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.

NQF #: 1626   **NQF Project:** Palliative Care and End-of-Life Care
(for Endorsement Maintenance Review) **Original Endorsement Date: Most Recent Endorsement Date:**
BRIEF MEASURE INFORMATION
De.1 Measure Title: Patients Admitted to ICU who Have Care Preferences Documented
Co.1.1 Measure Steward: RAND Corporation
De.2 Brief Description of Measure: Percentage of vulnerable adults admitted to ICU who survive at least 48 hours who have their care preferences documented within 48 hours OR documentation as to why this was not done.
2a1.1 Numerator Statement: Patients in the denominator who had their care preferences documented within 48 hours of ICU admission or have documentation of why this was not done.
2a1.4 Denominator Statement: All vulnerable adults admitted to ICU who survive at least 48 hours after ICU admission.
2a1.8 Denominator Exclusions: None
1.1 Measure Type: Process **2a1. 25-26 Data Source:** Electronic Clinical Data : Electronic Health Record, Paper Records **2a1.33 Level of Analysis:** Facility, Health Plan, Integrated Delivery System **1.2-1.4 Is this measure paired with another measure?** No **De.3 If included in a composite, please identify the composite measure** (*title and NQF number if endorsed*)**:**

STAFF NOTES (*issues or questions regarding any criteria*)
Comments on Conditions for Consideration:
Is the measure untested? Yes☐ No☐   If untested, explain how it meets criteria for consideration for time-limited endorsement:
1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (*check De.5*)**:** **5. Similar/related endorsed or submitted measures** (*check 5.1*)**:** **Other Criteria:**
Staff Reviewer Name(s):

1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT
Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See guidance on evidence. ***Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.*** **(evaluation criteria)**
1a. High Impact: H☐ M☐ L☐ I☐

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable   1

(*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*)**:** Cancer, Pulmonary/Critical Care : Critical Care
De.5 Cross Cutting Areas (*Check all the areas that apply*)**:** Palliative Care and End of Life Care

1a.1 Demonstrated High Impact Aspect of Healthcare: 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*)**:**
Many patients would prefer to die rather than live permanently comatose, mechanically ventilated, or tube fed (Pearlman 1993; Wenger 1998), yet physicians and surrogate decision makers often do not know patients´ preferences concerning life-sustaining treatment (Wenger 1998; Guidelines 1987; AMA 1994, Wenger 2000; Kish 2000). Patients entering ICUs are likely to receive invasive care, making the elicitation and documentation of preferences necessary to guide these potentially burdensome treatments. (Lorenz 2007) Care in United States hospitals tends to be aggressive. Even patients with lung and colorectal cancer enrolled in hospice receive aggressive care when brought to the hospital. (Cintron 2003) In a study of Medicare claims that evaluated patients who died within one year of a diagnosis of lung, breast, colorectal or other gastrointestinal cancer, patients receiving chemotherapy within two weeks of death increased from 13.8% in 1993 to 18.5% in 1996, and patients had more hospitalizations, ER visits, and ICU stays during the latter time period. (Earle 2004) Another retrospective study of 335 breast cancer patients who died in the 1990s found that within approximately two months prior to death, 64% continued to receive endocrine therapy and 20% continued to receive chemotherapy. (Asola 2006)

1a.4 Citations for Evidence of High Impact cited in 1a.3: AMA Council on Ethical and Judicial Affairs. Code of Medical Ethics: Current Opinions with Annotations. Chicago: American Medical Association, 1994

Asola R, Huhtala H, Holli K. Intensity of diagnostic and treatment activities during the end of life of patients with advanced breast cancer. Breast Cancer Res Treat 2006;100(1):77-82

Cintron A, Hamel MB, Davis RB, et al. Hospitalization of hospice patients with cancer. J Palliat Med 2003;6(%):757-768

Earle CC, Neville BA, Landrum MB, et al. Trends in the aggressiveness of cancer care near the end of life. J Clin Oncol 2004;22(2):315-321

Guidelines on the Termination of Life-Sustaining Treatment and the Care of the Dying. Briarcliff Manor, NY:Hasting Center, 1987

Kish SK, Martin CG, Price KJ. Advance directives in critically ill cancer patients. Crit Care Nurs Clin North Am 2000;12(#):373-383

Lorenz KA, Rosenfeld K, Wenger, N. Quality indicators for palliative and end-of-life care in vulnerable elders. J Am Geriatr Soc 2007;55:S318-S326

Pearlman RA, Cain KC, Patrick DL, et al. Insights pertaining to patient assessments of states worse than death. J Clin Ethics 1993;4:33-41

Wenger NS, Phillips RS, Teno JM, et al. Physician understanding of patient resuscitation preferences: insights and clinical implications. J Am Geriatr Soc 2000;48(5 Suppl):S44-S51

Wenger NS, Kanouse DE, Lie HH, et al. Preferences for aggressiveness of care among HIV-infected persons and use of advance directives. J Gen Intern Med 1998;13(Suppl 1):93

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:
The aim of this measure is to assist healthcare providers in providing care that is consistent with patient preferences.

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.*]
N, % measure performance
Assessing Care of Vulnerable Elders (ACOVE3)(Walling 2010): Inpatient decedents, N=369, 46%

Assessing Symptoms Side Effects and Indicators of Supportive Treatment (ASSIST) (Dy 2010): Inpatient decedents, N=22, 9%

ACOVE (Wenger 2003): Vulnerable elders, N=6, 17%

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*]
Dy SM, Asch SM, Lorenz KA, et al. Quality of end-of-life care for patients with advanced cancer in an academic medical center. J Palliat Med 2011;14(4)"451-457

Walling AM, Asch AM, Lorenz KA, et al. The quality of care provided to hospitalized patients at the end of life. Arch Intern Med 2010;170(12):1057-1063

Wenger NS, Solomon DH, Roth CP, et al. The quality of medical care provided to vulnerable community-dwelling older patients. Ann Intern Med 2003;139(():740-E759

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

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*]

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.

Quantity: H☐ M☐ L☐ I☐   Quality: H☐ M☐ L☐ I☐   Consistency: H☐ M☐ L☐ I☐

Quantity	Quality	Consistency	Does the measure pass subcriterion1c?
M-H	M-H	M-H	Yes☐
L	M-H	M	Yes☐ IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise **No**☐
M-H	L	M-H	Yes☐ IF potential benefits to patients clearly outweigh potential harms: otherwise **No**☐
L-M-H	L-M-H	L	No ☐
Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service		**Does the measure pass subcriterion1c?** **Yes**☐ IF rationale supports relationship	

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

1c.2-3 Type of Evidence *(Check all that apply)***:**
Clinical Practice Guideline, Systematic review of body of evidence (other than within guideline development)

1c.4 Directness of Evidence to the Specified Measure *(State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population)***:**
There is no clinical trial directly linking the care process in this measure with outcomes. However, elicitation of preferences is one important step in the advance care planning process and in matching care with patient goals. The ACOVE expert panel, based on a clinically informed understanding of the medical literature identified this care process important for providing care to seriously ill patients receiving intensive care in the hospital.

Lorenz KA, Rosenfeld K, Wenger N. Quality indicators for palliative and end-of-life care in vulnerable elders. J Am Geriatr Soc. 2007;55 Suppl 2:S318-26.

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

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*)**:**

1c.7 Consistency of Results across Studies *(Summarize the consistency of the magnitude and direction of the effect):*

1c.8 Net Benefit *(Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms)***:**

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:

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

1c.12 If other, identify and describe the grading scale with definitions: RCT, non-RCT, cohort or case analysis, multiple time series, textbook, opinion, descriptive study

1c.13 Grade Assigned to the Body of Evidence:

1c.14 Summary of Controversy/Contradictory Evidence:

1c.15 Citations for Evidence other than Guidelines*(Guidelines addressed below)***:**
Lorenz KA, Rosenfeld K, Wenger N. Quality indicators for palliative and end-of-life care in vulnerable elders. J Amer Geriatr Soc 2007;55:S318-S326

Walling A, Lorenz KA, Dy SM, et al. Evidence-based recommendations for information and care planning in cancer care. J Clin Oncol 2008;26(23):3896-3902

1c.16 Quote verbatim, <u>the specific guideline recommendation</u> *(Including guideline # and/or page #)***:**

1c.17 Clinical Practice Guideline Citation:

1c.18 National Guideline Clearinghouse or other URL: None

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: Not graded

1c.23 Grade Assigned to the Recommendation:

1c.24 Rationale for Using this Guideline Over Others:

Based on the NQF descriptions for rating the evidence, what was the <u>developer's assessment</u> 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.

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, <u>as specified</u>, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **(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 <u>this</u> measure can be obtained? No

S.2 If yes, provide web page URL:

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)***:**
Patients in the denominator who had their care preferences documented within 48 hours of ICU admission or have documentation of why this was not done.

2a1.2 Numerator Time Window *(The time period in which the target process, condition, event, or outcome is eligible for inclusion)***:**
48 hours starting from time of ICU admission

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***:**
Patients whose medical record includes documentation of care preferences within 48 hours of admission to ICU. Care preferences may include any of the following:
- Code status, preferences for general aggressiveness of care, mechanical ventilation, hemodialysis, transfusion, or permanent feeding tube, OR
- Documentation that a care preference discussion was attempted and/or reason why it was not done

2a1.4 Denominator Statement *(Brief, narrative description of the target population being measured)***:**
All vulnerable adults admitted to ICU who survive at least 48 hours after ICU admission.

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)*:
First 48 hours of ICU admission of a vulnerable adult.

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)*:
All vulnerable adults admitted to ICU who survive at least 48 hours after ICU admission.
"Vulnerable" is defined as any of the following:
- >74 years of age
- Vulnerable Elder Survey-13 (VES-13) score >2 (Saliba 2001)
- Poor prognosis/terminal illness defined as life expectancy of <6 months
- Stage IV cancer

2a1.8 Denominator Exclusions *(Brief narrative description of exclusions from the target population)*:
None

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)*:

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)*:

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.)*:

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.)*:
1. Identify all vulnerable adults admitted to ICU who survive at least 48 hours after ICU admission
2. Examine the medical record for evidence of a statement of patient care preferences OR attempt to elicit these or other reason why this was not done within 48 hours of ICU admission.

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

2a1.24 Sampling (Survey) Methodology. If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate)**:**

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

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.*)**:** Medical record abstraction tool

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

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

2a1.33 Level of Analysis (*Check the levels of analysis for which the measure is specified and tested)***:**   Facility, Health Plan, Integrated Delivery System

2a1.34-35 Care Setting (*Check all the settings for which the measure is specified and tested*)**:** Hospital/Acute Care Facility

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)***:**
See 2a2.3.

2a2.2 Analytic Method *(Describe method of reliability testing & rationale)***:**
See 2a2.3.

2a2.3 Testing Results *(Reliability statistics, assessment of adequacy in the context of norms for the test conducted)***:**
ACOVE3 (Walling 2010) inpatient decedents (n=369) 47 re-abstraction records: Eligibility kappa=0.95; specified care kappa=0.87

ASSIST (Dy 2010, 2011) inpatient decedents (n=22): Overall eligibility kappa=0.87; overall specified care kappa=0.86

Dy SM, Asch AM, Lorenz KA, et al. Quality of end-of-life care for patients with advanced cancer in an academic medical center. J Pall Med 2011;14(4):451-459

Dy SM, Lorenz KA, O´Neill S, et al. Cancer quality-ASSIST supportive oncology quality indicator set. Feasibility, reliability, and validity. Cancer 2010;116:3267-3275

Walling AM, Asch SM, Lorenz KA, et al. The quality of care provided to hospitalized patients at the end of life. Arch Intern Med 2010;170(12):1057-1063

2b. VALIDITY. Validity, Testing, <u>including all Threats to Validity</u>:   H☐ M☐ L☐ I ☐

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:**

See 2b2.2

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*)**:**
See 2b2.2

2b2.2 Analytic Method (*Describe method of validity testing and rationale; if face validity, describe systematic assessment*)**:**
Although validity has not been tested empirically for this measure alone, the process - outcome link of the set of quality measures including this measure has been tested. Process of care measured using the ACOVE quality indicator set is related to two important outcomes in vulnerable elders and persons 75 years and older: mortality and functional status. In 372 vulnerable elders there was a graded positive relationship between quality score and 3-year survival. After adjustment for sex, health status, and health service use, quality score was not associated with mortality for the first 500 days, but a higher quality score was associated with lower mortality after 500 days (hazard ratio, 0.64 [95% CI, 0.49 to 0.84] for a 10% higher quality score).(Higashi 2005) Using an administrative data implementation of a subset of these measures, 21,310 older persons from 19 California counties had their quality of care measured and outcomes followed over the next year. After accounting for number of measures triggered, baseline function and other covariates, better quality was associated with better function at follow-up. Ten percent better quality was associated at follow-up with 0.21 lower ADL need score [95% confidence interval (CI), 0.25-0.17], 0.022 lower IADL need score (95% CI, 0.032-0.013), and lower odds of death (0.91; 95% CI, 0.89 to 0.93).(Zingmond 2011) Validity of the process-outcome link was explicitly evaluated by the ACOVE, ACOVE3, and ASSIST expert panels that reviewed the relevant literature and used a modified Delphi panel of voting on the validity of the measure. (Shekelle 2001; Wenger 2007; Lorenz 2009) Although validity has not been tested empirically for this measure alone, the process-outcome link of the set of quality measures including this measure has been tested. Process of care measured using the ACOVE quality indicator set is linked to patient function and survival. (Higashi 2007)

Higashi T, Shekelle PG, Adams J, et al. Quality of care is associated with survival in vulnerable older patients. Ann Intern Med 2005;143:274-281

Lorenz KA, Dy SM, Naeim A, et al. Quality measures for supportive cancer care: the cancer quality-ASSIST project. J Pain Symptom Manage 2009;37(6):943-964

Shekelle PG, MacLean CH, Morton SC, et al. Assessing care of vulnerable elders: Methods for developing quality indicators. Ann Intern Med 2001;135:647-652

Wenger NW, Roth CP, Shekelle P, et al. Introduction to the assessing care of vulnerable elders-3 quality indicator measurement set. J Am Geriatr Soc 2007;55:S247-S252

Zingmond DS, Ettner SL, Wilber KH, et al. Association of claims-based quality of care measures with outcomes among community-dwelling vulnerable elders. Med Care 2011;49:553-559

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*)**:**
Face validity was tested in the panels described in 2b2.2 above as well as the strength of the process–outcome link.

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*)**:**
None

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

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

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)***:**
None

2b4.2 Analytic Method (*Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables)***:**

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)***:**

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

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)***:**
The awareness of patient preferences is vital to facilitate matching end-of-life care with that which the patient would want. Failure to attempt to elicit patient preferences, if unknown, when a patient is in ICU is significant. As noted in 1b2., performance was low for this measure (9-46%).

2b5.2 Analytic Method *(Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance)***:**

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):*

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)***:**
None

2b6.2 Analytic Method *(Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure)***:**

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)***:**

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*)**:** N/A

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

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☐
Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

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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 (Internal to the specific organization)

3.1 Current Use (*Check all that apply; for any that are checked, provide the specific program information in the following questions*): Quality Improvement (Internal to the specific organization)

3a. Usefulness for Public Reporting: H☐ M☐ 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.***]**
Not yet used

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**:**

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***]**.
Used in the quality of care measurement for end of life care at UCLA medical center and followed over time.

Walling AM, Ettner SL, Barry T, et al. Missed Opportunities: Use of an End-of-Life Symptom Management Order Protocol among Inpatients Dying Expected Deaths. J Palliat Med 2011;14:407-412

Walling AM, Asch SM, Lorenz KA, et al. The quality of care provided to hospitalized patients at the end of life. Arch Intern Med 2010;170(12):1057-1063

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 care process can be implemented in an intensive care unit for application to specific patients. No clinical trial has specifically focused on this single care process alone in related to outcomes.

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**:**
Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)

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)***:** No data elements are in 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: While some EHRs could provide information about the presence of an advance directive in the record, most preference information and discussions by their nature, do not lend themselves to electronic data capture. This is true for other aspects of geriatric care as well. (MacLean 2006) However, the data elements are discrete and could be delineated in an EHR.

MacLean GH, Louie R, Shekelle PG, et al. Comparison of administrative data and medical records to measure quality of medical care provided to vulnerable older patients. Med Care 2006;44(2):141-148

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:
Documentation of patient preferences or an attempt to elicit them is not a care process that is likely to produce unintended consequences.

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)***:**

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?**

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)*:
This measure is part of the NPCRC Key Palliative Measures Bundle. Refer to the NPCRC cover letter and table of bundle measures for description of the selection and harmonization of the Key Palliative Measures Bundle.

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner): RAND Corporation, 1776 Main Street, Santa Monica, California, 90407

Co.2 Point of Contact: Carol, Roth, RN, MPH, roth@rand.org, 310-393-0411-6425

Co.3 Measure Developer if different from Measure Steward: RAND Corporation, 1776 Main Street, Santa Monica, California, 90407

Co.4 Point of Contact: Neil, Wenger, MD, MPH, nwenger@mednet.ucla.edu, 310-794-2288-

Co.5 Submitter: Carol, Roth, RN, MPH, roth@rand.org, 310-393-0411-6425, RAND Corporation

Co.6 Additional organizations that sponsored/participated in measure development:

Co.7 Public Contact: Carol, Roth, RN, MPH, roth@rand.org, 310-393-0411-6425, RAND Corporation

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.
ACOVE-3 project expert panel members, ACOVE-3 Clinical Committee members, ASSIST project expert panel members and Advisory Board as listed below.

ACOVE-3 project (Panel 2) expert panel members:

Helena Chang, MD
UCLA School of Medicine, Los Angeles, CA

Nick Fitterman, MD
Northshore Medical Group, Huntington, NY

Jean S. Kutner, MD, MSPH
University of Colorado Health Sciences Center, Aurora, CO

Patrick J. Loehrer, Sr., MD
Indiana University School of Medicine, Indianapolis, IN

Thomas Mattimore, MD
University of California at Los Angeles, Los Angeles, CA

Hyman B. Muss, MD
Vermont Cancer Center at University of Vermont, Burlington, VT

James L. Naughton, MD
Alliance Medical Group, Pinole, CA

Cheryl Phillips, MD
Sutter Medical Group, Sacramento, CA

Doron Schneider, MD
Muller Center for Senior Health, Abington Memorial Hospital, Abington, PA

Michael Stamos, MD
University of California, Irvine, CA

Ronald D. Stock, MD
Center for Senior Health, Eugene, OR

May Lin Tao, MD, MSPH
John Wayne Cancer Institute, Saint John´s Health Center, Santa Monica, CA and Valley Radiotherapy Associates Medical Group, El Segundo, CA

Role of ACOVE Expert Panel: Expanded and updated the Assessing Care of Vulnerable Elders (ACOVE) quality indicators via literature review, face-to-face discussion, and 2 rounds of anonymous ratings to evaluate whether the QIs were valid measures of quality of care using a process that is an explicit combination of scientific evidence and professional consensus.

ACOVE-3 CLINICAL COMMITTEE MEMBERS:

Alpesh N. Amin, MD - Hospitalist
University of California, Irvine Medical Center, Irvine, CA

Richard W. Besdine, MD - Geriatrician and Clinical Committee Chair
Brown University Center for Gerontology and Health Care Research, Providence, RI

Dan G. Blazer, MD - Geriatric Psychiatrist
Duke University Medical Center, Durham, NC

Harvey J. Cohen, MD - Geriatric Oncologist
Duke University Medical Center, Durham, NC

Terry Fulmer, PhD, RN, FAAN - Nurse
New York University, New York, NY

Patricia A. Ganz, MD - Oncologist
UCLA Schools of Medicine & Public Health, Jonsson Comprehensive Cancer Center, Los Angeles, CA

Mark A. Grunwald, MD - Family Practitioner
Gunderson Lutheran Clinic, Prairie du Chien, WI

William J. Hall, MD, MACP - Geriatrician
Highland Hospital, Rochester, NY

Ira R. Katz, MD, PhD - Psychiatrist
University of Pennsylvania, Philadelphia, PA

Paul R. Katz, MD - Geriatrician
Monroe Community Hospital, Rochester, NY

Dalane W. Kitzman, MD - Geriatric Cardiologist
Wake Forest University School of Medicine, Winston-Salem, NC

Rosanne M. Leipzig, MD, PhD - Geriatrician
Mount Sinai School of Medicine, New York, NY

Ronnie A. Rosenthal, MD - Surgeon
Yale University School of Medicine, New Haven, CT

Role of ACOVE-3 Clinical Committee: Evaluated the coherence of the complete set of QIs that the experts rated as valid as well as determined exclusions for advanced dementia and poor prognosis.

ASSIST project expert panel members:
Kurt Kroenke, MD
Indiana University Cancer Center, Indianapolis, Indiana

Terry Altilio, LCSW
Beth Israel Medical Center, New York, New York

Lodovico Balducci, MD
H. Lee Moffitt Cancer Center & Research Institute, Tampa, Florida

Jeannine M. Brant PhD(c),
St. Vincent Healthcare, Billings, Montana

Eduardo Bruera, MD
UT M. D. Anderson Cancer Center, Houston, Texas

Peter Eisenberg, MD
California Cancer Care, Greenbrae, California

Pr Stein Kaasa

St. Olavs University Hospital HF, Trondheim, Norway

Sean Morrison, MD
Mt. Sinai Medical School, New York, New York

Mary Simmonds, MD
Family practice, New Cumberland, Pennsylvania

Role of ASSIST Expert Panel: Helped to develop and refine the quality indicators for the Addressing Symptoms Side effects and Indicators for Supportive Treatment (ASSIST) project via literature review, face-to-face discussion, and 2 rounds of anonymous ratings to evaluate whether the QIs were valid measures of quality of care using a process that is an explicit combination of scientific evidence and professional consensus.

ASSIST Project Advisory Board:

Neil S. Wenger, MD, MPH
UCLA Division of Gen Internal Med and Health Svcs Research, Los Angeles, CA

Steven B. Clauser, PhD
Chief, Outcomes Research Branch, Applied Research Program, Div of Cancer Control and Pop. Sciences, National Cancer Institute, Bethesda, MD

David Currow, MD
CEO, Cancer Australia, Flinders University, South Australia

Molla S. Donaldson, Dr.PH, MS
Adjunct Professor, Dept. of Medicine, George Washington University School of Medicine and Health Sciences and Principal, QuantaNet, Chevy Chase, MD

Betty Ferrell, PhD, RN, FAAN
City of Hope National Medical Center, Duarte, CA

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Catherine D. Harvey, Dr.PH, RN, AOCN
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Copenhagen University Hospital Department of Oncology, Herlev, Denmark

Paul Hesketh, MD
Chief, Division of Hematology/Oncology, Caritas St. Elizabeth´s Medical Center, Boston, MA

Catherine H. MacLean, MD, PhD
Medical Director, Programs for Clinical Excellence Health Solutions, Wellpoint, Inc., Thousand Oaks, CA

Thomas J. Smith, MD
Division of Hematology/Oncology and Palliative Care, Virginia Commonwealth University, Massey Cancer Center, Richmond, VA

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:
Measure Developer/Steward Updates and Ongoing Maintenance **Ad.3 Year the measure was first released:** 2001 **Ad.4 Month and Year of most recent revision:** 07, 2010 **Ad.5 What is your frequency for review/update of this measure?** Every 3 years **Ad.6 When is the next scheduled review/update for this measure?**
Ad.7 Copyright statement:
Ad.8 Disclaimers:
Ad.9 Additional Information/Comments:
Date of Submission (*MM/DD/YY*)**:** 05/18/2011