

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 #: 1625	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: Hospitalized Patients Who Die an Expected Death with an ICD that Has Been Deactivated	
Co.1.1 Measure Steward: RAND Corporation	
De.2 Brief Description of Measure: Percentage of hospitalized patients who die an expected death from cancer or other terminal illness and who have an implantable cardioverter-defibrillator (ICD) in place at the time of death that was deactivated prior to death or there is documentation why it was not deactivated	
2a1.1 Numerator Statement: Patients from the denominator who have their ICDs deactivated prior to death or have documentation of why this was not done	
2a1.4 Denominator Statement: Patients who died an expected death who have an ICD in place	
2a1.8 Denominator Exclusions: None	
1.1 Measure Type: Process	
2a1. 25-26 Data Source: Paper Records	
2a1.33 Level of Analysis: Facility	
1.2-1.4 Is this measure paired with another measure? No	
De.3 If included in a composite, please identify the composite measure (title and NQF number if endorsed):	

STAFF NOTES (issues or questions regarding any criteria)
Comments on Conditions for Consideration:
Is the measure untested? Yes <input type="checkbox"/> No <input type="checkbox"/> 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

(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, Cardiovascular, Cardiovascular : Congestive Heart Failure, Cardiovascular : Ischemic Heart Disease, Coronary Artery Disease

De.5 Cross Cutting Areas (Check all the areas that apply): Palliative Care and End of Life Care, Safety

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):

ICDs were designed to prevent sudden death. For patients who are expected to die, an ICD constitutes an inappropriate intervention that will promote suffering without achieving a patient goal. Most hospices admit patients with ICDs (Goldstein 2010) and these devices can present care problems and interfere with patient comfort. Problems include 1) ICD discharges that are both physically painful and emotionally distressing, 2) risk of the patient's caregivers receiving an accidental shock, and 3) increased risk of ICD shock in terminally ill patients due to electrolyte disturbances, hypoxia, and heart failure. (McGeary 2009; Goldstein 2004; Kolata 2002). In a cross-sectional survey of 900 randomly selected hospices, 97% admitted patients with ICDs, and 58% reported that in the past year, a patient had been shocked. (Goldstein 2010) A retrospective cohort study questioned next of kin about discussions with patients who had ICDs in place and died of any cause. Only 27 out of 100 patients had had a discussion of whether or not the ICD should be deactivated. (Goldstein 2004) Additionally, in a small sample (n=12) of one-on-one interviews with physicians, almost every one agreed that conversations about ICD deactivation should occur, but they acknowledged that they rarely did this. (Goldstein 2007) As the number of elderly patients increases, clinicians are likely to care for an increasing number of elderly patients with ICDs. (Sherazi 2008)

1a.4 Citations for Evidence of High Impact cited in 1a.3: Goldstein N, Carlson M, Livote E, et al. Brief communication: Management of implantable cardioverter-defibrillators in hospice: a nationwide survey. *Ann Intern Med* 2010;153:296-299

Goldstein NE, Mehta D, Teitelbaum E, et al. "it's like crossing a bridge" complexities preventing physicians from discussing deactivation of implantable defibrillators at the end of life. *J Gen Intern Med* 2007;23(Suppl 1):2-6

Goldstein NE, Lampert R, Bradley E, et al. Management of implantable cardioverter defibrillators in end-of-life care. *Ann Intern Med* 2004;141(11):835-8

Kolata G. Extending life, defibrillators can prolong misery. *NY Times (Print)* 2002;A1,18

McGeary A, Eldergill A. Medicolegal issues arising when pacemaker and implantable cardioverter defibrillator devices are deactivated in terminally ill patients.

Sherazi S, Daubert JP, Block RC, et al. Physicians' preferences and attitudes about end-of-life care in patients with an implantable cardioverter-defibrillator. *Mayo Clin Proc* 2008;83(10):1139-1141

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:

Given that ICDs may cause increased symptoms at the very end of life and that the timing of approaching death can be identified for patients with incurable cancers and other end-stage illness, this issue should be addressed in patients where death is expected in order to reduce suffering toward end of life. There is also the potential for an impact on provider behavior through greater awareness of the issues ICDs pose to patients at the end of life.

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.]

In a decedent sample of 496 hospitalized patients who died during an admission of at least 3 days duration, 12 patients with an ICD

in place died an expected death. In only 3 of these cases (25%) was deactivation of the ICD addressed.

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]
 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):1057-63.

1b.4 Summary of Data on Disparities by Population Group: [*For Maintenance* –Descriptive statistics for performance results for this measure by population group]
 None available

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 <input type="checkbox"/>
L	M-H	M	Yes <input type="checkbox"/> IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No <input type="checkbox"/>
M-H	L	M-H	Yes <input type="checkbox"/> IF potential benefits to patients clearly outweigh potential harms: otherwise No <input type="checkbox"/>
L-M-H	L-M-H	L	No <input type="checkbox"/>

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):

Measure is focused on addressing deactivating ICDs in terminally ill hospitalized patients who die an expected death with the intent of minimizing stress to patients and caregivers and maximizing end of life comfort.

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

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

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

There is no study showing that outcomes are better for patients if an ICD is deactivated prior to an expected death, however this is recognized as a good clinical practice and specifically recommended in practice guidelines.

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):
Also see 1a.4

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):3896-902.

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

When ICD therapy is offered, it is good practice to also discuss that a time will come when switching off the device becomes the best option for the patient, i.e. as the end of natural life approaches. (page 4)

1c.17 Clinical Practice Guideline Citation: Clinical Guidelines. Guideline Number: NoT 19. Newcastle, North Tyneside and Northumberland Guidelines (Adopted) on. ICD Deactivation Policy.
www.northoftyne.nhs.uk/...guidelines/...deactivation%20of%20implantable%20cardioverter%20defibrillator

1c.18 National Guideline Clearinghouse or other URL:

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 developer's assessment of the quantity, quality, and consistency of the body of evidence?

1c.25 Quantity: Moderate 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? **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 from the denominator who have their ICDs deactivated prior to death 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*):

During hospitalization ending in an expected death

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*):

Documentation in the medical record that the ICD was deactivated or documentation of a discussion of deactivation of the ICD with the patient or documentation of why ICD deactivation was not done.

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

Patients who died an expected death who have an ICD in place

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*):

During hospitalization that ended in an expected death

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*):

Hospitalizations of adult patients of at least 3 days duration that ended in an expected death. Expected death is defined as physician documentation at least 3 days before death that the patient's illness was terminal or that the patient had a grave prognosis, was receiving comfort care, was receiving hospice care, had a life-threatening disease, or was expected to die.

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):

None

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 adult hospitalizations of at least 3 days duration that ended in patient death
2. Identify from the medical record patients who had an ICD in place
3. Identify from physician documentation patients who were noted to have had an expected death at least 3 days prior to death
4. Determine if the ICD was deactivated prior to death or documentation noted an attempt to discuss ICD deactivation with the patient or surrogate or other documentation addressing why the ICD was not deactivated.

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):

None

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

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

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):

In a decedent sample of 496 patients who died during an admission of at least 3 days duration, 12 patients with an ICD in place died an expected death.

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

Two independent nurses abstracted a 10% reliability sample of the 496 cases. Identification of eligibility for a quality indicator and whether the care process was provided to satisfy the quality indicator were compared.

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

In the 47 reliability records, there was 100% agreement that none satisfied the quality measure eligibility statement. Indicator had good agreement but there was not enough variability to calculate a kappa. These data suggest that ICDs can be reliably identified in a sample of hospitalized, seriously ill patients.

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

Population tested is similar to populations in the cited evidence (hospice patients; patients who died an expected death).

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):

2b2.2 Analytic Method (Describe method of validity testing and rationale; if face validity, describe systematic assessment):

Validity of the process-outcome link was explicitly evaluated by the ASSIST expert panel that reviewed the relevant literature and used a modified Delphi panel method of voting on the validity of the measure. (Lorenz 2009)

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):943-952

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):

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):

While the number of eligible patients for this indicator is small, the potential impact on the patient of failed performance is large. Given the importance of this measure, any failure in performance should be considered significant.

We have not evaluated multiple samples with this measure to identify differences in performance.

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. Evaluated only using medical records so far, although this measure could be implemented using an electronic health record in the future.

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

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: **Although not yet used, this measure has excellent face validity and would be valuable for public reporting.**

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;14:407-12.

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):1037-1085

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:

Measure identifies the precise care processes that are needed and patients who did not receive the needed care process.

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: The data elements could be easily specified within an electronic record.

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:

Because documentation of a conversation about the deactivation decision satisfies the measure, there is little likelihood of 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: [Karl, Lorenz, MD, MSHS, karl.lorenz@va.gov, 310-478-3711-43523](#)

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:
[VA Greater Los Angeles Healthcare System](#)

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.

[ASSIST project expert panel members and Advisory Board as listed below:](#)

[Kurt Kroenke, MD](#)
[Indiana University Cancer Center, Indianapolis, Indiana](#)

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Pr Stein Kaasa
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Sean Morrison, MD
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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:

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NQF #1625 Hospitalized Patients Who Die an Expected Death with an ICD that Has Been Deactivated

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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: 2010

Ad.4 Month and Year of most recent revision:

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