

Step 3: Determine the number of patients who meet the numerator criteria as specified in section 2a1.3 above. The numerator includes all patients who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan.

Step 4: Calculate the rate by dividing the total from Step 3 by the total from Step 2

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

Attachment

PCPI Sample Calculation Algorithm-634613645501283368.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):

N/A

### 2a1.25 Data Source

(Check all the sources for which the measure is specified and tested). If other, please describe:

Administrative claims, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Registry

### 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.):

None

### 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:

URL

2a.1.33 **Level of Analysis** *(Check the levels of analysis for which the measure is specified and tested):* Clinician: Individual

2a.1.34-35 **Care Setting** *(Check all the settings for which the measure is specified and tested):* Ambulatory Care: Ambulatory Surgery Center (ASC), Ambulatory Care: Clinic/Urgent Care, Ambulatory Care: Clinician Office, Home Health, Hospice, Hospital/Acute Care Facility, Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility, Post Acute/Long Term Care Facility: Rehabilitation

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):*

AMA-PCPI Testing Project

Four practice sites representing various types, locations and sizes were identified to participate in testing the measures. One practice with paper medical records and three practices with EHR participated in this testing project. The number of geriatricians per site ranged from 1-16 in number. The sites were located in four different regions of the United States. Patient visit volume per site ranged from 500 – 1,000 geriatric patients per month. Site 1 (Paper): 2,500 patients, Site 2 (EHR): 1,800 patients, Site 3 (EHR): 3,700 outpatients/2,000 LTC patients, Site 4 (EHR): 2,500 patients.

A random sample of 70 geriatric patient charts were identified per site; resulting in approximately 220 patient records for purposes of this study.

Sample limited to Medicare patient office visits with dates of service between January 1, 2009- December 31, 2009.

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

Data abstracted from randomly sampled patient records were used from the AMA-PCPI Testing Project to calculate inter-rater reliability for the measure.

Data analysis included:
- Percent agreement
- Kappa statistic of reliability

Kappa: Strength of Agreement

0.00: Poor
0.01 – 0.20: Slight
0.21 – 0.40: Fair
0.41 – 0.60: Moderate
0.61 – 0.80: Substantial
0.81 – 0.99: Almost perfect

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

Overall, this measure is highly reliable.

Advance Care Plan:

[N, % Agreement, Kappa (95% Confidence Interval)]

Denominator: 116, 99.15%, Kappa is non-calculable*
Numerator: 116, 98.28%, 0.95 (0.87 to 1.00)
Overall: 116, 98.29%, 0.95 (0.87 to 1.00)

*This is an example of the limitation of the Kappa statistic. While the agreement can be 90% or greater, if one classification
category dominates, kappa can be significantly reduced. (http://www.ajronline.org/cgi/content/full/184/5/1391)

### 2b. VALIDITY. Validity, Testing, including all Threats to Validity:  \[ \begin{array}{c|c|c|c|c|c} \text{H} & \text{M} & \text{L} & \text{I} & \text{NA} \\ \hline \text{H} & \text{M} & \text{L} & \text{I} & \text{NA} \end{array} \]

#### 2b1. 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 focuses on advance care planning in the elderly population. The evidence is consistent with the focus and scope of this measure.

#### 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):
As described in section 2a2.1, a total of 220 patient records were abstracted to complete inter-rater reliability resting of the measure concept.

An expert panel was used to assess face validity of the measure, based on the data sample. This panel consists of 33 members, whose specialties include internal medicine, geriatrics, anesthesia, orthopedic surgery, physical medicine & rehabilitation, neurology, palliative medicine, urology, geriatric psychiatry, emergency medicine, nephrology, radiation oncology, ophthalmology, medical epidemiology, methodology, hospital medicine, family medicine, and bioethics.

The full list of panel members is provided under the section Additional Information, Ad.1. Workgroup/Expert Panel Involved in Measure Development.

##### 2b2.2 Analytic Method (Describe method of validity testing and rationale; if face validity, describe systematic assessment):
During measure development, the NCQA and PCPI-convened expert work groups assess the face and content validity of each measure. The groups establish the measure’s ability to capture what it is designed to capture using a consensus process that consists of input from multiple stakeholders, including practicing physicians and experts with technical measure expertise, as well as a review of additional input received through a public comment period.

##### 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):
This measure was deemed valid by the expert panel.

The aforementioned panel was asked to rate their agreement with the following statement:

“The scores obtained from the measure as specified will accurately differentiate quality across providers.”

Scale 1-5, where 1=Strongly Disagree; 3=Neither Disagree nor Agree; 5=Strongly Agree

The results of the expert panel rating of the validity statement were as follows:

N = 23 Mean rating = 4.35

Frequency Distribution of Ratings

- (1) - Strongly Disagree - 0 panel members
- (2) - Disagree - 0 panel members
- (3) - Neither Disagree nor Agree - 4 panel members
- (4) - Agree - 7 panel members
- (5) - Strongly Agree - 12 panel members

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):
There are no documented exceptions for this measure.

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

2b3.3 Results (Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):
N/A

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

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

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

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

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):
This measure was used in the CMS Physician Quality Reporting Initiative/System (PQRI/S), in the claims option (2007, 2008, 2009, 2010) and the registry option (2009, 2010).

This measure is part of the CMS Physician Quality Reporting Initiative: 880,190 cases were reported on for the 2008 program, the most recent year for which performance data are available.

For the CMS PQRI the 2009 program, this is the only year for which Quality Data Codes (QDC) and reporting rates are available, not performance data.

2b5.2 Analytic Method (Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance):
For the CMS PQRI 2008 program, the inter-quartile range (IQR) was calculated to determine the variability in performance on the measure between the different participating entities.

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):
The most recent performance data are from the CMS PQRI 2008 program in the claims option. There is a gap in care as shown by this 2008 data; 72.99% of patients reported on did not meet the measure.
10th percentile: 0.35 %
25th percentile: 3.30 %
50th percentile: 14.26 %
75th percentile: 44.68 %
The inter-quartile range (IQR) provides a measure of the dispersion of performance. The IQR is 41.38, and indicates that 50% of physicians have performance on this measure ranging from 3.30% and 44.68%. A quarter of reporting physicians have performance on this measure which is greater than 44.68%, while a quarter have performance on this measure less than 3.30%.

The 2009 data is provided below is specific to the QDCs and reporting rates:

Clinical Condition and Measure: #47 Advance Care Plan
# Eligible Professionals: 616,182
# Professionals Reporting >= 1 Valid QDC: 6,234
% Professionals Reporting >=1 Valid QDC: 1.01%
# Professionals Satisfactorily Reporting: 2,253
% Professionals Satisfactorily Reporting: 36.14%

### 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):
This measure has not been compared across data sources.

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

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

### 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):
The measure is not stratified.

2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:
N/A

### 2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, Scientific Acceptability of Measure Properties, met?
(Reiability and Validity must be rated moderate or high) Yes ☐ No ☐
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):
Professional Certification or
### Recognition Program, Public Reporting, Quality Improvement (Internal to the specific organization), 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, Professional Certification or Recognition Program
- Quality Improvement with Benchmarking (external benchmarking to multiple organizations)
- Quality Improvement (Internal to the specific organization)

#### 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.]**

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 successful use in PQRI supports the feasibility and usability of the measure specification on a national scale and the results indicate that there is still room for improvement in this critical care coordination area.

#### 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): **This measure may be used in a Maintenance of Certification program.**

#### 3b. Usefulness for Quality Improvement

| 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].**

All PCPI measures are suitable for use in quality improvement initiatives and are made freely available on the PCPI website and through the implementation efforts of medical specialty societies and other PCPI members. The PCPI strongly encourages the use of its measures in QI initiatives and seeks to provide information on such initiatives to PCPI members.

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 PCPI believes that the use of PCPI measures in quality improvement initiatives is a beneficial way to gather scientific data with which to improve physician performance. This is appropriate since the measure has been tested and the reliability of the performance data has been validated. NQF endorsement will facilitate our ongoing progress toward this quality improvement objective.

Overall, to what extent was the criterion, **Usability**, met? *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:**

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
4b. Electronic Sources

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 in electronic health records (EHRs)

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

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:

We are not aware of any unintended consequences related to this measurement.

4d. Data Collection Strategy/Implementation

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

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):

The specific costs for implementing or using this measure have not been measured, however the successful use in a national reporting program (PQRS) support the feasibility and utility of the measure concept.

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:

0647 : Transition Record with Specified Elements Received by Discharged Patients (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)

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:

NQF#0647 targets all age groups and focuses specifically on transition of care to another facility or to the home. This measure, NQF#0326, focuses specifically on the elderly and focuses on creating an advanced care plan a designated surrogate decision maker as they proceed though old age.

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
### Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 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:

| Ad.3 Year the measure was first released: | 2008 |
| Ad.4 Month and Year of most recent revision: | 02, 2008 |
| Ad.5 What is your frequency for review/update of this measure? | Approximately every 3 years, sooner if the clinical guidelines have changed significantly. |
| Ad.6 When is the next scheduled review/update for this measure? | |

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Ad.9 Additional Information/Comments:

Date of Submission (MM/DD/YY): 01/09/2012