

NATIONAL QUALITY FORUM
National Voluntary Consensus Standards for Nursing Homes 2010

Measure Number/Title: NH-001-10: Assessment of Dementia on Admission to Long Term Care Facility

Description: % of patients aged 75 years and over with current S&S of dementia assessed in the physical/functional and psychosocial domains with a validated instrument and documented in the medical record

Numerator Statement: Number of adult patients 75 and older who have signs and symptoms of dementia will be assessed in the physical/functional and psychosocial domains with a validated instrument and have that assessment documented in the medical record to validate a diagnosis of dementia and the impact of dementia on those domains

Denominator Statement: Number of all adult patients 75 and older being admitted to a nursing home with current signs and symptoms of dementia.

Level of Analysis: Clinicians: Individual, Facility/Agency

Data Source: paper medical record/flowsheet, electronic Health/Medical Record

Measure developer: American Medical Directors Association

Status: Not Recommended for Endorsement

Attachments: None

NATIONAL QUALITY FORUM

Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

- C = Completely (unquestionably demonstrated to meet the criterion)
- P = Partially (demonstrated to partially meet the criterion)
- M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
- N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
- NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) NQF Review #: NH-001-10 NQF Project: Nursing Homes 2010	
MEASURE DESCRIPTIVE INFORMATION	
De.1 Measure Title: Assessment of Dementia on Admission to Long Term Care Facility	
De.2 Brief description of measure: % of patients aged 75 years and over with current S&S of dementia assessed in the physical/functional and psychosocial domains with a validated instrument and documented in the medical record	
1.1-2 Type of Measure: Process	
De.3 If included in a composite or paired with another measure, please identify composite or paired measure	
De.4 National Priority Partners Priority Area: Care coordination	
De.5 IOM Quality Domain: Patient-centered	
De.6 Consumer Care Need:	

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
<p>A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i></p> <p>A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes</p> <p>A.2 Indicate if Proprietary Measure (as defined in measure steward agreement): Proprietary measure</p> <p>A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission</p> <p>A.4 Measure Steward Agreement attached: measure steward agreement.pdf</p>	<p>A</p> <p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>

B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	B Y <input type="checkbox"/> N <input type="checkbox"/>
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ► Purpose: Public reporting , Internal quality improvement	C Y <input type="checkbox"/> N <input type="checkbox"/>
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1 Testing: No, testing will be completed within 24 months D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes (for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (<i>if submission returned</i>): Staff Notes to Reviewers (<i>issues or questions regarding any criteria</i>): Staff Reviewer Name(s):	D Y <input type="checkbox"/> N <input type="checkbox"/> Met Y <input type="checkbox"/> N <input type="checkbox"/>

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. <i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.</i> (evaluation criteria) 1a. High Impact _____	Eval Rating
(for NQF staff use) Specific NPP goal:	
1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality, Severity of illness, High resource use, Patient/societal consequences of poor quality 1a.2 1a.3 Summary of Evidence of High Impact: 1. Up to 70% of nursing home patients carry a diagnosis of dementia yet it is believed that this disease is underdiagnosed. Dementia causes a range of behavioral, cognitive, functional, and mood impairments that can significantly affect patient-centered outcomes and quality of life. Unfortunately, many patients either have unrecognized dementia upon admission to the nursing home, or patients have a diagnosis of dementia that was never diagnosed/screened with a validated instrument and may have an in inappropriate diagnosis, leading to: a) poorly coordinated care across settings, b) inappropriate and non-compassionate care for these patients with life limiting illnesses and, c) causes overuse of and aggressive inappropriate care. 1a.4 Citations for Evidence of High Impact: Rovner B, Kaonek S, Filipp L, et al. Prevalence of mental illness in a community nursing home. Am J Psychiatry 1986;143:1446-1449. Tariot P, Podgorski CA, Blazina L, Leibovica A. Mental disorders in the nursing home: another perspective. Am J Psychiatry 1993;150:1063-1069. Christensen MD, White HK. Dementia assessment and management. J Am Med Dir Assoc. 2006 Feb;7(2):109-18. Epub 2006 Jan 10.	1a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

Comment [KP1]: 1a. The measure focus addresses:
 • a specific national health goal/priority identified by NQF's National Priorities Partners; OR
 • a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).

<p>American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (4th edition, text revision). Washington DC: 2000.</p> <p>Muller-Thomsen T, Arlt S, Mann U, et al. Detecting depression in Alzheimer’s disease: Evaluation of four different scales. Arch Clin Neuropsychol 2005; 20(2): 271-276.</p> <p>Yesavage JA, Brink TL, Rose TL, et al. Development and validation of geriatric depression screening scale: A preliminary report. J Psychiatr Res 1982-83; 17(1): 37-49.</p> <p>Mansdorf IJ, Harrington M, Lund J, Wohl N. Neuropsychological testing in skilled nursing facilities: The failure to confirm diagnoses of dementia. J Am Med Dir Assoc 2008; 9(4): 271-274. Epub 2008 Apr 8.</p> <p>Alzheimer’s Association. Key Elements of Dementia Care. 2007. Chicago, IL.</p> <p>Mitchell SL, Kiely DK, Hamel MB, et al. Estimating prognosis for nursing home residents with advanced dementia. JAMA 2004; 291(22): 2734-2740.</p> <p>Reisberg B. Functional assessment staging (FAST). Psychopharmacol Bull 1988; 24(4): 653-659.</p> <p>6. Scarmeas N, Brandt J, Albert M, et al. Delusions and hallucinations are associated with worse outcome in Alzheimer’s disease. Arch Neurol 2005; 62(10): 1601-1608</p>	
<p>1b. Opportunity for Improvement</p> <p>1b.1 Benefits (improvements in quality) envisioned by use of this measure: If a patient is accurately diagnosed with dementia AND the practitioner, using a validated instrument, has assessed the impact of dementia on the patients functional, physical and psychosocial status, then the practitioner can put in place an appropriate care process of assessment, treatment, and monitoring of patients with dementia, including impaired cognition and problematic behavior. It will provide a guide to appropriate management that maximizes function and quality of life, thereby minimizing the likelihood of complications and functional decline. Implementation of this practice should help practitioners working in nursing homes to improve their ability to identify patients who are at risk for new or progressive dementia, manage dementia symptoms, consequences, and complications effectively and appropriately. Thereby assisting them to identify the nature and causes of dementia in different patients, identify and manage potential sources of excess disability, minimize preventable complications and functional decline, respond appropriately to the changing needs of patients with dementia, make appropriate environmental and staffing modifications to maximize patient dignity, comfort, and safety and improve the understanding of staff, family members, and caregivers about dementia and respond appropriately to their concerns. As a result of this suggested practice the following patient-related outcomes may be anticipated, optimized function and quality of life, reduced complications and negative consequences of the condition or its management and improved resource utilization.</p> <p>1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers: Early and accurate diagnosis is clearly vital in order to optimize care planning and long-term outcomes for AD patients and their families. By delaying the diagnosis, opportunities to improve the care process and disease trajectory are missed, with negative consequences.</p> <p>1b.3 Citations for data on performance gap: American Medical Directors Association. Dementia Clinical Practice Guideline. Columbia, MD: AMDA 2009 Rubenstein LZ. Editorial: a view from the USA on the Alzheimer’s disease international position paper. J Nutr Health Aging. 2010;14(2):104. Chen Y, Briesacher BA, Field TS, Tjia J, Lau DT, Gurwitz JH. Unexplained Variation Across US Nursing Homes in Antipsychotic Prescribing Rates. Arch Intern Med. 2010 Jan 11;170(1):89-95.</p> <p>1b.4 Summary of Data on disparities by population group: Currently, no measures exist for residents of nursing homes, persons with a numerator or denominator of ages 75 years or older, or measures of dementia.</p> <p>1b.5 Citations for data on Disparities: None</p>	<p>1b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>1c. Outcome or Evidence to Support Measure Focus</p> <p>1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired</p>	<p>1c C <input type="checkbox"/> P <input type="checkbox"/></p>

Comment [KP2]: 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

Comment [k4]: 1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
- OR
- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 - oIntermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 - oProcess - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
 - oStructure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
 - oPatient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
 - oAccess - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
 - oEfficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

outcome. For outcomes, describe why it is relevant to the target population): Ensure patients receive well-coordinated care within and across all health-care organizations, settings, and levels of care. b. Guarantee appropriate and compassionate care for patients with life-limiting illnesses. c. Eliminate overuse while ensuring the delivery of appropriate care.

M
N

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

1c.2-3. Type of Evidence: Evidence-based guideline

1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome):

AMDA seeks to develop and revise guidelines that focus on specific concerns and common problems in the long-term care setting. Although AHRQ and other agencies, organizations, and associations have developed a number of guidelines for conditions that occur in elderly and chronically ill individuals, many of these guidelines limit or omit considerations that are unique to the long-term care population. AMDA guidelines emphasize key care processes and are organized for ready incorporation into facility-specific policies and procedures to guide staff and practitioner practices and performance. They are meant to be used in a manner appropriate to the population and practice of a particular facility. Guideline implementation will be affected by resources available in the facility, including staffing, and will require the involvement of all those in the facility who have a role in patient care. Original guidelines are developed by interdisciplinary workgroups, using a process that combines evidence and consensus-based approaches. Workgroups include practitioners and others involved in patient care in long-term care facilities. Beginning with a general guideline developed by an agency, association, or organization such as the Agency for Healthcare -Research and Quality, pertinent articles and information, and a draft outline, each group works to make a concise, usable guideline that is tailored to the long-term care setting. Because scientific research in the long-term care population is limited, many recommendations are based on the expert opinion of practitioners in the field. A bibliography is provided for individuals who desire more detailed information.

1c.5 Rating of strength/quality of evidence (also provide narrative description of the rating and by whom):
C+

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system <http://www.ahrq.gov/clinic/uspstf07/methods/benefit.htm>). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.

1c.6 Method for rating evidence: Can not equate with the USPSTF grading system. Randomized controlled trials appropriate for studying drug efficacy are not well suited for this measure. This measure requires using validated scales for screening function and cognition in persons with suspected dementia. Since the measure itself has not been tested, but the measure itself uses validated, fully tested scales, we can only give this measure the strength of a C+ rating.

1c.7 Summary of Controversy/Contradictory Evidence: None

1c.8 Citations for Evidence (other than guidelines): None

1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): AMDA Dementia Guideline, pages 4-6. practitioners should observe the patient's current physical, functional, cognitive and psychosocial status. Function may be assessed with one of several instruments (e.g., Activities of Daily Living [ADL] portion of the Minimum Data Set [MDS], Barthel Index, Functional Activities Questionnaire, Katz ADL scale).

Cognition may be assessed using an instrument such as the Blessed Orientation-Memory-Concentration Test, the Cognitive Performance Scale, the Clock Drawing Test, the Mini-Cog Diagnostic Test for dementia, the Mini-Mental State Examination (MMSE),* the Montreal Cognitive Assessment Scale, the St. Louis University Mental Status Exam, or the Verbal Fluency Test. To help to ensure reliability, each facility should choose a standard battery of tests for routine use, reserving others for special situations.

As of the date of this printing, MDS 3.0, scheduled to become available in Fall 2009, will use the following assessment tools: For delirium, the Confusion Assessment Method; for cognition, the Brief Interview for Mental Status; for mood and depression, the Patient Health Questionnaire; and for behavior, the Cohen Mansfield Agitation Inventory.

Dementia is a chronic condition that usually but not exclusively displays a gradual progression of symptoms such as memory loss, impairments in executive function (difficulty in planning and organizing), and difficulty recognizing familiar objects or using them correctly. By contrast, delirium is an illness of acute or subacute onset that presents with symptoms such as disturbance of consciousness; change in cognition (e.g. perception, thought, and memory); or perceptual impairments (e.g., illusions, hallucinations, or delusions). (See AMDA's clinical practice guideline Delirium and Acute Problematic Behavior.) Whereas symptoms of delirium typically fluctuate, those of dementia are usually fairly stable. Patients with dementia may, however, display worse symptoms at different times of day (e.g., in the late afternoon, at night). Unlike patients with delirium, patients with dementia usually do not have altered levels of consciousness. The clinical course can help to differentiate between dementia and delirium; multiple cognitive impairments that persist unchanged for more than a few months suggest dementia rather than delirium. (DSM-IV3).

Patients with dementia tend to have fewer reported somatic symptoms (e.g., headaches, gastrointestinal distress, musculoskeletal pain) than those with depression. In addition, patients with dementia tend to perform poorly on tasks involving automatic processing (e.g., writing their name, eating meals). The Cornell Scale for Depression in Dementia may help to detect clinically significant depression in patients who have significant cognitive impairment⁴ (see AMDA's clinical practice guideline Depression.) The Geriatric Depression Scale may help to detect depression in patients who have minimal cognitive impairment.⁵

Recent, abrupt changes in function, level of consciousness, and behaviors in patients with dementia almost always result from acute or subacute conditions. Patients whose behavior changes abruptly should be assessed for pain, which may be a cause of behavior change. Delirium may be superimposed on dementia (DSM-IV3), or a patient may have both alcohol-related dementia and delirium, or both Alzheimer's disease and a cognitive and functional decline precipitated by a recent urinary tract infection or pneumonia. Patients with dementia who also display symptoms such as delusions and hallucinations may be at increased risk for institutionalization and death.⁶

Document findings related to the patient's physical, functional, and psychosocial status in the appropriate location in the medical record. Complete the appropriate sections of the MDS. Document information that will enable useful conclusions to be drawn and appropriate interventions initiated, in a manner that communicates effectively to other members of the interdisciplinary team.

• Is the patient at risk for the onset or progression of dementia?
 Certain conditions may predispose patients to dementia (Table 3). It may also be helpful to identify patients who are at risk for progression of dementia as a result of acute conditions or medication use. The practitioner should promptly identify and manage patients with these risk factors (Table 4).
 NQF staff review left us questioning how the use of multiple instruments allows comparison to occur across facilities.

For the Physical/Functional One would use the section G and H portions of the Minimum Data Set [MDS 3.0], as well as either the following validated scales - the Barthel Index, Functional Activities Questionnaire, or the Katz ADL scale. For the cognitive/psychosocial assessment, it again would be a combination of both the MDS 3.0 and other scales. For the MDS 3.0, it would be sections C, D, and E) as well as either the following validated scales -the Blessed Orientation-Memory-Concentration Test, the Cognitive Performance Scale, the Clock Drawing Test, the Mini-Cog diagnostic test for dementia, the Mini-Mental State Examination (MMSE), the Montreal Cognitive Assessment Scale, the St. Louis University Mental Status Exam, or the Verbal Fluency Test. This way, it is a combination of nursing assessment and practitioner assessment which is what is used in the nursing home, the team approach to care.

1c.10 Clinical Practice Guideline Citation: American Medical Directors Association. Dementia Clinical Practice Guideline. Columbia, MD: AMDA 2009

1c.11 National Guideline Clearinghouse or other URL:
http://www.guideline.gov/summary/summary.aspx?doc_id=7508&nbr=004446&string=dementia

1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):

Comment [k7]: USPSTF grading system <http://www.ahrq.gov/clinic/uspstf/grades.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

<p>C+</p> <p>1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF): Can not equate with the USPSTF grading system. Randomized controlled trials do not exist for the frail elder nursing home population. We can use clinical trails, case studies and other peer reviewed literature, other guidelines and extract the age based population from those and apply that to our guideline, which is our process.</p> <p>1c.14 Rationale for using this guideline over others: The American Medical Directors Association is the professional association of medical directors, attending physicians, and others practicing in the long term care continuum, dedicated to excellence in patient care and provides education, advocacy, information, and professional development to promote the delivery of quality long term care medicine. It is the only professional association that creates evidence based clinical practice guidelines for the long term care setting, specializing in the 75 year old and older population. The guidelines are developed with the specifics of the long term care setting in mind. AMDA seeks to develop and revise guidelines that focus on specific concerns and common problems in the long-term care setting. Although AHRQ and other agencies, organizations, and associations have developed a number of guidelines for conditions that occur in elderly and chronically ill individuals, many of these guidelines limit or omit considerations that are unique to the long-term care population.</p>	
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?</p>	<p>1</p>
<p>Steering Committee: Was the threshold criterion, Importance to Measure and Report, met? Rationale:</p>	<p>1 Y <input type="checkbox"/> N <input type="checkbox"/></p>
<p style="text-align: center;">2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES</p>	
<p>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)</p>	<p>Eval Rating</p>
<p style="text-align: center;">2a. MEASURE SPECIFICATIONS</p>	
<p>S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL:</p>	
<p>2a. Precisely Specified _____</p>	
<p>2a.1 Numerator Statement (Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome): Number of adult patients 75 and older who have signs and symptoms of dementia will be assessed in the physical/functional and psychosocial domains with a validated instrument and have that assessment documented in the medical record to validate a diagnosis of dementia and the impact of dementia on those domains</p>	
<p>2a.2 Numerator Time Window (The time period in which cases are eligible for inclusion in the numerator): Assessment must be completed within 30 days of admission</p>	
<p>2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions): 99304 Initial nursing facility care, per day, for the evaluation and management of a patient which requires these three key components: a detailed or comprehensive history; a detailed or comprehensive examination; and medical decision making that is straightforward or of low complexity.</p>	<p>2a- specs C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF's Health Information Technology Expert Panel (HITEP) .

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs.
Usually, the problem(s) requiring admission are of low severity.
99305 Initial nursing facility care, per day, for the evaluation and management of a patient which requires these three key components:
a comprehensive history;
a comprehensive examination; and
medical decision making of moderate complexity.
Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs.
Usually, the problem(s) requiring admission are of moderate severity.
99306 Initial nursing facility care, per day, for the evaluation and management of a patient, which requires these three key components:
a comprehensive history;
a comprehensive examination; and
medical decision making of high complexity.
Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs.
Usually, the problem(s) requiring admission are of high severity.

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured*):

Number of all adult patients 75 and older being admitted to a nursing home with current signs and symptoms of dementia.

2a.5 Target population gender: Female, Male

2a.6 Target population age range: 75 and older

2a.7 Denominator Time Window (*The time period in which cases are eligible for inclusion in the denominator*):

Assessment must be completed within 30 days of admission

2a.8 Denominator Details (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions*):

99304 Initial nursing facility care, per day, for the evaluation and management of a patient which requires these three key components:

a detailed or comprehensive history;
a detailed or comprehensive examination; and
medical decision making that is straightforward or of low complexity.

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs.

Usually, the problem(s) requiring admission are of low severity.

99305 Initial nursing facility care, per day, for the evaluation and management of a patient which requires these three key components:

a comprehensive history;
a comprehensive examination; and
medical decision making of moderate complexity.

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs.

Usually, the problem(s) requiring admission are of moderate severity.

99306 Initial nursing facility care, per day, for the evaluation and management of a patient, which requires these three key components:

a comprehensive history;
a comprehensive examination; and
medical decision making of high complexity.

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs.

Usually, the problem(s) requiring admission are of high severity.

<p>2a.9 Denominator Exclusions (Brief text description of exclusions from the target population): All adult patients under the age of 75.</p> <p>2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions): NA</p> <p>2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions): NA</p> <p>2a.12-13 Risk Adjustment Type: No risk adjustment necessary</p> <p>2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method): This is not applicable. No risk adjustment model.</p> <p>2a.15-17 Detailed risk model available Web page URL or attachment:</p> <p>2a.18-19 Type of Score: Ratio</p> <p>2a.20 Interpretation of Score:</p> <p>2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps): Rates (percentages) are obtained by multiplying each calculated fraction by 100 (for example, if 15 persons were assessed for dementia out of 45 who should have been assessed, the rate is 15/45 x 100 or .333 x 100 = 33.3%)</p> <p>2a.22 Describe the method for discriminating performance (e.g., significance testing): NA</p> <p>2a.23 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): NA</p> <p>2a.24 Data Source (Check the source(s) for which the measure is specified and tested) Paper medical record/flow-sheet, Electronic Health/Medical Record</p> <p>2a.25 Data source/data collection instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): Data collection requires visual record review</p> <p>2a.26-28 Data source/data collection instrument reference web page URL or attachment:</p> <p>2a.29-31 Data dictionary/code table web page URL or attachment:</p> <p>2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested) Clinicians: Individual, Facility/Agency</p> <p>2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested) Nursing home (NH) /Skilled Nursing Facility (SNF)</p> <p>2a.38-41 Clinical Services (Healthcare services being measured, check all that apply) Clinicians: Physicians (MD/DO), Clinicians: Nurses</p>	
TESTING/ANALYSIS	
<p>2b. Reliability testing</p> <p>2b.1 Data/sample (description of data/sample and size): NA</p>	<p>2b</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p>

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

2b.2 Analytic Method (type of reliability & rationale, method for testing): NA	N <input type="checkbox"/>
2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted): NA	
2c. Validity testing	
2c.1 Data/sample (description of data/sample and size): NA	
2c.2 Analytic Method (type of validity & rationale, method for testing): NA	2c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): NA	
2d. Exclusions Justified	
2d.1 Summary of Evidence supporting exclusion(s): NA	
2d.2 Citations for Evidence: NA	
2d.3 Data/sample (description of data/sample and size): NA	
2d.4 Analytic Method (type analysis & rationale): NA	2d C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): NA	
2e. Risk Adjustment for Outcomes/ Resource Use Measures	
2e.1 Data/sample (description of data/sample and size): NA	
2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): NA	2e C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2e.3 Testing Results (risk model performance metrics): NA	
2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: NA	
2f. Identification of Meaningful Differences in Performance	
2f.1 Data/sample from Testing or Current Use (description of data/sample and size): NA	
2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale): NA	
2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance): NA	2f C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
2g. Comparability of Multiple Data Sources/Methods	2g C <input type="checkbox"/>

Comment [k11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

Comment [KP12]: 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

Comment [k13]: 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the ... [1]

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be: supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND ... [2]

Comment [k15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated: an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical ... [3]

Comment [k17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American ... [4]

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [k19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference ... [5]

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

2g.1 Data/sample (description of data/sample and size): NA	P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2g.2 Analytic Method (type of analysis & rationale): NA	
2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): NA	
2h. Disparities in Care	2h C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): NA	
2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: NA	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Scientific Acceptability of Measure Properties</i> ?	2
Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i> , met? Rationale:	2 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
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)	Eval Rating
3a. Meaningful, Understandable, and Useful Information	
3a.1 Current Use: Testing not yet completed	
3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years): NA	
3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years): NA	
Testing of Interpretability (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)	
3a.4 Data/sample (description of data/sample and size): NA	
3a.5 Methods (e.g., focus group, survey, QI project): NA	3a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
3a.6 Results (qualitative and/or quantitative results and conclusions): NA	
3b/3c. Relation to other NQF-endorsed measures	
3b.1 NQF # and Title of similar or related measures: N	
(for NQF staff use) Notes on similar/related endorsed or submitted measures:	
3b. Harmonization	3b C <input type="checkbox"/>
If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target	

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender); OR rationale/data justifies why stratification is not necessary or not feasible.

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

Comment [KP23]: 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

population/setting/data source or different topic but same target population): 3b.2 Are the measure specifications harmonized? If not, why?	P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
3c. Distinctive or Additive Value 3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF- endorsed measures: NA 5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality: NA	3c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?	3
Steering Committee: Overall, to what extent was the criterion, Usability, met? Rationale:	3 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes 4a.1-2 How are the data elements that are needed to compute measure scores generated? Other MEDICAL RECORD REVIEW	4a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4b. Electronic Sources 4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims) No 4b.2 If not, specify the near-term path to achieve electronic capture by most providers. With an electronic record you can capture and track through a query, that the validated tools mentioned in this measure were completed. This way you capture compliance. The measure can be tied into the history and physical billing codes as well. However, this measure is still feasible regardless of whether or not electronic sources are available as it is an easy capture by viewing the medical record.	4b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4c. Exclusions 4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No 4c.2 If yes, provide justification.	4c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences 4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. MEASURE PREDICATED ON STANDARDIZED ASSESSMENT INSTRUMENTS. UNLIKELY TO HAVE UNINTENDED CONSEQUENCES AS MEASURE REFLECTS HIGH STANDARD OF CARE.	4d C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4e. Data Collection Strategy/Implementation	4e

Comment [k24]: 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., *influenza immunization* of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for *patients with diabetes*), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

Comment [KP25]: 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).

Comment [KP26]: 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

Comment [KP27]: 4b. The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

Comment [KP28]: 4c. Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

Comment [KP29]: 4d. Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

Comment [KP30]: 4e. Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).

<p>4e.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/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: NA</p> <p>4e.2 Costs to implement the measure (<i>costs of data collection, fees associated with proprietary measures</i>): NA</p> <p>4e.3 Evidence for costs: NA</p> <p>4e.4 Business case documentation: NA</p>	<p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Feasibility</i>?</p>	<p>4</p>
<p>Steering Committee: Overall, to what extent was the criterion, <i>Feasibility</i>, met? Rationale:</p>	<p>4</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>RECOMMENDATION</p>	
<p>(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.</p>	<p>Time-limited <input type="checkbox"/></p>
<p>Steering Committee: Do you recommend for endorsement? Comments:</p>	<p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>A <input type="checkbox"/></p>
<p>CONTACT INFORMATION</p>	
<p>Co.1 Measure Steward (Intellectual Property Owner) Co.1 Organization American Medical Directors Association, 11000 Broken Land Parkway, Suite 400, Columbia, Maryland, 21044</p> <p>Co.2 Point of Contact Jacqueline, Vance, jvance@amda.com, 410-992-3105-</p>	
<p>Measure Developer If different from Measure Steward Co.3 Organization American Medical Directors Association, 11000 Broken Land Parkway, Suite 400, Columbia, Maryland, 21044</p> <p>Co.4 Point of Contact Jacqueline, Vance, jvance@amda.com, 410-992-3105-</p>	
<p>Co.5 Submitter If different from Measure Steward POC Jacqueline, Vance, jvance@amda.com, 410-992-3105-, American Medical Directors Association</p>	
<p>Co.6 Additional organizations that sponsored/participated in measure development</p>	
<p>ADDITIONAL INFORMATION</p>	
<p>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. Charles Cefalu, MD, MS, Chair, AMDA, AGS, Professor and Chief of Geriatrics LSU Health Science Center; Harold Bob, MD, CMD, AMDA; Kenneth Brubaker, MD, CMD; Gwendolen Buhr, MD, MHS,</p>	

CMD, AMDA, Duke University Medical Center; Roger Cadieux, MD, Clinical Professor of Psychiatry Pennsylvania State University College of Medicine at Hershey; Mario Cornacchione, DO, CMD, AMDA, Clinical Assistant Professor of Medicine at the Institute for Successful Aging, Charles Crecelius, MD, PhD, CMD, AMDA, Clinical Instructor of Geriatrics at Washington University School of Medicine in St Louis; Bassem Elsayy, MD, CMD, AMDA, CAQ - Geriatrics, AMDA-CMD (Certified Medical Director); CAQ - Hospice and Palliative Medicine; Sandra Fitzler, RN, American Health Care Association; Elizabeth Galik, PhD, CRNP, Assistant Professor at the University of Maryland School of Nursing; Susan D. Gilster, PhD, RN, NHA, Professor, Preceptor, College of Nursing, University of Cincinnati; Murthy Gokula, MD, CMD, AMDA, Assistant Professor of Geriatrics, University of Toledo; Joseph Gruber, Rph, FASCP, CGP, American Society of Consultant Pharmacists; Sarah Jerro, NA, RN, CDONA/LTC, FDONA, National Associations of Directors of Nursing Administration in Long Term Care; Steven Levenson, MD, CMD, AMDA, Susan Levy, MD, CMD, AMDA, Nancy L. Losben, Rph, CCP, FASCP, CG, American Society of Consultant Pharmacists; Jeffrey Nichols, MD, CMD, Board President of the New York Service Program for Older People, Inc; Naushira Pandya, MD, CMD, Chair, Department of Geriatrics, Nova Southeastern University; Meenakshi Patel, MD, CMD, Valley Medical Research; Barbara Resnick, PhD, CRNP, Professor, Department of Organizational Systems and Adult Health at the University of Maryland School of Nursing; William Smucker, MD, CMD, AMDA, Professor of Family Medicine at the Northeastern Ohio Universities College of Medicine; Barney Spivack, MD, FACP, CMD, AMDA, Director of Geriatric Medicine, Stamford Health System

This is the work group/panel involved in the development of the dementia guideline. Step 2 of the dementia guideline was then further broken down into the process measure we are submitting. The members primarily responsible for developing the measure from step 2 were: Charles Cefalu, MD, MS, Chair, AMDA, AGS, Professor and Chief of Geriatrics

LSU Health Science Center; ; Naushira Pandya, MD, CMD, Chair, Department of Geriatrics, Nova Southeastern University; Meenakshi Patel, MD, CMD, Valley Medical Research; and Barbara Resnick, PhD, CRNP, Professor, Department of Organizational Systems and Adult Health at the University of Maryland School of Nursing. The panel then went through a consensus agreement approval of the measure.

Ad.2 If adapted, provide name of original measure:

Ad.3-5 If adapted, provide original specifications URL or attachment

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.6 Year the measure was first released: 2008

Ad.7 Month and Year of most recent revision: 03, 2008

Ad.8 What is your frequency for review/update of this measure? every three years

Ad.9 When is the next scheduled review/update for this measure? 01, 2011

Ad.10 Copyright statement/disclaimers: This measure has no copyright. The measure is created from the step 2 of the AMDA dementia guideline of which AMDA does hold the copyright.

Ad.11 -13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): 04/02/2010

Page 9: [1] Comment [k13] **Karen Pace** **10/5/2009 8:59:00 AM**

9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure focus is the most important aspect of quality for the specific topic.

Page 9: [2] Comment [KP14] **Karen Pace** **10/5/2009 8:59:00 AM**

2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND

- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus; AND

- precisely defined and specified:

- if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);

if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

Page 9: [3] Comment [KP16] **Karen Pace** **10/5/2009 8:59:00 AM**

2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care; Error! Bookmark not defined. OR

rationale/data support no risk adjustment.

Page 9: [4] Comment [k17] **Karen Pace** **10/5/2009 8:59:00 AM**

13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

Page 9: [5] Comment [k19] **Karen Pace** **10/5/2009 8:59:00 AM**

14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.

NATIONAL QUALITY FORUM
National Voluntary Consensus Standards for Nursing Homes 2010

Measure Number/Title: NH-002-10: Behavioral intervention for worsening urinary incontinence

Description: Percentage of nursing home patients 65 years or older with worsening urinary incontinence and who are able to self toilet who have a behavioral intervention.

Numerator Statement: Patients in the denominator who received a behavioral intervention for urinary incontinence.

Denominator Statement: Nursing home patients 65 years or older who have worsening urinary incontinence and who are able to self toilet.

Level of Analysis: Facility/Agency, Health Plan, Integrated delivery system, Multi-site/corporate chain,
Population: national, Population: regional/network, Population: states, Population: counties or cities

Data Source: Electronic administrative data/claims

Measure developer: The RAND Corporation

Status: Not Recommended for Endorsement

Attachments: NH UI 11 Reference Document: Identify Urinary Incontinence and Interventions from the MDS

NATIONAL QUALITY FORUM

Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

- C = Completely (unquestionably demonstrated to meet the criterion)
- P = Partially (demonstrated to partially meet the criterion)
- M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
- N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
- NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) NQF Review #: NH-002-10 NQF Project: Nursing Homes 2010	
MEASURE DESCRIPTIVE INFORMATION	
De.1 Measure Title:	NH UI 11: Behavioral intervention for worsening urinary incontinence
De.2 Brief description of measure:	Percentage of nursing home patients 65 years or older with worsening urinary incontinence and who are able to self toilet who have a behavioral intervention.
1.1-2 Type of Measure:	Process
De.3 If included in a composite or paired with another measure, please identify composite or paired measure	
De.4 National Priority Partners Priority Area:	Patient and family engagement
De.5 IOM Quality Domain:	Patient-centered
De.6 Consumer Care Need:	

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff A Y <input type="checkbox"/> N <input type="checkbox"/> B Y <input type="checkbox"/>
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i> A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes A.2 Indicate if Proprietary Measure (as defined in measure steward agreement): A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission A.4 Measure Steward Agreement attached:	
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least	

every 3 years. Yes, information provided in contact section	N <input type="checkbox"/>
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ► Purpose: Public reporting, Internal quality improvement	C Y <input type="checkbox"/> N <input type="checkbox"/>
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1 Testing: Yes, fully developed and tested D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes	D Y <input type="checkbox"/> N <input type="checkbox"/>
(for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (if submission returned):	Met Y <input type="checkbox"/> N <input type="checkbox"/>
Staff Notes to Reviewers (issues or questions regarding any criteria): Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. <i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.</i> (evaluation criteria) 1a. High Impact	Eval Rating
(for NQF staff use) Specific NPP goal:	
1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers 1a.2 1a.3 Summary of Evidence of High Impact: Prevalence rates of urinary incontinence (UI) in nursing home residents ranges from 43% to 77% (median 58%) (Offermans 2009; Palmer 2008). UI often causes poor quality of life, social isolation and significant psychological distress in persons affected and their family and caregivers. Despite the effects of UI, studies demonstrate that many patients do not disclose its symptoms to their healthcare providers and many healthcare providers do not routinely ask elderly patients about UI symptoms (Bland 2003). Incontinent nursing home residents have been found to receive less frequency toileting assistance than they would prefer (Schnelle 2003). 1a.4 Citations for Evidence of High Impact: Offermans MP, Du Moulon MF, Jamers JP, et al. Prevalence of urinary incontinence and associated risk factors in nursing home residents: a systematic review. Neurol Urodyn. 2009;28(4):288-94 Palmer MH. Urinary incontinence quality improvement in nursing homes: where have we been? Where are we going? Urolog Nurs. 2008; 28(6):439-444, 453. Bland DR, Dugan E, Cohen SJ et al. The effects of implementation of the Agency for Health Care Policy and Research urinary incontinence guidelines in primary care practices. J Am Geriatr Soc. 2003; 51:979-984.	1a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

Comment [KP1]: 1a. The measure focus addresses:
 • a specific national health goal/priority identified by NQF's National Priorities Partners; OR
 • a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).

<p>Schnelle JF, Cadogan MP, Grbic D, et al. A standardized quality assessment system to evaluate incontinence care in the nursing home. J Am Geriatr Soc. 2003; 51(12):1754-1761.</p>	
<p>1b. Opportunity for Improvement</p> <p>1b.1 Benefits (improvements in quality) envisioned by use of this measure: Providing behavioral interventions to patients with urinary incontinence can potentially reduce the negative social and psychological impact of urinary incontinence as well as potentially avoid the use of treatment with drugs that carry significant side effects for the elderly.</p> <p>1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers: This quality measure was implemented in a population of nursing home patients. The sample included Individuals 65 years and older enrolled in both Medicare and Medicaid continually residing in nursing homes with at least 5 of the last 6 months of 1998 who were residing in 19 counties in California. Patients received Medicaid through the Aged/Blind/Disabled eligibility category. Assessments were made during 1999 through 2000. Data included MDS assessments (1998 to 2000), Medicare and Medicaid eligibility files, and Medicare and Medicaid fee-for-service claims. Of 21,657 dually enrolled nursing home patients 65 years and older living in nursing homes in 19 California counties, 868 had worsened urinary incontinence and the ability to self-toilet. Among this eligible sample, 223 (25.7%) received a behavioral intervention. This represents a difference in the calculation of the denominator from the previously published measure (Zingmond 2009). Incontinent nursing home residents have been found to receive less frequency toileting assistance than they would prefer (Schnelle 2003).</p> <p>1b.3 Citations for data on performance gap: Zingmond DS, Saliba D, Wilber KH, et al. Measuring the quality of care provided to dually enrolled Medicare and Medicaid beneficiaries living in nursing homes. Med Care. 2009;47:536-44.</p> <p>Schnelle JF, Cadogan MP, Grbic D, et al. A standardized quality assessment system to evaluate incontinence care in the nursing home. J Am Geriatr Soc. 2003; 51:1754-61.</p> <p>1b.4 Summary of Data on disparities by population group: There are no published data on disparities concerning this measure. We investigated potential disparities in our implementation of the measure, and found none by age, race or gender. The data are as follows: Males 27.1% and Females 25.2% (p=0.6); Age 65-75 27.2%, 75-85 24.9% and >85 25.8% (p=0.9); White 25.9%, African American 21.9% and Latino 27.3% (p>0.5)</p> <p>1b.5 Citations for data on Disparities:</p>	<p>1b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>1c. Outcome or Evidence to Support Measure Focus</p> <p>1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population): Substantial evidence supports the relationship between behavioral treatment and reduced symptoms of urinary incontinence among persons able to self-toilet. This is detailed below in 1c.2. The outcomes of the proposed measure have not been tested. However, this measure is the administrative version of a chart-based measure that has been tested against an incontinence-specific outcome. When combined with the other 5 implemented ACOVE urinary incontinence quality measures, the summary score of quality of care for urinary incontinence was directly related to improvement in the Incontinence Quality of Life (IQOL) scale. After controlling for age, gender and co-morbidity, an improvement of 10% in incontinence quality of care was associated with 1.4 point improvement (p=.01) in the rescaled IQOL score. (Min LC 2008) This response would correspond to a group of UI patients reporting that their mean global symptoms were "a little bit better." (Patrick DL 1999) The individual quality indicator from the medical record implementation was associated with less worsening in IQOL over a one year period (mean -2.7 IQOL points for patients passing the measure compared to -6.0 IQOL points for patients failing the measure), but this was not statistically</p>	<p>1c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>

Comment [KP2]: 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

Comment [k4]: 1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
- OR
- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 - Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 - Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
 - Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
 - Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
 - Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
 - Efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., ... [1])

significant.

1c.2-3. Type of Evidence: Evidence-based guideline, Randomized controlled trial, Expert opinion, Systematic synthesis of research

1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome):

Many studies have evaluated behavioral treatments for urinary incontinence including pelvic floor muscle training and bladder training. A Cochrane review that included only randomized trials concluded that pelvic floor muscle training improved outcomes for women with stress or mixed incontinence, although these studies did not focus on the nursing home. Meta-analysis of two studies (one including patients with urge or mixed incontinence and another including only patients with stress incontinence) found that pelvic floor muscle training was associated with more reports of self-cure than placebo (RR53.1, 95% CI 51.5-66.2). (Hay-Smith 2005) A study of patients with urge or mixed UI that compared three treatments (bladder training and pelvic floor muscle training, medication treatment, and placebo) found that behavioral treatment led to the greatest reduction in number of accidents per week and fewer side effects. (Burgio KL 1998) In nursing home residents, prompted voiding alone and prompted voiding with exercise were associated with improvement in daytime UI (Fink 2008; Ouslander 1995).

1c.5 Rating of strength/quality of evidence (also provide narrative description of the rating and by whom):

This quality measure is supported by behavioral interventions studied in RCTs, some in patients in nursing homes (Level Good).

1c.6 Method for rating evidence: We rated the level of evidence as "Good" according to the USPSTF 3-point scale (good, fair, poor). Ref: U.S. Preventive Services Task Force Ratings: Grade Definitions. Guide to Clinical Preventive Services, Third Edition: Periodic Updates, 2000-2003. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/clinic/3rduspstf/ratings.htm>.

1c.7 Summary of Controversy/Contradictory Evidence: A systematic review of randomized trials of treatment interventions in nursing home residents identified 5 trials that met methodological criteria and compared the efficacy of a toileting behavior intervention with that of usual care for nursing home residents with UI (Fink 2008). These trials consistently showed greater improvement in continence with behavioral intervention.

Fink HA, Taylor BC, Tackling JW et al. Treatment interventions in nursing home residents with urinary incontinence: a systematic review of randomized trials. *Mayo Clin Proc* 2008;83:1332-43

1c.8 Citations for Evidence (other than guidelines): Min LC, Wenger NS, Reuben DB, Better Quality of Care for Urinary Incontinence Improves Incontinence Quality of Life. *J Am Geriatr Soc*, 2008;56(Suppl 1):S34.

Patrick DL, Martin ML, Bushnell DM, Yalcin I, Wagner TH, Buesching DP. Quality of life of women with urinary incontinence: further development of the incontinence quality of life instrument (I-QOL). *Urology*. 1999;53: 71-76.

Hay-Smith EJ, Bo Berghmans LC, Hendriks HJ, et al. Pelvic floor muscle training for urinary incontinence in women. *Cochrane Database Syst Rev* 2005; (3):CD001407

Burgio KL, Locher JL, Goode PS et al. Behavioral vs drug treatment for urge urinary incontinence in older women: A randomized controlled trial. *JAMA* 1998;280:1995-2000.

Fink HA, Taylor BC, Tackling JW, et al. Treatment interventions in nursing home residents with urinary incontinence: a systematic review of randomized trials. *Mayo Clin Proc*. 2008; 83:1332-43.

Ouslander JG, Schnelle JF, Uman G, et al. Predictors of successful prompted voiding among incontinent nursing home residents. *JAMA*. 1995; 273(17):1366-70.

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system <http://www.ahrq.gov/clinic/uspstf07/methods/benefit.htm>). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.

<p>1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): The Third International Consultation on Incontinence recommends that prompted voiding should be offered for certain homebound frail elderly people. (Fonda D 2005) The National Institute for Health and Clinical Excellence 2006 UI guidelines state, "A trial of supervised pelvic floor muscle training of at least 3 months' duration should be offered as first-line treatment to women with stress or mixed UI. Bladder training lasting for a minimum of 6 weeks should be offered as first-line treatment to women with urge or mixed UI." (NICE 2006)</p> <p>1c.10 Clinical Practice Guideline Citation: Fonda D, DuBeau CE, Harari D et al. Incontinence in the Frail Elderly. International Consultation on Urological Disease: 3rd International Consultation on Incontinence, 2005.</p> <p>Urinary Incontinence: The Management of Urinary Incontinence in Women. NHS National Institute for Health and Clinical Excellence. London, England: National Collaborating Centre for Women's and Children's Health, 2006.</p> <p>1c.11 National Guideline Clearinghouse or other URL:</p> <p>1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom): This quality measure is supported by behavioral interventions studied in RCTs, some in patients in nursing homes (Level Good)</p> <p>1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF): We rated the level of evidence as "Good" according to the USPTF 3-point scale (good, fair, poor). Ref: U.S. Preventive Services Task Force Ratings: Grade Definitions. Guide to Clinical Preventive Services, Third Edition: Periodic Updates, 2000-2003. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/clinic/3rduspstf/ratings.htm.</p> <p>1c.14 Rationale for using this guideline over others: This guideline is consistent with the other major guideline in the area, the NICE guideline: Urinary incontinence: the management of urinary incontinence in women, October 2006 (http://www.nice.org.uk/nicemedia/live/10996/30281/30281.pdf) which recommends behavioral therapies as first line treatment, as follows:</p> <p>4.2 Physical therapies A trial of supervised pelvic floor muscle training of at least 3 months' duration should be offered as first-line treatment to women with stress or mixed UI. (Level A evidence)</p> <p>4.3 Behavioural therapies A Bladder training lasting for a minimum of 6 weeks should be offered as first-line treatment to women with urge or mixed UI. (Level A evidence) Level of evidence is graded according to the NICE Classification (grading) of recommendations for intervention studies.</p>	
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?</p>	<p>1</p>
<p>Steering Committee: Was the threshold criterion, Importance to Measure and Report, met? Rationale:</p>	<p>1 Y <input type="checkbox"/> N <input type="checkbox"/></p>
<p>2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES</p>	
<p>Extent to which the measure, <u>as specified</u>, produces consistent (reliable) and credible (valid) results about</p>	<p>Eval</p>

Comment [k7]: USPSTF grading system <http://www.ahrq.gov/clinic/uspstf/grades.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

the quality of care when implemented. (evaluation criteria)	Rating
2a. MEASURE SPECIFICATIONS	
<p>S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL:</p>	
<p>2a. Precisely Specified _____</p> <p>2a.1 Numerator Statement (<i>Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome</i>): Patients in the denominator who received a behavioral intervention for urinary incontinence.</p> <p>2a.2 Numerator Time Window (<i>The time period in which cases are eligible for inclusion in the numerator</i>): All patients in the denominator whose quarterly MDS indicates worsening UI (compared to the prior MDS) and also indicates a behavioral intervention. The intervention could have been initiated at any time between the first and second MDS since the onset of the worsening UI could have occurred any time during that 3-month period as well.</p> <p>2a.3 Numerator Details (<i>All information required to collect/calculate the numerator, including all codes, logic, and definitions</i>): Behavioral intervention: MDS (H3a or H3b) indicates a scheduled toileting plan or a bladder retraining program. See attached reference document for codes and detail</p>	
<p>2a.4 Denominator Statement (<i>Brief, text description of the denominator - target population being measured</i>): Nursing home patients 65 years or older who have worsening urinary incontinence and who are able to self toilet.</p> <p>2a.5 Target population gender: Female, Male 2a.6 Target population age range: Nursing home patients who are 65 years old or older</p> <p>2a.7 Denominator Time Window (<i>The time period in which cases are eligible for inclusion in the denominator</i>): Nursing home patients with an MDS assessment indicating worsening urinary incontinence during a one-year study period.</p> <p>2a.8 Denominator Details (<i>All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions</i>): Nursing home patient 65 years old or older.</p> <p>Worsening urinary incontinence: Any MDS report during the study period indicating urinary incontinence with deterioration. Thus, H1b is equal to 2, 3 or 4 (0=continent; 1=usually continent; 2=occasionally incontinent; 3=frequently incontinent; 4=incontinent) and H4 (Change in urinary incontinence) is equal to 2 (0=no change; 1=improved; 2=deteriorated).</p> <p>Able to self toilet: MDS (G1Ai) indicates that patient is independent in toileting ADL (G1Ai=0). See attached reference document for codes and detail.</p>	
<p>2a.9 Denominator Exclusions (<i>Brief text description of exclusions from the target population</i>): Patients are excluded from the denominator if they have advanced dementia or a poor prognosis.</p> <p>2a.10 Denominator Exclusion Details (<i>All information required to collect exclusions to the denominator, including all codes, logic, and definitions</i>):</p>	<p>2a-specs C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF's Health Information Technology Expert Panel (HITEP) .

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
 12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

Patients are excluded from the denominator for advanced dementia or poor prognosis.

Advanced dementia: MDS-COGS score = 5 (Hartmaier 1994). Scoring is based on 8 MDS items:
 Cognitive Patterns:
 B2a: Short term memory (0-1; MDS=1, memory problem; MDS-COGS=1)
 B2b: Long term memory (0-1; MDS=1, memory problem; MDS-COGS=1)
 B3b: Location of own room (0-1; MDS=0, doesn't recall; MDS-COGS=1)
 B3d: Knows he/she in a nursing home (0-1; MDS=0, doesn't recall; MDS-COGS=1)
 B3e: No orientation recalled (0-1; MDS=1, none recalled; MDS-COGS=1)
 B4: Decision making (0-3; MDS/MDS-COGS: 0=independent, 1=modified independence, 2=moderately impaired, 3=severely impaired)
 Communication Patterns:
 C4: Making self understood [0-1; MDS=understood (0) or usually understood (1) or sometimes understood (2), then MDS-COGS=0; MDS=never/rarely understood (3), then MDS-COGS=1]
 Physical Functioning:
 G1Ag: Dressing self performance [0-1; MDS=independent (0) or supervision (1) or limited assistance (2) or extensive assistance (3), then MDS-COGS=0; MDS=total dependence (4), then MDS-COGS=1]

Hartmaier SL, Sloane PD, Guess HA, et al. The MDS cognition scale: a valid instrument for identifying and staging nursing home residents with dementia using the minimum data set. J Am Geriatr Soc 1994; 42:1173-1179.

Poor prognosis: MDS (J5c) indicates end stage disease, 6 or fewer months to live OR Medicare/Medicaid claim for hospice care.

See attached reference document for codes and details.

2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions):
 None

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method):

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Ratio
2a.20 Interpretation of Score:
2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps):
 1. Identify all nursing home patients 65 years or older
 2. Exclude patients with advanced dementia or poor prognosis
 3. Determine patients who have worsening urinary incontinence from MDS (H1b and H4).
 4. Determine patients who can self toilet from MDS (G1Ai)
 5. For this sample, determine if patient received a behavioral intervention (scheduled toileting plan or bladder retraining program) from MDS (H3a or H3b) on the MDS report noting the worsening incontinence.

2a.22 Describe the method for discriminating performance (e.g., significance testing):

2a.23 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):
 All nursing home patients eligible.

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
 Electronic administrative data/claims

<p>2a.25 Data source/data collection instrument (<i>Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.</i>): Minimum Data Set (MDS) 2.0</p> <p>2a.26-28 Data source/data collection instrument reference web page URL or attachment: URL http://www.cms.hhs.gov</p> <p>2a.29-31 Data dictionary/code table web page URL or attachment: Attachment NH UI 11 Reference.doc</p> <p>2a.32-35 Level of Measurement/Analysis (<i>Check the level(s) for which the measure is specified and tested</i>) Facility/Agency, Health Plan, Integrated delivery system, Multi-site/corporate chain, Population: national, Population: regional/network, Population: states, Population: counties or cities</p> <p>2a.36-37 Care Settings (<i>Check the setting(s) for which the measure is specified and tested</i>) Nursing home (NH) /Skilled Nursing Facility (SNF)</p> <p>2a.38-41 Clinical Services (<i>Healthcare services being measured, check all that apply</i>) Clinicians: Pharmacist, Clinicians: Nurses</p>	
TESTING/ANALYSIS	
<p>2b. Reliability testing</p> <p>2b.1 Data/sample (<i>description of data/sample and size</i>): The sample for analysis is 21,657 individuals aged 65 years and older who were dually enrolled in Medicare and Medicaid and living in nursing homes during a 2-year period (1999-2000) in 19 California counties. Individuals were included in the study if they were residing in a nursing home for at least 5 of the last 6 months of 1998 and were alive on January 1, 1999. For the MDS 3.0, the national validation and evaluation of the MDS 3.0 included 71 community NHs (3,822 residents) and 19 VHA NHs (764 residents), regionally distributed throughout the United States.</p> <p>2b.2 Analytic Method (<i>type of reliability & rationale, method for testing</i>): This measure is based on MDS data elements. The evaluation was designed to test and analyze inter-rater agreement (reliability) between gold-standard (research) nurses and between facility and gold-standard nurses, validity of key sections, response rates for interview items, anonymous feedback on changes from participating nurses, and time to complete the MDS assessment. In addition, the national test design allowed comparison of item distributions between MDS 3.0 and MDS 2.0 and thus facilitated mapping into payment cells. The data collection occurred from September 2006 to February 2007. Saliba D, Buchanan J. Development & Evaluation of a Revised Nursing Home Assessment Tool: MDS 3.0. RAND report, CMS MDS 3.0 Validation Contract No. 500-00-0027/Task Order #2, April 2008</p> <p>2b.3 Testing Results (<i>reliability statistics, assessment of adequacy in the context of norms for the test conducted</i>): For MDS 3.0, reliability for continence items overall: average kappa for gold-standard to gold-standard was .949; the gold-standard to facility-nurse kappa for the section was .945. For MDS 2.0, see the DAVE program referenced in 4d.1.</p>	<p style="text-align: center;">2b</p> <p style="text-align: center;">C <input type="checkbox"/></p> <p style="text-align: center;">P <input type="checkbox"/></p> <p style="text-align: center;">M <input type="checkbox"/></p> <p style="text-align: center;">N <input type="checkbox"/></p>
<p>2c. Validity testing</p> <p>2c.1 Data/sample (<i>description of data/sample and size</i>): The sample for analysis is 21,657 individuals aged 65 years and older who were dually enrolled in Medicare and Medicaid and living in nursing homes during a 2-year period (1999 -2000) in 19 California counties. Individuals were included in the study if they were residing in a nursing home for at least 5 of the last 6 months of 1998 and were alive on January 1, 1999.</p> <p>2c.2 Analytic Method (<i>type of validity & rationale, method for testing</i>): Validity of the process-outcome link was explicitly evaluated by the ACOVE Nursing Home Panel that reviewed the relevant literature and used a modified Delphi panel method of voting on the validity of the measure. (Saliba 2004)</p>	<p style="text-align: center;">2c</p> <p style="text-align: center;">C <input type="checkbox"/></p> <p style="text-align: center;">P <input type="checkbox"/></p> <p style="text-align: center;">M <input type="checkbox"/></p> <p style="text-align: center;">N <input type="checkbox"/></p>

Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

Comment [k11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

Comment [KP12]: 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

Comment [k13]: 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure focus is the most important aspect of quality for the specific topic.

Saliba D, Solomon D, Rubenstein L, Young R, Schnelle J, Roth C, Wenger N. Feasibility of quality indicators for the management of geriatric syndromes in nursing home residents. *J Am Med Dir Assoc.* 2004;5:310-9.

2c.3 Testing Results (*statistical results, assessment of adequacy in the context of norms for the test conducted*):

The outcomes of the proposed measure based on administrative data have not been explicitly tested. However this measure is the administrative version of a chart-based measure that has been tested against an incontinence-specific outcome combined with the other 5 implemented ACOVE urinary incontinence quality measures. The summary score of quality of care for urinary incontinence was directly related to improvement in the Incontinence Quality of Life (IQOL) scale. After controlling for gender and comorbidity, an improvement of 10% in incontinence quality of care was associated with 1.4 point improvement in the rescaled IQOL score. (Min LC 2008) This response would correspond to a group of UI patients reporting that their mean quality of life symptoms were "a little bit better." (Patrick DL 1999) The individual quality indicator from the medical record implementation associated with less worsening in IQOL over a one year period (mean -2.7 IQOL points for patients passing the measure compare 6.0 IQOL points for patients failing the measure), but this was not statistically significant.

Min LC, Wenger NS, Reuben DB. Better quality of care for urinary incontinence improves incontinence quality of life. *J Am Geriatr Soc.* 2008;56(Suppl 1):S34.

Patrick DL, Martin ML, Bushnell DM, Yalcin I, Wagner TH, Buesching DP. Quality of life of women with urinary incontinence: further development of the incontinence quality of life instrument (I-QOL). *Urology.* 1999;53: 71-76.

2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s):

Patients were excluded if they had advanced dementia or poor prognosis. An axiom of good medical practice is that management of patients' illnesses should be individualized. Even the most firmly established standards for prevention, diagnosis, and treatment cannot be applied to all patients. This is particularly true for patients with advanced illness or those with compromised quality of life (Luchins 1993; Brauner 2000). Thus, an essential step in measuring quality of care, particularly for patients in nursing homes, is to determine whether the benefit from an intervention is so small for patients in the most debilitated condition that a quality indicator is inapplicable. Given this, Solomon 2003, convened a clinical panel of experts to identify indicators that should not be applied in the setting or more-general preferences or for patient in severely debilitated condition. This panel, using a structured method of rating the aims and burdens of care processes, identified the quality indicator proposed here as one that should not be applied to patients with advanced dementia or poor prognosis (anticipated survival < 6 months).

2d.2 Citations for Evidence:

Luchins DJ, Hanrahan P. What is appropriate health care for end-stage dementia? *J Am Geriatr Soc* 1993; 41:25-30

Brauner DJ, Muir JC, Sachs GA. Treating nondementia illnesses in patients with dementia. *JAMA.* 2000; 283:3230-5.

Solomon DH, Wenger NS, Saliba D, et al. Appropriateness of quality indicators for older patients with advanced dementia and poor prognosis. *J Am Geriatr Soc.* 2003;51:902-7.

2d.3 Data/sample (*description of data/sample and size*):

2d.4 Analytic Method (*type analysis & rationale*):

2d
C
P
M
N
NA

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be:
 •supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
 AND
 •a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
 AND
 •precisely defined and specified:
 –if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
 if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

Comment [k15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses):	
2e. Risk Adjustment for Outcomes/ Resource Use Measures	
2e.1 Data/sample (description of data/sample and size):	
2e.2 Analytic Method (type of risk adjustment, analysis, & rationale):	
2e.3 Testing Results (risk model performance metrics):	2e C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:	
2f. Identification of Meaningful Differences in Performance	
2f.1 Data/sample from Testing or Current Use (description of data/sample and size):	
2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):	
2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):	2f C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
2g. Comparability of Multiple Data Sources/Methods	
2g.1 Data/sample (description of data/sample and size):	
2g.2 Analytic Method (type of analysis & rationale):	
2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):	2g C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2h. Disparities in Care	
2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts):	2h C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Scientific Acceptability of Measure Properties</i> ?	2
Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i> , met? Rationale:	2 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
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)	Eval Rating
3a. Meaningful, Understandable, and Useful Information	3a C <input type="checkbox"/> P <input type="checkbox"/>
3a.1 Current Use: Not in use but testing completed	

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care. OR rationale/data support no risk adjustment.

Comment [k17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [k19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender); OR rationale/data justifies why stratification is not necessary or not feasible.

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

<p>3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years): Not yet. Goal is to have the measure employed in measuring nursing home care so that it will be picked up by governmental agencies for public reporting.</p> <p>3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years): This quality indicator has been used in one measurement effort in the community and the nursing home, (Zingmond 2007, Zingmond 2009) and in several quality improvement initiatives in community-based settings using medical record data, including one program in conjunction with the American College of Physicians (Wenger 2009), but not yet in nursing homes.</p> <p>Zingmond DS, Wilber KH, Maclean CH, Wenger NS. Measuring the quality of care provided to community dwelling vulnerable elders dually enrolled in Medicare and Medicaid. <i>Med Care.</i> 2007;45:931-8.</p> <p>Zingmond DS, Saliba D, Wilber KH, et al. Measuring the quality of care provided to dually enrolled Medicare and Medicaid beneficiaries living in nursing homes. <i>Med Care.</i> 2009;47:536-44.</p> <p>Wenger NS, Roth CP, Shekelle PG, et al. A practice-based intervention to improve primary care for falls, urinary incontinence, and dementia. <i>J Am Geriatr Soc.</i> 2009;57:547-55.</p> <p>Wenger NS, Roth CP, Hall W, et al. A primary care practice redesign intervention improves quality of care for older patients with urinary incontinence and high risk of falls: A controlled trial. <i>J Gen Intern Med.</i> 2009. 24(Suppl 1):S141-2.</p> <p>Testing of Interpretability (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)</p> <p>3a.4 Data/sample (description of data/sample and size):</p> <p>3a.5 Methods (e.g., focus group, survey, QI project):</p> <p>3a.6 Results (qualitative and/or quantitative results and conclusions):</p>	<p>M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>3b/3c. Relation to other NQF-endorsed measures</p> <p>3b.1 NQF # and Title of similar or related measures: Existing endorsed measures target screening for urinary incontinence (#0098 Urinary Incontinence: Assessment of presence or absence of urinary incontinence in women), characterization of type of UI (#0099 Urinary Incontinence: Characterization of urinary incontinence in women), patient report of a discussion of UI and a plan of care with a health care provider (#0030 Urinary incontinence management in older adults: a. discussing UI, b. receiving treatment for UI; #0100 Urinary Incontinence: Plan of care for urinary incontinence in women). None of these measures is directed to nursing home patients and none (including those in the National Voluntary Consensus Standards for Nursing Home Care) addresses the provision of a behavioral intervention as does the proposed indicator.</p> <p>(for NQF staff use) Notes on similar/related endorsed or submitted measures:</p>	
<p>3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population): 3b.2 Are the measure specifications harmonized? If not, why?</p>	<p>3b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>

Comment [KP23]: 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

Comment [k24]: 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., influenza immunization of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for patients with diabetes), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

<p>3c. Distinctive or Additive Value</p> <p>3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:</p> <p>5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality:</p>	<p>3c</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Usability</i>?</p>	<p>3</p>
<p>Steering Committee: Overall, to what extent was the criterion, <i>Usability</i>, met?</p> <p>Rationale:</p>	<p>3</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>4. FEASIBILITY</p>	
<p>Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)</p>	<p>Eval Rating</p>
<p>4a. Data Generated as a Byproduct of Care Processes</p> <p>4a.1-2 How are the data elements that are needed to compute measure scores generated? Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)</p>	<p>4a</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>4b. Electronic Sources</p> <p>4b.1 Are all the data elements available electronically? (<i>elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims</i>) No</p> <p>4b.2 If not, specify the near-term path to achieve electronic capture by most providers.</p>	<p>4b</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>4c. Exclusions</p> <p>4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No</p> <p>4c.2 If yes, provide justification.</p>	<p>4c</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences</p> <p>4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. This measure is susceptible to inaccuracies to the extent that all patient-level administrative data is susceptible to data-entry errors and does not capture instances when services are recommended by the clinician but refused.</p> <p>Regarding the MDS, DAVE 2, the second phase of the Data Assessment and VERification (DAVE) program, came to a close September 30, 2007. The primary focus of DAVE 2 was to assure accuracy and reliability of MDS assessment data.</p> <p>The DAVE 2 contract, which was awarded to Abt Associates in September 2005, consisted of onsite visits to nursing homes by trained nurse reviewers who examined resident records and conducted independent resident assessments to evaluate the accuracy of MDS assessments. They also provided educational support to nursing home staff.</p>	<p>4d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>

Comment [KP25]: 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).

Comment [KP26]: 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

Comment [KP27]: 4b. The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

Comment [KP28]: 4c. Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

Comment [KP29]: 4d. Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

<p>CMS is continuing to work with Abt Associates on MDS 2.0 initiatives under the MDS Technical Support Contract. It also continues to develop training materials, based on the DAVE 2 findings, in order to improve MDS coding guidelines in the RAI User's Manual and to support nursing home staff in improving MDS data accuracy.</p> <p>The DAVE projects developed MDS coding Tip Sheets for various sections of the MDS found to have higher discrepancy rates upon onsite accuracy review. There are currently four downloadable TIP Sheets on proper coding for the MDS Sections including Section G on Self Performance, Section P on Physician Visits (P7) and Physician Orders (P8), Section P on Therapies (P1b), and Section K on Parenteral/IV (K5a). The MDS Technical Support project plans to develop additional Tip Sheets in the coming year.</p> <p>From: http://www.cms.hhs.gov/NursingHomeQualityInits/20_NHQIMDS20.asp</p> <p>New updated coding for the to-be-released MDS 3.0 will be developed for the proposed indicator by the measure developer.</p>	
<p>4e. Data Collection Strategy/Implementation</p> <p>4e.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/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:</p> <p>4e.2 Costs to implement the measure (<i>costs of data collection, fees associated with proprietary measures</i>):</p> <p>4e.3 Evidence for costs:</p> <p>4e.4 Business case documentation:</p>	<p>4e C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Feasibility</i>?</p>	<p>4</p>
<p>Steering Committee: Overall, to what extent was the criterion, <i>Feasibility</i>, met? Rationale:</p>	<p>4 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
RECOMMENDATION	
<p>(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.</p>	<p>Time-limited <input type="checkbox"/></p>
<p>Steering Committee: Do you recommend for endorsement? Comments:</p>	<p>Y <input type="checkbox"/> N <input type="checkbox"/> A <input type="checkbox"/></p>
CONTACT INFORMATION	
<p>Co.1 Measure Steward (Intellectual Property Owner) Co.1 Organization RAND Corporation, 1776 Main Street, Santa Monica, California, 90401</p>	

Comment [KP30]: 4e. Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).

<p>Co.2 Point of Contact Carol, Roth, RN, MPH, roth@rand.org, 310-393-0411-6425</p>
<p>Measure Developer If different from Measure Steward Co.3 Organization RAND Corporation, 1776 Main Street, Santa Monica, California, 90401</p>
<p>Co.4 Point of Contact Neil, Wenger, MD, MPH, nwenger@mednet.ucla.edu, 310-794-2288-</p>
<p>Co.5 Submitter If different from Measure Steward POC Carol, Roth, RN, MPH, roth@rand.org, 310-393-0411-6425, RAND Corporation</p>
<p>Co.6 Additional organizations that sponsored/participated in measure development</p>
<p>ADDITIONAL INFORMATION</p>
<p>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 EXPERT PANEL MEMBERS:</p> <p>Joseph S. Alpert, MD - Cardiology University of Arizona Health Sciences Center, Tucson, AZ</p> <p>Andrew Auerbach, MD - Hospitalist University of California, San Francisco, San Francisco, CA</p> <p>Helena Chang, MD - Surgical Oncology UCLA School of Medicine, Los Angeles, CA</p> <p>Jerome Epplin, MD - Family Medicine St. Francis Hospital, Litchfield, IL</p> <p>Nick Fitterman, MD - Internal Medicine Northshore Medical Group, Huntington, NY</p> <p>Jerry C. Johnson, MD - Geriatric Medicine University of Pennsylvania, Philadelphia, PA</p> <p>Jean S. Kutner, MD, MSPH - General Internal Medicine University of Colorado Health Sciences Center, Aurora, CO</p> <p>Patrick J. Loehrer, Sr., MD - Oncology Indiana University School of Medicine, Indianapolis, IN</p> <p>Thomas Mattimore, MD - General Internal Medicine University of California at Los Angeles, Los Angeles, CA</p> <p>Gregory Maynard, MD - Hospitalist University of California, San Diego, San Diego, CA</p> <p>Charles McKay, MD - Cardiology Harbor UCLA Medical Center, Torrance, CA</p> <p>Keith W. Michl, MD - General Internal Medicine Private Practice, Manchester Center, VT</p> <p>Hyman B. Muss, MD - Oncology</p>

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University of Texas Southwestern Medical Ctr., Dallas, TX

Kristine Yaffe, MD - Neurology
University of California, San Francisco, San Francisco, CA

Role of 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

<p>Harvey J. Cohen, MD - Geriatric Oncologist Duke University Medical Center, Durham, NC</p> <p>Terry Fulmer, PhD, RN, FAAN - Nurse New York University, New York, NY</p> <p>Patricia A. Ganz, MD - Oncologist UCLA Schools of Medicine & Public Health, Jonsson Comprehensive Cancer Center, Los Angeles, CA</p> <p>Mark A. Grunwald, MD - Family Practitioner Gunderson Lutheran Clinic, Prairie du Chien, WI</p> <p>William J. Hall, MD, MACP - Geriatrician Highland Hospital, Rochester, NY</p> <p>Ira R. Katz, MD, PhD - Psychiatrist University of Pennsylvania, Philadelphia, PA</p> <p>Paul R. Katz, MD - Geriatrician Monroe Community Hospital, Rochester, NY</p> <p>Dalane W. Kitzman, MD - Geriatric Cardiologist Wake Forest University School of Medicine, Winston-Salem, NC</p> <p>Rosanne M. Leipzig, MD, PhD - Geriatrician Mount Sinai School of Medicine, New York, NY</p> <p>Ronnie A. Rosenthal, MD - Surgeon Yale University School of Medicine, New Haven, CT</p> <p>Role of 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.</p> <p>Wenger NS, Roth CP, Shekelle P, and the ACOVE Investigators. Introduction to the Assessing Care of Vulnerable Elders-3 quality indicator measurement set. J Am Geriatr Soc 2007; 55(S2):S247-S487</p>
<p>Ad.2 If adapted, provide name of original measure: Ad.3-5 If adapted, provide original specifications URL or attachment</p>
<p>Measure Developer/Steward Updates and Ongoing Maintenance Ad.6 Year the measure was first released: 2001 Ad.7 Month and Year of most recent revision: 10, 2007 Ad.8 What is your frequency for review/update of this measure? Every 3-5 years Ad.9 When is the next scheduled review/update for this measure?</p>
<p>Ad.10 Copyright statement/disclaimers:</p>
<p>Ad.11 -13 Additional Information web page URL or attachment:</p>
<p>Date of Submission (MM/DD/YY): 04/08/2010</p>

4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

NH UI 11 Reference Document

```
/** IDENTIFY URINARY INCONTINENCE AND INTERVENTIONS FROM THE MDS **/

DATA WORKF.MDS_DUALS_UI_MEASURES (COMPRESS=YES);
  SET MDS_DUALS (KEEP = MCDID EFFECTIVE_DATE
                G1IA_SELF_TOLIET
                H1B_BLADDER_CONTRL H3A_TOLIET_PLAN H3B BLADDER_TRAINING
                H4_CHANGE_URINARY);
  FORMAT MDS_EVAL_DATE MMDDYY10.;
  FORMAT CONTINENT OCCL_UI INCONTINENT UI_CATEGORY UI_WORSE
         SELF_TOILET UI_BEHAVIOR_RX $1.;

  MDS_EVAL_DATE = MDY(SUBSTR(EFFECTIVE_DATE, 5, 2),
                     SUBSTR(EFFECTIVE_DATE, 7, 2),
                     SUBSTR(EFFECTIVE_DATE, 1, 4));

  IF H1B_BLADDER_CONTRL EQ '0'      OR
     H1B_BLADDER_CONTRL EQ '1'
  THEN DO;
    CONTINENT           = 'Y';
    UI_CATEGORY         = 1;
  END;

  IF H1B_BLADDER_CONTRL EQ '2'
  THEN DO;
    OCCL_UI             = 'Y';
    UI_CATEGORY         = 2;
  END;

  IF H1B_BLADDER_CONTRL EQ '3'      OR
     H1B_BLADDER_CONTRL EQ '4'
  THEN DO;
    INCONTINENT        = 'Y';
    UI_CATEGORY         = 3;
  END;

  IF H4_CHANGE_URINARY EQ '2'
  THEN UI_WORSE        = 'Y';

  IF G1IA_SELF_TOLIET EQ '0'
  THEN SELF_TOILET     = 'Y';

  IF H3B_BLADDER_TRAINING EQ '1' OR
     H3A_TOLIET_PLAN EQ '1'
  THEN UI_BEHAVIOR_RX  = 'Y';

  IF      CONTINENT      EQ 'Y'      OR
     OCCL_UI            EQ 'Y'      OR
     INCONTINENT        EQ 'Y'      OR
     UI_WORSE           EQ 'Y'      OR
     SELF_TOILET        EQ 'Y'      OR
     UI_BEHAVIOR_RX     EQ 'Y'
  THEN OUTPUT;
```

NH UI 11 Reference Document

```
LABEL
  MDS_EVAL_DATE      = 'Evaluation date (MDS)'
  CONTINENT          = 'Continent of Urine (MDS)'
  UI_CATEGORY        = 'Incontinence severity 1-continent/3-incontinent
(MDS) '
  OCCL_UI            = 'Usually continent (1-2 times / wk; MDS)'
  INCONTINENT        = 'Incontinent every day (MDS)'
  UI_WORSE           = 'UI Worsened (MDS)'
  SELF_TOILET        = 'Able to Self Toilet (MDS)'
  UI_BEHAVIOR_RX     = 'Incontinence Behavioral Intervention (MDS)'
;
```

```
KEEP MCDID MDS_EVAL_DATE
      CONTINENT OCCL_UI INCONTINENT UI_CATEGORY UI_WORSE
      SELF_TOILET ASSIST_TOILET UI_BEHAVIOR_RX
;
```

```
DATA UI_QI_BEHAVIORAL_INTERVENTION;
  SET WORKF.MDS_DUALS_UI_MEASURES;
```

```
*****;
** IF NH PATIENT HAS EVIDENCE OF INCONTINENCE **;
** AND IS CAPABLE OF INDEPENDENT TOILETING **;
** THEN SHOULD BE OFFERED BEHAVIORAL TREATMENT **;
*****;
  IF UI_WORSE          EQ 'Y'          AND
     UI_CATEGORY      IN (2, 3)      AND
     SELF_TOILET      EQ 'Y'
  THEN DO;
    NHSV_21_5A      = 1;
    IF UI_BEHAVIOR_RX EQ 'Y'
      THEN NHSV_21_5B = 1;
      ELSE NHSV_21_5B = 0;
  END;
```

```
LABEL
  NHSV_21_5A      = 'IF VE has worsening incontinence and is able to self
toilet'
  NHSV_21_5B      = 'THEN should have a behavioral intervention'
;
```

*

NH UI 11 Reference Document

```
/** EXCLUSION FOR POOR PROGNOSIS OR ADVANCED DEMENTIA **/  
  
DATA UI_QI_BEHAVIORAL_INTERVENTION_WITH_EXCLUSION;  
  MERGE  
    UI_QI_BEHAVIORAL_INTERVENTION    (IN=IN1)  
    ALL_EXCLUSIONS                 (IN=IN2);  
  BY MCDID;  
  
  IF ANY_POOR_PROG                    EQ 1 OR  
    ADVANCED_DEMENTIA EQ 1  
  THEN DO;  
    NHSV_21_5A_POST_EX = .;  
    NHSV_21_5B_POST_EX = .;  
  END;  
  ELSE DO;  
    NHSV_21_5A_POST_EX = NHSV_21_5A;  
    NHSV_21_5B_POST_EX = NHSV_21_5B;  
  END;  
  
  LABEL  
    NHSV_21_5A_POST_EX = 'IF VE has worsening incontinence and is able to self  
toilet'  
    NHSV_21_5B_POST_EX = 'THEN should have a behavioral intervention'  
  ;  
RUN;  
  
*****;  
*   FREQUENCIES OF RESULTS;  
*****;  
PROC FREQ DATA = UI_QI_BEHAVIORAL_INTERVENTION;  
  TABLE NHSV_21_6A          NHSV_21_6B          / LIST MISSING;  
RUN;
```

NH UI 11 Reference Document

```
/**
IDENTIFY EXCLUSIONS - ADVANCED DEMENTIA AND POOR PROGNOSIS
**/

/** MEASURES BASED UPON MDS **/
/** CREATE THE MDS ADVANCED DEMENTIA SCALE **/
/** IF SCALE >= 5, THEN THE PATIENT HAS FEATURES OF ADVANCED DEMENTIA **/
DATA MDS_DEMENTIA_ITEMS;
  SET MDS_DUALS (KEEP = MCDID EFFECTIVE_DATE B2A_ST_MEMORY B2B_LT_MEMORY
B3B_LOC_OWN_ROOM
                B3D_IN_HOME B3E_NONE_ABOVE B4_DAY_DCSN_MAKING
C4_IS_UNDERSTOOD
                G1GA_SELF_DRESS P1AN_ALZHEIMER P1AO_HOSPICE
P1AQ_RESPITE );
RUN;

DATA MDS_DEMENTIA_SCALE;
  SET MDS_DUALS (KEEP = MCDID EFFECTIVE_DATE B2A_ST_MEMORY B2B_LT_MEMORY
B3B_LOC_OWN_ROOM
                B3D_IN_HOME B3E_NONE_ABOVE B4_DAY_DCSN_MAKING
C4_IS_UNDERSTOOD
                G1GA_SELF_DRESS
                WHERE = ((B2A_ST_MEMORY EQ '1' OR B2A_ST_MEMORY EQ '0')
AND
                (B3B_LOC_OWN_ROOM EQ '1' OR B3B_LOC_OWN_ROOM EQ
'0')));
  ARRAY MDS_ITEMS(8) $ B2A_ST_MEMORY B2B_LT_MEMORY B3B_LOC_OWN_ROOM
B3D_IN_HOME B3E_NONE_ABOVE B4_DAY_DCSN_MAKING
C4_IS_UNDERSTOOD
                G1GA_SELF_DRESS;
  ARRAY MDS_COG_ITEMS(8) MDS_COG_ITEM1-MDS_COG_ITEM8;

  FORMAT MDS_EVAL_DATE MMDDYY10.;

  MDS_EVAL_DATE = MDY(SUBSTR(EFFECTIVE_DATE, 5, 2),
                SUBSTR(EFFECTIVE_DATE, 7, 2),
                SUBSTR(EFFECTIVE_DATE, 1, 4));

  MDS_COGS = 0;
  DO i = 1 TO 8;
    IF i IN (1, 2, 5, 6) AND
      MDS_ITEMS{i} NOT IN ('-', '*')
    THEN MDS_COG_ITEMS{i} = MDS_ITEMS{i} + 0;
    ELSE
      IF i IN (3, 4) AND
        MDS_ITEMS{i} NOT IN ('-', '*')
      THEN MDS_COG_ITEMS{i} = 1 - MDS_ITEMS{i};
    ELSE
      IF i EQ 7 AND
        MDS_ITEMS{i} NE '-' AND
        MDS_ITEMS{i} NOT IN ('-', '*')
      THEN DO;
        IF MDS_ITEMS{i} EQ '3'
          THEN MDS_COG_ITEMS{i} = 1;
        ELSE MDS_COG_ITEMS{i} = 0;
      END;
    ELSE
```

NH UI 11 Reference Document

```
IF i EQ 8
THEN DO;
  IF MDS_ITEMS{i} EQ '4'
  THEN MDS_COG_ITEMS{i} = 1;
  ELSE MDS_COG_ITEMS{i} = 0;
END;
MDS_COGS = MDS_COGS + MDS_COG_ITEMS{i};
END;

IF MDS_COGS GE 5
THEN SEVERE_DEMENTIA = 1;
ELSE SEVERE_DEMENTIA = 0;

LABEL
MDS_COG_ITEM1 = 'Short term memory'
MDS_COG_ITEM2 = 'Long term memory'
MDS_COG_ITEM3 = 'Location of own room'
MDS_COG_ITEM4 = 'Knows is in NH'
MDS_COG_ITEM5 = 'No orientation items recalled'
MDS_COG_ITEM6 = 'Decision making'
MDS_COG_ITEM7 = 'Making self understood'
MDS_COG_ITEM8 = 'Dressing self performance'
MDS_COGS      = 'MDS Cognition Scale'
SEVERE_DEMENTIA = 'Severe Dementia (MDS-COGS >= 5)'
;

DROP EFFECTIVE_DATE i;
RUN;

/** IDENTIFY THE HIGHEST AND LOWEST MEASURES ON THE DEMENTIA SCALE **/
PROC SORT DATA=MDS_DEMENTIA_SCALE;
  BY MCDID MDS_EVAL_DATE;
RUN;

DATA MDS_COGS_RANGE;
  SET MDS_DEMENTIA_SCALE;
  BY MCDID;
  RETAIN MDS_COGS_MAX      MDS_COGS_MIN;
  RETAIN MDS_COGS_MAX_DATE MDS_COGS_MIN_DATE;
  FORMAT MDS_COGS_MAX_DATE MDS_COGS_MIN_DATE MMDDYY10.;

IF FIRST.MCDID
THEN DO;
  MDS_COGS_MAX      = MDS_COGS;
  MDS_COGS_MIN      = MDS_COGS;
  MDS_COGS_MAX_DATE = MDS_EVAL_DATE;
  MDS_COGS_MIN_DATE = MDS_EVAL_DATE;

END;
IF MDS_COGS      LE MDS_COGS_MIN
THEN DO;
  MDS_COGS_MIN      = MDS_COGS;
  MDS_COGS_MIN_DATE = MDS_EVAL_DATE;
END;
IF MDS_COGS      GE MDS_COGS_MAX
THEN DO;
  MDS_COGS_MAX = MDS_COGS;
```

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```
MDS_COGS_MAX_DATE = MDS_EVAL_DATE;
END;
IF LAST.MCDID
THEN DO;
  IF MDS_COGS_MAX      GE 5  AND
     MDS_COGS_MIN      GE 5
  THEN ADV_DEMENTIA = 1;
  ELSE
  IF MDS_COGS_MAX      GE 5  AND
     MDS_COGS_MIN      < 5
  THEN ADV_DEMENTIA = 2;
  ELSE
  IF MDS_COGS_MAX      < 5  AND
     MDS_COGS_MIN      GE 5
  THEN ADV_DEMENTIA = 3;
  ELSE
  IF MDS_COGS_MAX      < 5  AND
     MDS_COGS_MIN      < 5
  THEN ADV_DEMENTIA = 4;
  OUTPUT;
END;

KEEP MCDID MDS_COGS_MIN MDS_COGS_MAX MDS_COGS_MAX_DATE MDS_COGS_MIN_DATE
ADV_DEMENTIA;
RUN;

/** IDENTIFY ADVANCED DISEASE / POOR PROGNOSIS USING MDS - HOSPICE, OR ESRD **/
DATA MDS_POOR_PROGNOSIS;
  SET MDS_DUALS (KEEP = MCDID EFFECTIVE_DATE P1AO_HOSPICE J5C_END_STG_DISEAS
                  WHERE = (P1AO_HOSPICE EQ '1' OR
                          J5C_END_STG_DISEAS EQ '1'));
  FORMAT MDS_PROGNOSIS_DATE MMDDYY10.;

  MDS_PROGNOSIS_DATE = MDY(SUBSTR(EFFECTIVE_DATE, 5, 2),
                          SUBSTR(EFFECTIVE_DATE, 7, 2),
                          SUBSTR(EFFECTIVE_DATE, 1, 4));

  LABEL
    MDS_PROGNOSIS_DATE = 'Date for poor prognosis'
    ;

  RENAME P1AO_HOSPICE = HOSPICE;
  RENAME J5C_END_STG_DISEAS = END_STAGE_DZ;

  DROP EFFECTIVE_DATE;
RUN;

/** IDENTIFY THE FIRST AND LAST DATES FOR THE POOR PROGNOSIS MEASURES **/
DATA MDS_POOR_PROGNOSIS_REV (COMPRESS=YES);
  SET MDS_POOR_PROGNOSIS;
  BY MCDID;
  RETAIN DATE_1ST_HOSPICE DATE_LAST_HOSPICE
         DATE_1ST_ESD DATE_LAST_ESD;
  FORMAT DATE_1ST_HOSPICE DATE_LAST_HOSPICE
         DATE_1ST_ESD DATE_LAST_ESD MMDDYY10.;
  ARRAY PP_DATES(4) DATE_1ST_HOSPICE DATE_LAST_HOSPICE
                 DATE_1ST_ESD DATE_LAST_ESD;
```

NH UI 11 Reference Document

```
IF FIRST.MCDID
THEN DO i = 1 TO 6;
  PP_DATES{i} = .;
END;

IF HOSPICE EQ '1'
THEN DO;
  IF DATE_1ST_HOSPICE EQ .
  THEN DATE_1ST_HOSPICE = MDS_PROGNOSIS_DATE;
  DATE_LAST_HOSPICE = MDS_PROGNOSIS_DATE;
END;

IF END_STAGE_DZ EQ '1'
THEN DO;
  IF DATE_1ST_ESD EQ .
  THEN DATE_1ST_ESD = MDS_PROGNOSIS_DATE;
  DATE_LAST_ESD = MDS_PROGNOSIS_DATE;
END;

IF LAST.MCDID
THEN OUTPUT;

LABEL
  DATE_1ST_HOSPICE = 'Hospice - 1st date'
  DATE_LAST_HOSPICE = 'Hospice - last date'
  DATE_1ST_ESD = 'ESD - 1st date'
  DATE_LAST_ESD = 'ESD - last date'
;
KEEP MCDID DATE_1ST_HOSPICE DATE_LAST_HOSPICE
      DATE_1ST_ESD DATE_LAST_ESD;
RUN;

/** COMBINE TO CREAT THE MDS-BASED MEASURES **/
DATA WORKF.MDS_SNF_EXCLUSIONS (COMPRESS=YES);
MERGE
  MDS_COGS_RANGE (IN=IN1)
  MDS_POOR_PROGNOSIS_REV (IN=IN2);
BY MCDID;
ARRAY PP_DATES(4) DATE_1ST_HOSPICE DATE_LAST_HOSPICE
      DATE_1ST_ESD DATE_LAST_ESD;

RUN;

/** IDENTIFY HOSPICE USE FROM MEDICARE AND MEDICAID DATA **/
/** MONTHLY CLAIMS FOR HOSPICE USE WERE SUMMARIZED BY AN OUTSIDE VENDOR FOR THE
CCLTCI **/
DATA WORKF.HOSPICE_UTILIZATION;
SET ARCHIVE2.Ca199800perdatbetaenc
  (KEEP = MCDID ihsday1-ihsday36 mcdhosu1-mcdhosu36 mcrhs1-mcrhs36
      mcdhos1-mcdhos36 mcdhosx1-mcdhosx36);

RUN;

/** RETAIN ONLY INDIVIDUALS 65+ YEARS OLD **/
DATA WORKF.HOSPICE_UTILIZATION2;
MERGE
```


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```
WORKF.HOSPICE_UTILIZATION (IN=IN1)
  ARCHIVE2.Demogr_98_00_dual      (IN=IN2 KEEP = MCDID AGE65_1999 WHERE =
(AGE65_1999 EQ 1));
BY MCDID;
IF IN1 AND IN2;
ARRAY HOSPICE_USE(24)           HOSPICE_USE1-HOSPICE_USE24;
ARRAY MCD_PAYMENT(24)          mcdhos13      - mcdhos36;
ARRAY MCD_XPAYMENT(24)         mcdhosx13     - mcdhosx36;
ARRAY MCR_PAYMENT(24)          mcrhs13       - mcrhs36;

DO i = 1 TO 24;
  IF MCD_PAYMENT{i} > 0 OR
     MCD_XPAYMENT{i} > 0 OR
     MCR_PAYMENT{i} > 0
  THEN HOSPICE_USE{i} = 1;
  ELSE HOSPICE_USE{i} = 0;
END;

LABEL
HOSPICE_USE1 = 'Hospice use (1/1999)'
HOSPICE_USE2 = 'Hospice use (2/1999)'
HOSPICE_USE3 = 'Hospice use (3/1999)'
HOSPICE_USE4 = 'Hospice use (4/1999)'
HOSPICE_USE5 = 'Hospice use (5/1999)'
HOSPICE_USE6 = 'Hospice use (6/1999)'
HOSPICE_USE7 = 'Hospice use (7/1999)'
HOSPICE_USE8 = 'Hospice use (8/1999)'
HOSPICE_USE9 = 'Hospice use (9/1999)'
HOSPICE_USE10 = 'Hospice use (10/1999)'
HOSPICE_USE11 = 'Hospice use (11/1999)'
HOSPICE_USE12 = 'Hospice use (12/1999)'
HOSPICE_USE13 = 'Hospice use (1/2000)'
HOSPICE_USE14 = 'Hospice use (2/2000)'
HOSPICE_USE15 = 'Hospice use (3/2000)'
HOSPICE_USE16 = 'Hospice use (4/2000)'
HOSPICE_USE17 = 'Hospice use (5/2000)'
HOSPICE_USE18 = 'Hospice use (6/2000)'
HOSPICE_USE19 = 'Hospice use (7/2000)'
HOSPICE_USE20 = 'Hospice use (8/2000)'
HOSPICE_USE21 = 'Hospice use (9/2000)'
HOSPICE_USE22 = 'Hospice use (10/2000)'
HOSPICE_USE23 = 'Hospice use (11/2000)'
HOSPICE_USE24 = 'Hospice use (12/2000)'
;
KEEP MCDID HOSPICE_USE1--HOSPICE_USE24;
RUN;

/** COMBINE THE MDS AND CLAIMS EXCLUSION FILES **/
DATA ALL_EXCLUSIONS (COMPRESS=YES);
MERGE
  WORKF.MDS_SNF_EXCLUSIONS (IN=IN1)
  WORKF.HOSPICE_UTILIZATION2 (IN=IN2);
BY MCDID;

ARRAY HOSPICE_USE(24)           HOSPICE_USE1-HOSPICE_USE24;
```

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```
DO i = 1 TO 24;
  IF HOSPICE_USE{i} EQ 1
    THEN HOSPICE_CLAIM = 1;
END;

IF MDS_COGS_MAX GE 5
THEN ADVANCED_DEMENTIA = 1;
ELSE ADVANCED_DEMENTIA = 0;

IF DATE_1ST_HOSPICE NE .
THEN HOSPICE = 1;
ELSE HOSPICE = 0;

IF DATE_1ST_ESD NE .
THEN ESD = 1;
ELSE ESD = 0;

IF ESD EQ 1 OR
HOSPICE EQ 1
THEN ESD_OR_HOSPICE = 1;
ELSE ESD_OR_HOSPICE = 0;

IF ESD_OR_HOSPICE EQ 1 OR
HOSPICE_CLAIM EQ 1
THEN ANY_POOR_PROG = 1;
ELSE ANY_POOR_PROG = 0;

LABEL
  ADVANCED_DEMENTIA = 'MDS COGS >= 5'
  HOSPICE = 'Hospice use reported (MDS)'
  HOSPICE_CLAIM = 'Hospice use reported (Claims)'
  ESD = 'End Stage Disease (MDS)'
  ESD_OR_HOSPICE = 'End Stage Disease or Hospice use (MDS)'
  ANY_POOR_PROG = 'End Stage Disease (MDS) or Hospice use (MDS or
Claims)'
;
DROP i HOSPICE_USE1-HOSPICE_USE24;
RUN;

/**
TO IMPLEMENT THE EXCLUSIONS, THE PATIENT QIS ARE SET TO MISSING - THE IF
PORTIONS DO NOT TRIGGER
AND THE THEN PORTIONS ARE NOT MEASURED.
**/

DATA UI_QIS_WITH_EXCLUSIONS;
MERGE
  UI_QIS (IN=IN1)
  ALL_EXCLUSIONS (IN=IN2);
BY MCDID;

ARRAY UI_QI(2) NHSV_21_6A NHSV_21_6B;

IF ANY_POOR_PROG
THEN DO i = 1 TO 6;
  UI_QI{i} = .;
END;
```

NH UI 11 Reference Document

```
END;  
  
DROP i;  
RUN;
```

NATIONAL QUALITY FORUM
National Voluntary Consensus Standards for Nursing Homes 2010

Measure Number/Title: NH-004-10: Patient Fall Rate

Description: All documented falls, with or without injury, experienced by patients on an eligible unit in a calendar quarter.

Numerator Statement: Total number of patient falls (with or without injury to the patient and whether or not assisted by a staff member) by Unit during the month X 1000.

Denominator Statement: Patient days by unit during the calendar month

Level of Analysis: Clinicians: Group

Data Source: Electronic clinical data, electronic Health/Medical Record, paper medical record/flowsheet, Management data, special or unique data

Measure developer: American Nurses Association

Status: Not Recommended for Endorsement

Attachments: None

NATIONAL QUALITY FORUM

Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

- C = Completely (unquestionably demonstrated to meet the criterion)
- P = Partially (demonstrated to partially meet the criterion)
- M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
- N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
- NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) NQF Review #: NH-004-10	NQF Project: Nursing Homes 2010
MEASURE DESCRIPTIVE INFORMATION	
De.1 Measure Title: Patient Fall Rate	
De.2 Brief description of measure: All documented falls, with or without injury, experienced by patients on an eligible unit in a calendar quarter.	
1.1-2 Type of Measure: Outcome	
De.3 If included in a composite or paired with another measure, please identify composite or paired measure	
De.4 National Priority Partners Priority Area: Safety	
De.5 IOM Quality Domain: Safety, Patient-centered	
De.6 Consumer Care Need:	

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff A Y <input type="checkbox"/> N <input type="checkbox"/> B Y <input type="checkbox"/>
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i>	
A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Indicate if Proprietary Measure (as defined in measure steward agreement): Proprietary measure A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission A.4 Measure Steward Agreement attached: NQF Agreement 121409-634018532015573689.pdf	
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least	

every 3 years. Yes, information provided in contact section	N <input type="checkbox"/>
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ► Purpose: Public reporting, Internal quality improvement	C Y <input type="checkbox"/> N <input type="checkbox"/>
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1 Testing: No, testing will be completed within 24 months D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes	D Y <input type="checkbox"/> N <input type="checkbox"/>
(for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (if submission returned):	Met Y <input type="checkbox"/> N <input type="checkbox"/>
Staff Notes to Reviewers (issues or questions regarding any criteria): Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. <i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.</i> (evaluation criteria) 1a. High Impact _____	Eval Ratin g
(for NQF staff use) Specific NPP goal:	
1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Patient/societal consequences of poor quality, High resource use, Severity of illness 1a.2 1a.3 Summary of Evidence of High Impact: Each year, an average nursing home with 100 beds reports 100 to 200 falls. (1) About 1,800 older adults living in nursing homes die each year from fall-related injuries. Those who experience non-fatal falls can suffer injuries, have difficulty getting around and have a reduced quality of life.(2) In 2003, 1.5 million people 65 and older lived in nursing homes.(3) If current rates continue, by 2030 this number will rise to about 3 million.(4) About 5% of adults 65 and older live in nursing homes, but nursing home residents account for about 20% of deaths from falls in this age group.(1) Each year, a typical nursing home with 100 beds reports 100 to 200 falls. Many falls go unreported.(1) As many as 3 out of 4 nursing home residents fall each year.(2) That's twice the rate of falls for older adults living in the community. Patients often fall more than once. The average is 2.6 falls per person per year.(5) About 35% of fall injuries occur among residents who cannot walk.(6) About 1,800 people living in nursing homes die each year from falls. (7) About 10% to 20% of nursing home falls cause serious injuries; 2% to 6% cause fractures.(7) Falls result in disability, functional decline and reduced quality of life. Fear of falling can cause further loss of function, depression, feelings of helplessness, and social isolation.(2)	1a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

Comment [KP1]: 1a. The measure focus addresses:
 • a specific national health goal/priority identified by NQF's National Priorities Partners; OR
 • a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).

<p>Falling can be a sign of other health problems. People in nursing homes are generally more frail than older adults living in the community. They are generally older, have more chronic conditions, and have difficulty walking. They also tend to have problems with thinking or memory, to have difficulty with activities of daily living, and to need help getting around or taking care of themselves. (8) All of these factors are linked to falling. (9)</p> <p>Muscle weakness and walking or gait problems are the most common causes of falls among nursing home residents. These problems account for about 24% of the falls in nursing homes. (2) Environmental hazards in nursing homes cause 16% to 27% of falls among residents. (7, 2) Such hazards include wet floors, poor lighting, incorrect bed height, and improperly fitted or maintained wheelchairs. (2, 10) Medications can increase the risk of falls and fall-related injuries. Drugs that affect the central nervous system, such as sedatives and anti-anxiety drugs, are of particular concern. (11, 12) Other causes of falls include difficulty in moving from one place to another (for example, from the bed to a chair), poor foot care, poorly fitting shoes, and improper or incorrect use of walking aids. (10, 13)</p> <p>1a.4 Citations for Evidence of High Impact: 1. Rubenstein LZ. Preventing falls in the nursing home. Journal of the American Medical Association 1997;278(7):595-6. 2. Rubenstein LZ, Josephson KR, Robbins AS. Falls in the nursing home. Annals of Internal Medicine 1994;121:442-51. 3. National Center for Health Statistics. Health, United States, 2005. With Chartbook on Trends in the Health of Americans. Hyattsville (MD): National Center for Health Statistics; 2005. 4. Sahyoun NR, Pratt LA, Lentzner H, Dey A, Robinson KN. The changing profile of nursing home residents: 1985-1997. Aging Trends; No. 4. Hyattsville (MD): National Center for Health Statistics; 2001. 5. Rubenstein LZ, Robbins AS, Josephson KR, Schulman BL, Osterweil D. The value of assessing falls in an elderly population. A randomized clinical trial. Annals of Internal Medicine 1990;113(4):308-16. 6. Thapa PB, Brockman KG, Gideon P, Fought RL, Ray WA. Injurious falls in nonambulatory nursing home residents: a comparative study of circumstances, incidence and risk factors. Journal of the American Geriatrics Society 1996;44:273-8. 7. Rubenstein LZ, Robbins AS, Schulman BL, Rosado J, Osterweil D, Josephson KR. Falls and instability in the elderly. Journal of the American Geriatrics Society 1988;36:266-78. 8. Bedsine RW, Rubenstein LZ, Snyder L, editors. Medical care of the nursing home resident. Philadelphia (PA): American College of Physicians; 1996. 9. Ejaz FK, Jones JA, Rose MS. Falls among nursing home residents: an examination of incident reports before and after restraint reduction programs. Journal of the American Geriatrics Society 1994;42(9):960-4. 10. Ray WA, Taylor JA, Meador KG, Thapa PB, Brown AK, Kajihara HK, et al. A randomized trial of consultation service to reduce falls in nursing homes. Journal of the American Medical Association 1997;278(7):557-62. 11. Mustard CA, Mayer T. Case-control study of exposure to medication and the risk of injurious falls requiring hospitalization among nursing home residents. American Journal of Epidemiology 1997;145:738-45. 12. Ray WA, Thapa PB, Gideon P. Benzodiazepenes and the risk of falls in nursing home residents. Journal of the American Geriatrics Society 2000;48(6):682-5. 13. Tinetti ME. Factors associated with serious injury during falls by ambulatory nursing home residents. Journal of the American Geriatrics Society 1987;35:644-8.</p>	
<p>1b. Opportunity for Improvement</p> <p>1b.1 Benefits (improvements in quality) envisioned by use of this measure: Comparing fall rates among different institutions is difficult because of varying fall definitions, methods to report data and differences in settings and patient populations, and the lack of risk adjustment. The most reliable and useful approach for any organization is an examination of its own quality indicator data over time -- with the ultimate goal of reducing and eliminating all preventable falls. Endorsement of the proposed measure will allow facilities to gather data in a standardized manner.</p> <p>1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers: There were 220 falls during the 6-month period covered by one study. Most falls (66%) occurred in the resident's room and almost half (48%) resulted in an injury. Falls during the evening were likely to result in a more serious injury than daytime falls (P = .03). A statistically significant higher percentage of falls (27%) occurred between 4 PM and 8 PM (compared with expected number in a 4-hour period, P < .001). Among the</p>	<p>1b</p> <p><input type="checkbox"/> C</p> <p><input type="checkbox"/> P</p> <p><input type="checkbox"/> M</p> <p><input type="checkbox"/> N</p>

Comment [KP2]: 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

<p>3 nursing shifts, the lowest percentage of falls occurred during the 11 pm to 7 am night shift (16%).(1)</p> <p>1b.3 Citations for data on performance gap: 1. Falls in the Nursing Home Setting: Does Time Matter? Paula Lester, Mahenaaz Haq, Amruta Vadnerkar, Marty Feuerman. Journal of the American Medical Directors Association - November 2008 (Vol. 9, Issue 9, Pages 684-686, DOI: 10.1016/j.jamda.2008.06.007).</p> <p>1b.4 Summary of Data on disparities by population group: Nursing homes with high proportions of Medicaid patients and very limited resources constitute the lower tier of the nation's two-tiered nursing home system. Researchers used three data sources - the On-Line Survey Certification and Reporting (OSCAR) of nursing home data, the Minimum Data Set (MDS) of resident data and 2000 county-level census data - to investigate the implications of the two-tiered system for the care of long-term nursing home patients. The researchers classified 13 percent of nursing homes as lower tier, defined as those with 85 percent or more Medicaid patients, less than 10 percent private patients and less than eight percent Medicare patients. Compared with upper-tier facilities, lower-tier homes had significantly fewer registered nurses per resident and fewer administrators and physician extenders (nurse practitioners and physician assistants). They had significantly more health-related deficiencies and performed worse on three of four quality measures studied, with better performance on the fourth, pain control, potentially the result of underassessment of pain levels. The lower-tier facilities were significantly more likely to serve residents with psychiatric diagnoses or mental retardation. Compared with whites, African Americans were four times more likely to live in a lower tier facility.1</p> <p>1b.5 Citations for data on Disparities: 1. Driven to Tiers: Socioeconomic and Racial Disparities in the Quality of Nursing Home Care. Mor V, Zinn J, Angelelli J, Teno JM and Miller SC The Milbank Quarterly, 82(2), pp.227-256. June 2004.</p>	
<p>1c. Outcome or Evidence to Support Measure Focus</p> <p>1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population): Outcome</p> <p>1c.2-3. Type of Evidence:</p> <p>1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome): Not Available</p> <p>1c.5 Rating of strength/quality of evidence (also provide narrative description of the rating and by whom): Not Available</p> <p>1c.6 Method for rating evidence: Not Available</p> <p>1c.7 Summary of Controversy/Contradictory Evidence: Not Available</p> <p>1c.8 Citations for Evidence (other than guidelines): Not Available</p> <p>1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): Multifactorial screening and intervention program for all residents admitted to long-term care facilities.</p> <p>1c.10 Clinical Practice Guideline Citation: Norris MA, Walton RE, Patterson CJS, Feightner JW. Prevention of falls in long-term care facilities. London (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2005. 4 p. [17 references]</p> <p>1c.11 National Guideline Clearinghouse or other URL: http://www.guideline.gov/summary/summary.aspx?doc_id=8011&nbr=004498&string=falls+AND+nursing+AND+home#s23</p> <p>1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):</p>	<p>1c <input type="checkbox"/> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N</p>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable

Comment [k4]: 1c. The measure focus is:
 •an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
 OR
 •if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 oIntermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 oProcess - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
 if the measure focus is on one step in a multi-step care process, it measures the step (... [1])

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a (... [2])

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system
<http://www.ahrq.gov/clinic/uspstf07/methods/benefit.htm>). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.

Comment [k7]: USPSTF grading system
<http://www.ahrq.gov/clinic/uspstf/grades.htm>:
 A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient.
 D - The USPSTF recommends against the (... [3])

<p>B: The CTF concludes that there is fair evidence to recommend the clinical preventive action. Level of Evidence: 1, fair (2 randomized controlled trials [RCTs])</p> <p>1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF): The Canadian Task Force on Preventive Health Care (CTFPHC) System closely approximates that of USPSTF</p> <p>1c.14 Rationale for using this guideline over others: Currency and ready availability via www.guideline.gov</p> <p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?</p>	1
<p>Steering Committee: Was the threshold criterion, Importance to Measure and Report, met? Rationale:</p>	1 Y <input type="checkbox"/> N <input type="checkbox"/>
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
<p>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)</p>	Eval Ratin g
2a. MEASURE SPECIFICATIONS	
<p>S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL:</p> <p>2a. Precisely Specified</p>	
<p>2a.1 Numerator Statement (Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome): Total number of patient falls (with or without injury to the patient and whether or not assisted by a staff member) by Unit during the month X 1000.</p> <p>2a.2 Numerator Time Window (The time period in which cases are eligible for inclusion in the numerator): Calendar Month</p> <p>2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions): Fall Definition: A patient fall is an unplanned descent to the floor (or extension of the floor, e.g., trash can or other equipment) with or without injury to the patient, and occurs on an eligible reporting nursing unit. All types of falls are to be included whether they result from physiological reasons (fainting) or environmental reasons (slippery floor). Include assisted falls - when a staff member attempts to minimize the impact of the fall.</p> <p>Included Populations:</p> <ul style="list-style-type: none"> • Patient falls occurring while on an eligible reporting unit • Assisted falls • Repeat falls (A repeat fall is a second or subsequent fall by a resident in a long term care facility within the same calendar month) <p>Excluded Populations: Falls by:</p> <ul style="list-style-type: none"> •Visitors •Students •Staff members •Falls by patients from eligible reporting unit, however patient was not on unit at time of fall (e.g., 	2a- specs C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NOF's Health Information Technology Expert Panel (HITEP).

patients falls in radiology department)
 •Falls on other unit types (e.g., pediatric, psychiatric, obstetrical, etc.)

Data Elements: Collected at a patient level

- Month
- Year
- Age
- Gender
- Event Type (fall, assisted fall, repeat fall)
- Type of Unit
- Fall Risk Assessment
- Fall Risk
- Fall Prevention Protocol

2a.4 Denominator Statement (*Brief, text description of the denominator - target population being measured*):

Patient days by unit during the calendar month

2a.5 Target population gender: Female, Male

2a.6 Target population age range: All

2a.7 Denominator Time Window (*The time period in which cases are eligible for inclusion in the denominator*):

Calendar Month

2a.8 Denominator Details (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions*):

Included Populations:

- Inpatients, short stay patients, observation patients who receive care on eligible units for all or part of a day.
- Any age patient on an eligible reporting unit is included in the patient day count.

Four (4) Patient Days reporting methods are recognized:

•Method 1-Midnight Census

This is adequate for units that have all in-patient admissions. It is the least accurate method for units that have both in-patient and short stay patients. The daily number should be summed for every day in the month.

•Method 2-Midnight Census + Patient Days from Actual Hours for Short Stay Patients

This is an accurate method for units that have both in-patients and short stay patients. The short stay "days" should be reported separately from midnight census and will be summed to obtain patient days. The total daily hours for short stay patients should be summed for the month and divided by 24.

•Method 3-from Average Hours for Short Stay Patients

This method has been eliminated from the list of acceptable reporting methods.

•Method 4-Patient Days from Actual Hours

This is the most accurate method. An increasing number of facilities have accounting systems that track the actual time spent in the facility by each patient. Sum actual hours for all patients, whether in-patient or short stay, and divide by 24.

•Method 5-Patient Days from Multiple Census Reports

Some facilities collect censuses multiple times per day (e.g., every 4 hours or each shift). This method is more accurate than the Midnight Census, but not as accurate as Midnight Census + Actual Short Stay hours, or as Actual Patient Hours. A sum of the daily average censuses can be calculated to determine patient days

<p>for the month on the unit.</p> <p>For all patient day reporting methods, it is recommended that facilities consistently use the same method for a reporting unit over time. However, units with short stay patients should transition either to Method 2 or Method 4 when it becomes feasible.</p> <p>Data Elements:</p> <ul style="list-style-type: none"> • Month • Year • Patient Days Reporting method which includes midnight census and short stay patient days • Type of Unit
<p>2a.9 Denominator Exclusions (Brief text description of exclusions from the target population): Excluded Populations: Other unit types (e.g., pediatric, psychiatric, obstetrical, etc.)</p> <p>2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions): Not Available</p>
<p>2a.11 Stratification Details/Variables (All information required to stratify the measure including the stratification variables, all codes, logic, and definitions): Type of unit</p>
<p>2a.12-13 Risk Adjustment Type: No risk adjustment necessary</p> <p>2a.14 Risk Adjustment Methodology/Variables (List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method): Not Available</p> <p>2a.15-17 Detailed risk model available Web page URL or attachment:</p>
<p>2a.18-19 Type of Score: Ratio</p> <p>2a.20 Interpretation of Score:</p> <p>2a.21 Calculation Algorithm (Describe the calculation of the measure as a flowchart or series of steps): Rate calculated for a quarter, as the average of the three monthly rates. The monthly rate is defined to be the number of falls per month X 1000 divided by patient days per month. This approach allows for units to have missing data for one or two months and still receive a quarterly rate.</p> <p>The numerator and denominator statements provide the calculation details for the monthly rates that are the basis for the quarterly rates.</p> <p>Fall rates are produced for each eligible unit reporting data.</p> <p>Unit type rates may be calculated as the average fall rates for all units in the facility of the same type for the same quarter.</p>
<p>2a.22 Describe the method for discriminating performance (e.g., significance testing): Significance testing is not recommended for evaluating performance. Units should compare themselves against the median or other percentile rankings provided from national convenience samples.</p>
<p>2a.23 Sampling (Survey) Methodology If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate): Not Available</p>
<p>2a.24 Data Source (Check the source(s) for which the measure is specified and tested) Electronic clinical data, Electronic Health/Medical Record, Paper medical record/flow-sheet, Management data, Special or unique data</p> <p>2a.25 Data source/data collection instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): National Database of Nursing Quality Indicators®</p>

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

<p>2a.26-28 Data source/data collection instrument reference web page URL or attachment: URL www.nursingquality.org</p> <p>2a.29-31 Data dictionary/code table web page URL or attachment: URL www.nursingquality.org</p> <p>2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested) Clinicians: Group</p> <p>2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested) Hospice, Long term acute care hospital, Nursing home (NH) /Skilled Nursing Facility (SNF), Rehabilitation Facility</p> <p>2a.38-41 Clinical Services (Healthcare services being measured, check all that apply) Hospice/ Palliative Care, Clinicians: Pharmacist, Clinicians: Nurses</p>	
TESTING/ANALYSIS	
<p>2b. Reliability testing</p> <p>2b.1 Data/sample (description of data/sample and size): The patient fall measure (in the HOSPITAL setting) is reviewed semi-annually, incorporating input from NDNQI staff who answer hospital questions regarding falls and patient days data collection, review of publications on fall measurement, and reports from staff who clean data and analyze data provided by hospitals. As needed, definitions, data collection guidelines and web-based indicator tutorials are updated, and conference calls are held with hospitals on changes to definitions and data collection protocols. Reliability testing of the falls indicator (in the HOSPITAL setting) occurred in 2009 and final results are pending.</p> <p>2b.2 Analytic Method (type of reliability & rationale, method for testing): Pending</p> <p>2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted): Pending</p>	<p>2b</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>2c. Validity testing</p> <p>2c.1 Data/sample (description of data/sample and size): Pending</p> <p>2c.2 Analytic Method (type of validity & rationale, method for testing): Face validity is predicated on testing of the initial measure (in the HOSPITAL setting).</p> <p>2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): Pending</p>	<p>2c</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>2d. Exclusions Justified</p> <p>2d.1 Summary of Evidence supporting exclusion(s): All residents are at risk for falls, including those who are immobile who may fall, or be dropped, during transfers</p> <p>2d.2 Citations for Evidence: Not Available</p> <p>2d.3 Data/sample (description of data/sample and size): Not Available</p> <p>2d.4 Analytic Method (type analysis & rationale): Not Available</p>	<p>2d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>

Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

Comment [k11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

Comment [KP12]: 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

Comment [k13]: 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure focus is the most important aspect of quality for the specific topic.

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
- AND
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
- AND
- precisely defined and specified:
 - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
 - if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category ... [4])

Comment [k15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): Not Available	
2e. Risk Adjustment for Outcomes/ Resource Use Measures	
2e.1 Data/sample (description of data/sample and size): Not Available	
2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): Not Available	2e C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2e.3 Testing Results (risk model performance metrics): Not Available	
2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: Not Available	
2f. Identification of Meaningful Differences in Performance	
2f.1 Data/sample from Testing or Current Use (description of data/sample and size): Not Available	
2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale): Not Available	2f C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance): Not Available	
2g. Comparability of Multiple Data Sources/Methods	
2g.1 Data/sample (description of data/sample and size): Not Available	
2g.2 Analytic Method (type of analysis & rationale): Not Available	2g C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): Not Available	
2h. Disparities in Care	
2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): Not Available	2h C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: Not Available	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Scientific Acceptability of Measure Properties</i> ?	2
Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i> , met? Rationale:	2 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
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)	Eval Ratin g

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated:
 •an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care; OR rationale/data support no risk adjustment.

Comment [k17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [k19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender); OR rationale/data justifies why stratification is not necessary or not feasible.

<p>3a. Meaningful, Understandable, and Useful Information</p> <p>3a.1 Current Use: In use</p> <p>3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years): On its Quality Check® Web site, The Joint Commission reports data on nursing homes that "Reduce the risk of resident harm resulting from falls."</p> <p>3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years): There are a number of quality improvement initiatives directed at fall prevention. As an example, the Falls Management Program (FMP) developed by the Emory Center for Health in Aging in Atlanta, GA (that represents 13 years (1993-2006) of fieldwork) is an interdisciplinary, multifaceted approach to reducing fall risk that includes systematic screening, assessment, individualized care planning, resident monitoring, and the elimination of environmental safety hazards. The FMP is initiated by a self-assessment process that assists nursing homes in identifying areas that need improvement so that staff can tailor implementation to their own facility's needs. The FMP incorporates education on best practices and uses several QI tools designed to assist nursing homes with program implementation. Core components of the program include administrative and clinical leadership, interdisciplinary teamwork using QI methodology, support by advance practice nurses, and an 8-step fall response system to facilitate the comprehensive investigation and documentation of falls, primary care provider involvement, and development of individualized fall risk reduction strategies.</p> <p>Testing of Interpretability (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)</p> <p>3a.4 Data/sample (description of data/sample and size): Not Available</p> <p>3a.5 Methods (e.g., focus group, survey, QI project): Not Available</p> <p>3a.6 Results (qualitative and/or quantitative results and conclusions): Not Available</p>	<p>3a</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>3b/3c. Relation to other NQF-endorsed measures</p> <p>3b.1 NQF # and Title of similar or related measures: 0141:Patient Fall Rate and 0266: Patient Fall</p> <p>(for NQF staff use) Notes on similar/related endorsed or submitted measures:</p>	
<p>3b. Harmonization</p> <p>If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population):</p> <p>3b.2 Are the measure specifications harmonized? If not, why? 0141 is specified for the hospital setting; 0266 for ambulatory surgery. The proposed measure is applicable to long term care.</p>	<p>3b</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>3c. Distinctive or Additive Value</p> <p>3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures: Amplifies the settings in which the measure may be used</p> <p>5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality: This measure is an adaptation of 0141:Patient Fall Rate for use in the nursing home setting.</p>	<p>3c</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?</p>	<p>3</p>

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

Comment [KP23]: 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

Comment [k24]: 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., influenza immunization of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for patients with diabetes), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

Comment [KP25]: 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).

Steering Committee: Overall, to what extent was the criterion, <i>Usability</i> , met? Rationale:		3 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4. FEASIBILITY		
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)		Eval Ratin g
4a. Data Generated as a Byproduct of Care Processes		4a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4a.1-2 How are the data elements that are needed to compute measure scores generated? Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition)		
4b. Electronic Sources		
4b.1 Are all the data elements available electronically? (<i>elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims</i>) No		
4b.2 If not, specify the near-term path to achieve electronic capture by most providers. Fall data currently come from incident reports, many, but not all, of which are electronic. To advance the electronic collection of falls data, it will be necessary to standardize the collateral information on incident reports or electronic health records, including fall injury and injury level and the determination of whether a fall was assisted. There is little consensus across facilities using an appropriate fall risk assessment tool. Therefore, the electronic capture of risk status would follow development of consensus on an appropriate risk assessment tool. After consensus is reached on the conceptual data elements, to advance data collection through electronic health records, clinically-based Yes/No data elements and those with a list of allowable values (e.g., '1', '2', '3') need to be broken down into the finite data elements that a manual abstractor evaluates to determine the correct allowable value for the patient. These finite data elements will be at the patient care level and, therefore, can be collected within an EHR as a by-product of care. These new clinically-based finite data elements and the existing date/time and claims-based data elements will be reviewed against HITSP standards to determine if the data is currently available within an EHR Record. For those that are available, the specific location within the EHR Record and any required policies (e.g., prescriptions provided to a patient at discharge are included in the discharge summary record) will be included in the data element's definition. If the required data elements are not available, the appropriate Standards Organization will be contacted to begin the process of having this data incorporated into the standards for HITSP approval. In addition, non-date and time data elements will be evaluated against HITSP approved vocabularies (e.g., SNOMED, Loinc, and RxNorm) to determine if the required vocabulary already exists. If approved vocabularies are not available, the National Library of Medicine will be contacted to start the process of developing new vocabulary. Once the vocabulary has been identified, data sets (value sets) will be created and linked to the appropriate data elements in the measure documentation. These data sets (values sets) will be created at the most finite level possible in order to ensure maximum reusability in multiple measures (across measure developers and across settings of care). Clinical data on falls will need to be combined electronically with patient day (denominator) data from patient census systems, all of which are electronic. To advance the accuracy of patient day data, it will be necessary to capture short stay patient hours in patient census systems. Currently, short stay patient hours frequently are captured manually.		4b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4c. Exclusions		4c

Comment [KP26]: 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

Comment [KP27]: 4b. The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

Comment [KP28]: 4c. Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

<p>4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No</p> <p>4c.2 If yes, provide justification.</p>	<p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences</p> <p>4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. A study by The Joint Commission (in the HOSPITAL setting) identified under reporting of assisted falls. They recommend that reporting formats be changed to separate assisted falls from unassisted falls. NDNQI finds that the provision of education and technical assistance support to HOSPITAL data collectors to be critical to the maintenance of data quality and has created automated error reports to support monitoring the quality of data submission.</p>	<p>4d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>4e. Data Collection Strategy/Implementation</p> <p>4e.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/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: Not Available</p> <p>4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures): Relatively low cost as the data are obtained from facility records.</p> <p>4e.3 Evidence for costs: Not Available</p> <p>4e.4 Business case documentation: According to the Centers for Disease Control and Prevention "In 2005, 15,800 people 65 and older died from injuries related to unintentional falls; about 1.8 million people 65 and older were treated in emergency departments for nonfatal injuries from falls, and more than 433,000 of these patients were hospitalized (CDC 2005)."</p>	<p>4e</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Feasibility</i>?</p>	<p>4</p>
<p>Steering Committee: Overall, to what extent was the criterion, <i>Feasibility</i>, met? Rationale:</p>	<p>4</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>RECOMMENDATION</p>	
<p>(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.</p>	<p>Time-limited <input type="checkbox"/></p>
<p>Steering Committee: Do you recommend for endorsement? Comments:</p>	<p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>A <input type="checkbox"/></p>
<p>CONTACT INFORMATION</p>	
<p>Co.1 Measure Steward (Intellectual Property Owner) Co.1 <u>Organization</u> American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, Maryland, 20910-3492</p>	

Comment [KP29]: 4d. Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

Comment [KP30]: 4e. Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).

Co.2 Point of Contact

Isis, Montalvo, MBA, MS, RN, Isisi.Montalvo@ANA.org, 301-628-5047-

Measure Developer If different from Measure Steward

Co.3 Organization

American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, Maryland, 20910-3492

Co.4 Point of Contact

Isis, Montalvo, MBA, MS, RN, Isisi.Montalvo@ANA.org, 301-628-5047-

Co.5 Submitter If different from Measure Steward POC

Rita Munley, Gallagher, PhD, RN, Rita.Gallagher@ANA.org, 301-628-5062-, American Nurses Association

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

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development

Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations.

Describe the members' role in measure development.

In 1994, ANA launched the Patient Safety and Quality Initiative (ANA, 1995). A series of pilot studies across the United States were funded by ANA to evaluate linkages between nurse staffing and quality of care. Multiple quality indicators were identified initially. Evidence of the effectiveness of these indicators was used to adopt a final set of 10 nursing-sensitive indicators to use in evaluating patient care quality.

In 1998, the National Database of Nursing Quality Indicators was established by ANA so that ANA could continue to collect and build on data obtained from earlier studies and further develop nursing's body of knowledge related to factors which influence the quality of nursing care. Linkages between nurse staffing and patient outcomes had already been identified, but continued data collection and reporting was necessary to evaluate nursing care quality at the unit level and thus fulfill nursing's commitment to evaluating and improving patient care.

In 2007-2008, ANA participated in an expert advisory panel that evaluated the implementation of multiple nursing measures. The Robert Wood Johnson Foundation (RWJF) funded the study with the Joint Commission took the lead role in the development of uniform, standardized technical specifications for the measure set. The advisory panel consisted of:

- Marilyn P. Chow, RN, DNSc, FAAN (Chair)
Vice President, Patient Care Services
Kaiser Permanente
Oakland, CA
- Nancy E. Donaldson RN, DNSc, FAAN
Director, Center for Research & Innovation in Patient Care, Department of Physiological Nursing
UCSF School of Nursing
San Francisco, CA
- Marybeth Farquhar, PhD, RN, MSN (Liaison)
Managing Director, Performance Measures
National Quality Forum
Washington, DC
- Lillie S. Gelinas RN, MSN, FAAN
Vice President and Chief Nursing Officer
VHA, Inc.
Irving, TX
- Ann Hendrich, RN, MSN, FAAN
Vice President, Clinical Excellence Operations Ascension Health
St. Louis, Mo

- Teresa C. Horan, MPH
Captain, US Public Health Service, Leader Performance Measurement Team, Healthcare Outcomes Branch, Division of Healthcare Quality Promotion
Centers for Disease Control and Prevention
Atlanta, GA
- Gail Keenan, RN, PHD
Associate Professor of Nursing and Director of the Nursing Informatics Initiative, College of Nursing
University of Illinois at Chicago
Chicago, IL
- Ellen T. Kurtzman, MPH, RN
Assistant Research Professor, Department of Nursing Education, School of Medicine and Health Sciences
The George Washington University
Washington, DC
- Eileen Lake, PhD, RN
Assistant Professor, School of Nursing
University of Pennsylvania
Philadelphia, Pennsylvania
- Jack Needleman, PhD
Associate Professor, Department of Health Services
UCLA School of Public Health
Los Angeles, CA
- Mamatha S. Pancholi
Senior Social Science Research Analyst
Center for Delivery, Organization, and Markets
Agency for Healthcare Research and Quality
Rockville, Maryland
- Michael T. Rapp, MD, JD
Director, Quality Measurement and Health Assessment Group
Centers for Medicare and Medicaid Services
Baltimore, MD
- Cathy Rick, RN, CNA, FACHE
Chief Nursing Officer, Office of Nursing Services
Department of Veterans Affairs
Washington, DC
- Mary Jean Schumann, MSN, RN, MBA, CPNP
Director, Department of Nursing Practice & Policy
American Nurses Association
Silver Spring, MD

Ad.2 If adapted, provide name of original measure: Patient Fall Rate (in the inpatient setting)

NB: The patient fall measure is reviewed semi-annually, incorporating input from NDNQI staff who answer hospital questions regarding falls and patient days data collection, review of publications on fall measurement, and reports from staff who clean data and analyze data provided by hospitals. As needed, definitions, data collection guidelines and web-based indicator tutorials are updated, and conference calls are held with hospitals on changes to definitions and data collection protocols. Reliability testing in the HOSPITAL setting of the falls indicator occurred in 2009.

Ad.3-5 If adapted, provide original specifications URL or attachment www.nursingquality.org

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.6 Year the measure was first released: 1998

Ad.7 Month and Year of most recent revision: 02, 2009

Ad.8 What is your frequency for review/update of this measure? Reliability testing scheduled within 24 months

Ad.9 When is the next scheduled review/update for this measure?

Ad.10 Copyright statement/disclaimers: The American Nurses Association (ANA) National Database of Nursing Quality Indicators® (“The NDNQI® Database”) is a repository of data related to health care facilities, including data collected from NDNQI® Participating Facilities with respect to the ANA Quality Measures and Complex Measures. “NDNQI® Participating Facility” shall mean any health care facility that has contracted to receive services from ANA, ANA’s National Center for Nursing Quality (NCNQ®) or ANA’s subcontractors that are related to the NDNQI® Database. The NDNQI® Database shall not be considered a Measure, and no aspect of the development of the NDNQI® Database, including the collection of data from NDNQI® Participating Facilities shall be considered a non-proprietary Measure. Nothing in the foregoing Agreement with Measure Stewards, these Exhibits and the Measure Submission Forms shall implicate or diminish ANA’s intellectual property rights in the NDNQI® Database, including but not limited to data and benchmarks. Similarly, nothing in the foregoing Agreement with Measure Stewards, these Exhibits and the Measure Submission Forms shall implicate or diminish ANA’s intellectual property rights with respect to refinements and improvements to the Measures and Complex Measures, or the application of the Measures and Complex Measures, that are related to the NDNQI® Database, including but not limited to the NDNQI® guidelines and tutorials, stratification details, definitions and data collection methodologies. ANA expressly reserves all copyright, patent and trademark rights with respect to its Measures, Complex Measures and related materials.

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Ad.11 -13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): 04/06/2010

1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;

OR

- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 - o Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 - o Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
 - o Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
 - o Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
 - o Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
 - o Efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

USPSTF grading system <http://www.ahrq.gov/clinic/uspstf/grades.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
- AND
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
- AND
- precisely defined and specified:
 - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);

if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately,

NATIONAL QUALITY FORUM
National Voluntary Consensus Standards for Nursing Homes 2010

Measure Number/Title: NH-005-10: Falls with Injury

Description: All documented patient falls with an injury level of minor (2) or greater.

Numerator Statement: Total number of patient falls of injury level minor or greater (whether or not assisted by a staff member) during the month X 1000. Reliable collection of assisted fall data is dependent both on adequate training of data collection/records abstraction staff.

Denominator Statement: Patient days during the calendar month.

Level of Analysis: Facility/Agency

Data Source: Electronic clinical data, electronic Health/Medical Record, paper medical record/flowsheet, Management data, special or unique data

Measure developer: American Nurses Association

Status: Not Recommended for Endorsement

Attachments: None

NATIONAL QUALITY FORUM

Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

- C = Completely (unquestionably demonstrated to meet the criterion)
- P = Partially (demonstrated to partially meet the criterion)
- M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
- N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
- NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) NQF Review #: NH-005-10 NQF Project: Nursing Homes 2010	
MEASURE DESCRIPTIVE INFORMATION	
De.1 Measure Title:	Falls with Injury
De.2 Brief description of measure:	All documented patient falls with an injury level of minor (2) or greater.
1.1-2 Type of Measure:	Outcome
De.3 If included in a composite or paired with another measure, please identify composite or paired measure	
De.4 National Priority Partners Priority Area:	Safety
De.5 IOM Quality Domain:	Patient-centered, Safety
De.6 Consumer Care Need:	

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
<p>A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i></p> <p>A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes</p> <p>A.2 Indicate if Proprietary Measure (as defined in measure steward agreement): Proprietary measure</p> <p>A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission</p> <p>A.4 Measure Steward Agreement attached: NQF Agreement 121409-634018533069004447.pdf</p>	A Y <input type="checkbox"/> N <input type="checkbox"/>
<p>B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section</p>	B Y <input type="checkbox"/> N <input type="checkbox"/>

C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ► Purpose: Public reporting, Internal quality improvement	C Y <input type="checkbox"/> N <input type="checkbox"/>
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1 Testing: No, testing will be completed within 24 months D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes	D Y <input type="checkbox"/> N <input type="checkbox"/>
(for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (if submission returned):	Met Y <input type="checkbox"/> N <input type="checkbox"/>
Staff Notes to Reviewers (issues or questions regarding any criteria):	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. <i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.</i> (evaluation criteria) 1a. High Impact	Eval Ratin g
(for NQF staff use) Specific NPP goal:	
1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, High resource use, Severity of illness, Patient/societal consequences of poor quality 1a.2 1a.3 Summary of Evidence of High Impact: Each year, an average nursing home with 100 beds reports 100 to 200 falls.1 About 1,800 older adults living in nursing homes die each year from fall-related injuries. Those who experience non-fatal falls can suffer injuries, have difficulty getting around and have a reduced quality of life.2 In 2003, 1.5 million people 65 and older lived in nursing homes.3 If current rates continue, by 2030 this number will rise to about 3 million.4 About 5% of adults 65 and older live in nursing homes, but nursing home residents account for about 20% of deaths from falls in this age group.1 Each year, a typical nursing home with 100 beds reports 100 to 200 falls. Many falls go unreported.1 As many as 3 out of 4 nursing home residents fall each year.2 That's twice the rate of falls for older adults living in the community. Patients often fall more than once. The average is 2.6 falls per person per year.5 About 35% of fall injuries occur among residents who cannot walk.6 About 1,800 people living in nursing homes die each year from falls.7 About 10% to 20% of nursing home falls cause serious injuries; 2% to 6% cause fractures.7 Falls result in disability, functional decline and reduced quality of life. Fear of falling can cause further loss of function, depression, feelings of helplessness, and social isolation.2 Falling can be a sign of other health problems. People in nursing homes are generally more frail than older adults living in the community. They are generally older, have more chronic conditions, and have difficulty	1a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

Comment [KP1]: 1a. The measure focus addresses:
 • a specific national health goal/priority identified by NQF's National Priorities Partners; OR
 • a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).

<p>walking. They also tend to have problems with thinking or memory, to have difficulty with activities of daily living, and to need help getting around or taking care of themselves.⁸ All of these factors are linked to falling.⁹</p> <p>Muscle weakness and walking or gait problems are the most common causes of falls among nursing home residents. These problems account for about 24% of the falls in nursing homes.² Environmental hazards in nursing homes cause 16% to 27% of falls among residents.^{7, 2} Such hazards include wet floors, poor lighting, incorrect bed height, and improperly fitted or maintained wheelchairs.^{2, 10} Medications can increase the risk of falls and fall-related injuries. Drugs that affect the central nervous system, such as sedatives and anti-anxiety drugs, are of particular concern.^{11, 12} Other causes of falls include difficulty in moving from one place to another (for example, from the bed to a chair), poor foot care, poorly fitting shoes, and improper or incorrect use of walking aids.^{10, 13}</p> <p>1a.4 Citations for Evidence of High Impact: ¹Rubenstein LZ. Preventing falls in the nursing home. Journal of the American Medical Association 1997;278(7):595-6. ²Rubenstein LZ, Josephson KR, Robbins AS. Falls in the nursing home. Annals of Internal Medicine 1994;121:442-51. ³National Center for Health Statistics. Health, United States, 2005. With Chartbook on Trends in the Health of Americans. Hyattsville (MD): National Center for Health Statistics; 2005. ⁴Sahyoun NR, Pratt LA, Lentzner H, Dey A, Robinson KN. The changing profile of nursing home residents: 1985-1997. Aging Trends; No. 4. Hyattsville (MD): National Center for Health Statistics; 2001. ⁵Rubenstein LZ, Robbins AS, Josephson KR, Schulman BL, Osterweil D. The value of assessing falls in an elderly population. A randomized clinical trial. Annals of Internal Medicine 1990;113(4):308-16. ⁶Thapa PB, Brockman KG, Gideon P, Fought RL, Ray WA. Injurious falls in nonambulatory nursing home residents: a comparative study of circumstances, incidence and risk factors. Journal of the American Geriatrics Society 1996;44:273-8. ⁷Rubenstein LZ, Robbins AS, Schulman BL, Rosado J, Osterweil D, Josephson KR. Falls and instability in the elderly. Journal of the American Geriatrics Society 1988;36:266-78. ⁸Bedsine RW, Rubenstein LZ, Snyder L, editors. Medical care of the nursing home resident. Philadelphia (PA): American College of Physicians; 1996. ⁹Ejaz FK, Jones JA, Rose MS. Falls among nursing home residents: an examination of incident reports before and after restraint reduction programs. Journal of the American Geriatrics Society 1994;42(9):960-4. ¹⁰Ray WA, Taylor JA, Meador KG, Thapa PB, Brown AK, Kajihara HK, et al. A randomized trial of consultation service to reduce falls in nursing homes. Journal of the American Medical Association 1997;278(7):557-62. ¹¹Mustard CA, Mayer T. Case-control study of exposure to medication and the risk of injurious falls requiring hospitalization among nursing home residents. American Journal of Epidemiology 1997;145:738-45. ¹²Ray WA, Thapa PB, Gideon P. Benzodiazepenes and the risk of falls in nursing home residents. Journal of the American Geriatrics Society 2000;48(6):682-5. ¹³Tinetti ME. Factors associated with serious injury during falls by ambulatory nursing home residents. Journal of the American Geriatrics Society 1987;35:644-8.</p>	
<p>1b. Opportunity for Improvement</p> <p>1b.1 Benefits (improvements in quality) envisioned by use of this measure: Comparing fall rates among different institutions is difficult because of varying fall definitions, methods to report data and differences in settings and patient populations, and the lack of risk adjustment. The most reliable and useful approach for any organization is an examination of its own quality indicator data over time -- with the ultimate goal of reducing and eliminating all preventable falls. Endorsement of the proposed measure will allow facilities to gather data in a standardized manner.</p> <p>1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers: There were 220 falls during the 6-month period covered by one study. Most falls (66%) occurred in the resident's room and almost half (48%) resulted in an injury. Falls during the evening were likely to result in a more serious injury than daytime falls (P = .03). A statistically significant higher percentage of falls (27%) occurred between 4 PM and 8 PM (compared with expected number in a 4-hour period, P < .001). Among the 3 nursing shifts, the lowest percentage of falls occurred during the 11 pm to 7 am night shift (16%).¹</p>	<p>1b <input type="checkbox"/> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N</p>

Comment [KP2]: 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

<p>1b.3 Citations for data on performance gap: 1 Falls in the Nursing Home Setting: Does Time Matter? Paula Lester, Mahenaaz Haq, Amruta Vadnerkar, Marty Feuerman. Journal of the American Medical Directors Association - November 2008 (Vol. 9, Issue 9, Pages 684-686, DOI: 10.1016/j.jamda.2008.06.007)</p> <p>1b.4 Summary of Data on disparities by population group: Nursing homes with high proportions of Medicaid patients and very limited resources constitute the lower tier of the nation's two-tiered nursing home system. Researchers used three data sources - the On-Line Survey Certification and Reporting (OSCAR) of nursing home data, the Minimum Data Set (MDS) of resident data and 2000 county-level census data - to investigate the implications of the two-tiered system for the care of long-term nursing home patients. The researchers classified 13 percent of nursing homes as lower tier, defined as those with 85 percent or more Medicaid patients, less than 10 percent private patients and less than eight percent Medicare patients. Compared with upper-tier facilities, lower-tier homes had significantly fewer registered nurses per resident and fewer administrators and physician extenders (nurse practitioners and physician assistants). They had significantly more health-related deficiencies and performed worse on three of four quality measures studied, with better performance on the fourth, pain control, potentially the result of underassessment of pain levels. The lower-tier facilities were significantly more likely to serve residents with psychiatric diagnoses or mental retardation. Compared with whites, African Americans were four times more likely to live in a lower tier facility.1</p> <p>1b.5 Citations for data on Disparities: 1 Driven to Tiers: Socioeconomic and Racial Disparities in the Quality of Nursing Home Care. Mor V, Zinn J, Angelelli J, Teno JM and Miller SC The Milbank Quarterly, 82(2), pp.227-256. June 2004.</p>	
<p>1c. Outcome or Evidence to Support Measure Focus</p> <p>1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population): Outcome</p> <p>1c.2-3. Type of Evidence:</p> <p>1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome): Not Available</p> <p>1c.5 Rating of strength/quality of evidence (also provide narrative description of the rating and by whom): Not Available</p> <p>1c.6 Method for rating evidence: Not Available</p> <p>1c.7 Summary of Controversy/Contradictory Evidence: Not Available</p> <p>1c.8 Citations for Evidence (other than guidelines): Not Available</p> <p>1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): Multifactorial screening and intervention program for all residents admitted to long-term care facilities.</p> <p>1c.10 Clinical Practice Guideline Citation: Norris MA, Walton RE, Patterson CJS, Feightner JW. Prevention of falls in long-term care facilities. London (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2005. 4 p. [17 references]</p> <p>1c.11 National Guideline Clearinghouse or other URL: http://www.guideline.gov/summary/summary.aspx?doc_id=8011&nbr=004498&string=falls+AND+nursing+AN D+home#s23</p> <p>1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom): B: The CTF concludes that there is fair evidence to recommend the clinical preventive action. Level of Evidence: 1, fair (2 randomized controlled trials [RCTs])</p>	<p>1c <input type="checkbox"/> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N</p>

Comment [k4]: 1c. The measure focus is:
 •an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
 OR
 •if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 oIntermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 oProcess - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
 if the measure focus is on one step in a multi-step care process, it measures the step (... [1])

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a (... [2])

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system
<http://www.ahrq.gov/clinic/uspstf07/methods/benefit.htm>). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.

Comment [k7]: USPSTF grading system
<http://www.ahrq.gov/clinic/uspstf/grades.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the (... [3])

<p>1c.13 Method for rating strength of recommendation (<i>If different from USPSTF system, also describe rating and how it relates to USPSTF</i>): The Canadian Task Force on Preventive Health Care (CTFPHC) System closely approximates that of USPSTF</p> <p>1c.14 Rationale for using this guideline over others: Currency and ready availability via www.guideline.gov</p>	
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Importance to Measure and Report</i>?</p>	1
<p>Steering Committee: Was the threshold criterion, <i>Importance to Measure and Report</i>, met? Rationale:</p>	1 Y <input type="checkbox"/> N <input type="checkbox"/>
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
<p>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)</p>	Eval Ratin g
2a. MEASURE SPECIFICATIONS	
<p>S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL:</p>	
<p>2a. Precisely Specified</p> <p>2a.1 Numerator Statement (<i>Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome</i>): Total number of patient falls of injury level minor or greater (whether or not assisted by a staff member) during the month X 1000.</p> <p>Reliable collection of assisted fall data is dependent both on adequate training of data collection/records abstraction staff.</p> <p>2a.2 Numerator Time Window (<i>The time period in which cases are eligible for inclusion in the numerator</i>): Calendar Month</p> <p>2a.3 Numerator Details (<i>All information required to collect/calculate the numerator, including all codes, logic, and definitions</i>): Included Populations: • Falls with Fall Injury Level of 2 "minor" or greater, including assisted and repeat falls with an Injury level of 2 or greater • Patient injury falls occurring while in the facility</p> <p>Excluded Populations: Falls by: •Visitors •Students •Staff members •Falls by patients from eligible reporting unit, however patient was not on unit at time of fall (e.g., patients falls in radiology department) •Falls on other unit types (e.g., pediatric, obstetrical, rehab, etc) •Falls with Fall Injury Level of 1 "none"</p> <p>Data Elements: Collected at a patient level • Month • Year</p>	2a- specs C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NOF's Health Information Technology Expert Panel (HITEP) .

<ul style="list-style-type: none"> • Age • Gender • Event Type (fall, assisted fall, or repeat fall) • Fall Injury Level • Type of Unit • Fall Risk Assessment • Fall Risk • Fall Prevention Protocol <p>ANA would be happy to provide additional detail on reporting elements. ANA has specific definitions of fall injury levels, fall risk assessment, etc. The NQF CSAC recently re-endorsed the detailed data specifications for fall injury measure for acute care settings. In LTC settings, falls are a reportable event and are recording in the MDS and in incident reports.</p>
<p>2a.4 Denominator Statement (<i>Brief, text description of the denominator - target population being measured</i>): Patient days during the calendar month.</p> <p>2a.5 Target population gender: Female, Male 2a.6 Target population age range: All</p> <p>2a.7 Denominator Time Window (<i>The time period in which cases are eligible for inclusion in the denominator</i>): Calendar Month</p> <p>2a.8 Denominator Details (<i>All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions</i>): Included Populations:</p> <ul style="list-style-type: none"> • Inpatients, short stay patients, observation patients and same day surgery patients who receive care for all or part of a day. <p>Midnight Census The daily number should be summed for every day in the month.</p> <p>Data Elements:</p> <ul style="list-style-type: none"> • Month • Year • Patient Days Reporting method which includes midnight census and short stay patient days • Type of Unit
<p>2a.9 Denominator Exclusions (<i>Brief text description of exclusions from the target population</i>): Excluded Populations: Other unit types (e.g., pediatric, psychiatric, obstetrical)</p> <p>2a.10 Denominator Exclusion Details (<i>All information required to collect exclusions to the denominator, including all codes, logic, and definitions</i>): Not Available</p> <p>2a.11 Stratification Details/Variables (<i>All information required to stratify the measure including the stratification variables, all codes, logic, and definitions</i>): Type of unit</p> <p>2a.12-13 Risk Adjustment Type: No risk adjustment necessary</p> <p>2a.14 Risk Adjustment Methodology/Variables (<i>List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method</i>): Not Available</p> <p>2a.15-17 Detailed risk model available Web page URL or attachment:</p>

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

<p>2a.18-19 Type of Score: Ratio 2a.20 Interpretation of Score: 2a.21 Calculation Algorithm (<i>Describe the calculation of the measure as a flowchart or series of steps</i>): Rate calculated for a quarter, as the average of the three monthly rates. The monthly rate is defined to be the number of falls per month X 1000 divided by patient days per month. This approach allows for units to have missing data for one or two months and still receive a quarterly rate.</p> <p>The numerator and denominator statements provide the calculation details for the monthly rates that are the basis for the quarterly rates.</p> <p>Injury fall rates are produced for each eligible unit reporting data.</p> <p>Unit type rates may be calculated as the average injury fall rates for all units in the facility of the same type for the same quarter.</p>	
<p>2a.22 Describe the method for discriminating performance (<i>e.g., significance testing</i>): Significance testing is not recommended for evaluating performance. Units should compare themselves against the median or other percentile rankings provided from national convenience samples.</p>	
<p>2a.23 Sampling (Survey) Methodology <i>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):</i> Not Available</p>	
<p>2a.24 Data Source (<i>Check the source(s) for which the measure is specified and tested</i>) Electronic clinical data, Electronic Health/Medical Record, Paper medical record/flow-sheet, Management data, Special or unique data</p>	
<p>2a.25 Data source/data collection instrument (<i>Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.</i>): National Database of Nursing Quality Indicators®</p>	
<p>2a.26-28 Data source/data collection instrument reference web page URL or attachment:</p>	
<p>2a.29-31 Data dictionary/code table web page URL or attachment: URL www.nursingquality.org</p>	
<p>2a.32-35 Level of Measurement/Analysis (<i>Check the level(s) for which the measure is specified and tested</i>) Facility/Agency</p>	
<p>2a.36-37 Care Settings (<i>Check the setting(s) for which the measure is specified and tested</i>) Hospice, Long term acute care hospital, Nursing home (NH) /Skilled Nursing Facility (SNF), Rehabilitation Facility</p>	
<p>2a.38-41 Clinical Services (<i>Healthcare services being measured, check all that apply</i>) Hospice/ Palliative Care, Clinicians: Pharmacist</p>	
TESTING/ANALYSIS	
<p>2b. Reliability testing</p>	
<p>2b.1 Data/sample (<i>description of data/sample and size</i>): Reliability testing will be conducted within 24 months.</p>	
<p>2b.2 Analytic Method (<i>type of reliability & rationale, method for testing</i>): The patient fall with injury measure (in the HOSPITAL setting) is reviewed semi-annually, incorporating input from NDNQI staff who answer hospital questions regarding falls and patient days data collection, review of publications on fall measurement, and reports from staff who clean data and analyze data provided by hospitals. As needed, definitions, data collection guidelines and web-based indicator tutorials are updated, and conference calls are held with hospitals on changes to definitions and data collection protocols. Reliability testing of the falls data (in the HOSPITAL setting) occurred in 2009.</p>	<p>2b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>

Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

Comment [k11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

<p>2b.3 Testing Results (<i>reliability statistics, assessment of adequacy in the context of norms for the test conducted</i>): Not Available</p>	
<p>2c. Validity testing</p>	
<p>2c.1 Data/sample (<i>description of data/sample and size</i>): Not Available</p>	
<p>2c.2 Analytic Method (<i>type of validity & rationale, method for testing</i>): Face validity is predicated on testing of the initial measure (in the HOSPITAL setting).</p>	<p>2c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>2c.3 Testing Results (<i>statistical results, assessment of adequacy in the context of norms for the test conducted</i>): Not Available</p>	
<p>2d. Exclusions Justified</p>	
<p>2d.1 Summary of Evidence supporting exclusion(s): Not Available</p>	
<p>2d.2 Citations for Evidence: Not Available</p>	
<p>2d.3 Data/sample (<i>description of data/sample and size</i>): Not Available</p>	
<p>2d.4 Analytic Method (<i>type analysis & rationale</i>): Not Available</p>	<p>2d C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>2d.5 Testing Results (<i>e.g., frequency, variability, sensitivity analyses</i>): Not Available</p>	
<p>2e. Risk Adjustment for Outcomes/ Resource Use Measures</p>	
<p>2e.1 Data/sample (<i>description of data/sample and size</i>): Not Available</p>	
<p>2e.2 Analytic Method (<i>type of risk adjustment, analysis, & rationale</i>): Not Available</p>	<p>2e C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>2e.3 Testing Results (<i>risk model performance metrics</i>): Not Available</p>	
<p>2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: Not Available</p>	
<p>2f. Identification of Meaningful Differences in Performance</p>	
<p>2f.1 Data/sample from Testing or Current Use (<i>description of data/sample and size</i>): Not Available</p>	
<p>2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (<i>type of analysis & rationale</i>): Not Available</p>	
<p>2f.3 Provide Measure Scores from Testing or Current Use (<i>description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance</i>): Not Available</p>	<p>2f C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>2g. Comparability of Multiple Data Sources/Methods</p>	
<p>2g.1 Data/sample (<i>description of data/sample and size</i>): Not Available</p>	<p>2g C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/></p>

Comment [KP12]: 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

Comment [k13]: 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure ... [4]

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be: supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion; AND ... [5]

Comment [k15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated: an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome ... [6]

Comment [k17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treat ... [7]

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [k19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage ... [8]

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

2g.2 Analytic Method (type of analysis & rationale): Not Available	N <input type="checkbox"/> NA <input type="checkbox"/>
2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): Not Available	
2h. Disparities in Care	
2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): Not Available	2h C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: Not Available	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Scientific Acceptability of Measure Properties</i> ?	2
Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i> , met? Rationale:	2 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
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)	Eval Ratin g
3a. Meaningful, Understandable, and Useful Information	
3a.1 Current Use: In use	
3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years): On its Quality Check® Web site, The Joint Commission reports data on nursing homes that "Reduce the risk of resident harm resulting from falls."	
3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years): There are a number of quality improvement initiatives directed at reduction of injury from falls. As an example, the U.S. Department of Defense (through its Patient Safety Program) has developed Patient Falls Reduction Tools that allow individual medical treatment facility choice as to execution while encouraging standardization.	
Testing of Interpretability (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)	
3a.4 Data/sample (description of data/sample and size): Not Available	
3a.5 Methods (e.g., focus group, survey, QI project): Not Available	3a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
3a.6 Results (qualitative and/or quantitative results and conclusions): Not Available	
3b/3c. Relation to other NQF-endorsed measures	
3b.1 NQF # and Title of similar or related measures: 0202: Falls with injury	

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender); OR rationale/data justifies why stratification is not necessary or not feasible.

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

(for NQF staff use) Notes on similar/related endorsed or submitted measures:	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source <u>or</u> different topic but same target population): 3b.2 Are the measure specifications harmonized? If not, why? 0202 is specified for the hospital setting. The proposed measure is applicable to long term care.	3b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
3c. Distinctive or Additive Value 3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures: Amplifies the settings in which the measure may be used. 5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality: This measure is an adaptation of 0202: Falls with injury for use in the nursing home setting.	3c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Usability</i> ?	3
Steering Committee: Overall, to what extent was the criterion, <i>Usability</i> , met? Rationale:	3 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Ratin g
4a. Data Generated as a Byproduct of Care Processes 4a.1-2 How are the data elements that are needed to compute measure scores generated? Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition)	4a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4b. Electronic Sources 4b.1 Are all the data elements available electronically? (<i>elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims</i>) No 4b.2 If not, specify the near-term path to achieve electronic capture by most providers. Fall data currently come from incident reports, many, but not all, of which are electronic. To advance the electronic collection of falls data, it will be necessary to standardize the collateral information on incident reports or electronic health records, including fall injury and injury level and the determination of whether a fall was assisted. There is little consensus across facilities using an appropriate fall risk assessment tool. Therefore, the electronic capture of risk status would follow development of consensus on an appropriate risk assessment tool. After consensus is reached on the conceptual data elements, to advance data collection through electronic health records, clinically-based Yes/No data elements and those with a list of allowable values (e.g., '1', '2', '3') need to be broken down into the finite data elements that a manual abstractor evaluates to determine the correct allowable value for the patient. These finite data elements will be at the patient care level and, therefore, can be collected within an EHR as a by-product of care. These new clinically-based finite data elements and the existing date/time and claims-based data elements will be reviewed against HITSP standards to determine if the data is currently available within an EHR Record. For those that are available, the specific location within the EHR Record and any required policies	4b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

Comment [KP23]: 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

Comment [k24]: 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., *influenza immunization* of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for *patients with diabetes*), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

Comment [KP25]: 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).

Comment [KP26]: 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

Comment [KP27]: 4b. The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

<p>(e.g., prescriptions provided to a patient at discharge are included in the discharge summary record) will be included in the data element's definition. If the required data elements are not available, the appropriate Standards Organization will be contacted to begin the process of having this data incorporated into the standards for HITSP approval.</p> <p>In addition, non-date and time data elements will be evaluated against HITSP approved vocabularies (e.g., SNOMED, Loinc, and RxNorm) to determine if the required vocabulary already exists. If approved vocabularies are not available, the National Library of Medicine will be contacted to start the process of developing new vocabulary. Once the vocabulary has been identified, data sets (value sets) will be created and linked to the appropriate data elements in the measure documentation. These data sets (values sets) will be created at the most finite level possible in order to ensure maximum reusability in multiple measures (across measure developers and across settings of care).</p> <p>Clinical data on falls will need to be combined electronically with patient day (denominator) data from patient census systems, all of which are electronic. To advance the accuracy of patient day data, it will be necessary to capture short stay patient hours in patient census systems. Currently, short stay patient hours frequently are captured manually.</p>	
<p>4c. Exclusions</p> <p>4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No</p> <p>4c.2 If yes, provide justification.</p>	<p>4c</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences</p> <p>4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. A study by The Joint Commission (in the HOSPITAL setting) identified under reporting of assisted falls. They recommend that reporting formats be changed to separate assisted falls from unassisted falls.</p>	<p>4d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>4e. Data Collection Strategy/Implementation</p> <p>4e.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/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: Not Available</p> <p>4e.2 Costs to implement the measure (<i>costs of data collection, fees associated with proprietary measures</i>): Relatively low cost as the data are obtained from facility records.</p> <p>4e.3 Evidence for costs: Not Available</p> <p>4e.4 Business case documentation: Hospitalizations accounted for nearly two thirds of the costs of nonfatal fall injuries, and emergency department treatment accounted for 20%. Fractures were both the most common and most costly type of nonfatal injuries. Just over one third of nonfatal injuries were fractures, but they accounted for 61% of costs—or \$12 billion (Stevens JA, Corso PS, Finkelstein EA, Miller TR. The costs of fatal and nonfatal falls among older adults. Injury Prevention 2006;12:290-5).</p>	<p>4e</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Feasibility</i>?</p>	<p>4</p>
<p>Steering Committee: Overall, to what extent was the criterion, <i>Feasibility</i>, met? Rationale:</p>	<p>4</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p>

Comment [KP28]: 4c. Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

Comment [KP29]: 4d. Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

Comment [KP30]: 4e. Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).

	M <input type="checkbox"/> N <input type="checkbox"/>
RECOMMENDATION	
(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.	Time-limited <input type="checkbox"/>
Steering Committee: Do you recommend for endorsement? Comments:	Y <input type="checkbox"/> N <input type="checkbox"/> A <input type="checkbox"/>
CONTACT INFORMATION	
Co.1 Measure Steward (Intellectual Property Owner) Co.1 Organization American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, Maryland, 20910-3492 Co.2 Point of Contact Isis, Montalvo, MBA, MS, RN, Isis.Montalvo@ANA.org, 301-628-5047-	
Measure Developer If different from Measure Steward Co.3 Organization American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, Maryland, 20910-3492 Co.4 Point of Contact Isis, Montalvo, MBA, MS, RN, Isis.Montalvo@ANA.org, 301-628-5047-	
Co.5 Submitter If different from Measure Steward POC Rita Munley, Gallagher, PhD, RN, Rita.Gallagher@ANA.org, 301-628-5062-, American Nurses Association	
Co.6 Additional organizations that sponsored/participated in measure development	
ADDITIONAL INFORMATION	
Workgroup/Expert Panel involved in measure development Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development. In 1994, ANA launched the Patient Safety and Quality Initiative (ANA, 1995). A series of pilot studies across the United States were funded by ANA to evaluate linkages between nurse staffing and quality of care. Multiple quality indicators were identified initially. Evidence of the effectiveness of these indicators was used to adopt a final set of 10 nursing-sensitive indicators to use in evaluating patient care quality. In 1998, the National Database of Nursing Quality Indicators was established by ANA so that ANA could continue to collect and build on data obtained from earlier studies and further develop nursing's body of knowledge related to factors which influence the quality of nursing care. Linkages between nurse staffing and patient outcomes had already been identified, but continued data collection and reporting was necessary to evaluate nursing care quality at the unit level and thus fulfill nursing's commitment to evaluating and improving patient care. In 2007-2008, ANA participated in an expert advisory panel that evaluated the implementation of multiple nursing measures. The Robert Wood Johnson Foundation (RWJF) funded the study with the Joint Commission took the lead role in the development of uniform, standardized technical specifications for the measure set. The advisory panel consisted of: <ul style="list-style-type: none"> • Marilyn P. Chow, RN, DNSc, FAAN (Chair) Vice President, Patient Care Services Kaiser Permanente Oakland, CA • Nancy E. Donaldson RN, DNSc. FAAN Director, Center for Research & Innovation in Patient Care, Department of Physiological Nursing UCSF School of Nursing 	

San Francisco, CA

- Marybeth Farquhar, PhD, RN, MSN (Liaison)
Managing Director, Performance Measures
National Quality Forum
Washington, DC
- Lillee S. Gelinas RN, MSN, FAAN
Vice President and Chief Nursing Officer
VHA, Inc.
Irving, TX
- Ann Hendrich, RN, MSN, FAAN
Vice President, Clinical Excellence Operations Ascension Health
St. Louis, Mo
- Teresa C. Horan, MPH
Captain, US Public Health Service, Leader Performance Measurement Team, Healthcare Outcomes Branch, Division
of Healthcare Quality Promotion
Centers for Disease Control and Prevention
Atlanta, GA
- Gail Keenan, RN, PHD
Associate Professor of Nursing and Director of the Nursing Informatics Initiative, College of Nursing
University of Illinois at Chicago
Chicago, IL
- Ellen T. Kurtzman, MPH, RN
Assistant Research Professor, Department of Nursing Education, School of Medicine and Health Sciences
The George Washington University
Washington, DC
- Eileen Lake, PhD, RN
Assistant Professor, School of Nursing
University of Pennsylvania
Philadelphia, Pennsylvania
- Jack Needleman, PhD
Associate Professor, Department of Health Services
UCLA School of Public Health
Los Angeles, CA
- Mamatha S. Pancholi
Senior Social Science Research Analyst
Center for Delivery, Organization, and Markets
Agency for Healthcare Research and Quality
Rockville, Maryland
- Michael T. Rapp, MD, JD
Director, Quality Measurement and Health Assessment Group
Centers for Medicare and Medicaid Services
Baltimore, MD
- Cathy Rick, RN, CNA, FACHE
Chief Nursing Officer, Office of Nursing Services
Department of Veterans Affairs
Washington, DC

• Mary Jean Schumann, MSN, RN, MBA, CPNP
 Director, Department of Nursing Practice & Policy
 American Nurses Association
 Silver Spring, MD

Ad.2 If adapted, provide name of original measure: Falls with Injury (in the inpatient setting)

NB: The patient fall with injury measure (in the inpatient setting) is reviewed semi-annually, incorporating input from NDNQI staff who answer hospital questions regarding falls and patient days data collection, review of publications on fall measurement, and reports from staff who clean data and analyze data provided by hospitals. As needed, definitions, data collection guidelines and web-based indicator tutorials are updated, and conference calls are held with hospitals on changes to definitions and data collection protocols. Reliability testing of the falls data in the HOSPITAL setting occurred in 2009.

Ad.3-5 If adapted, provide original specifications URL or attachment www.nursingquality.org

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.6 Year the measure was first released: 1998

Ad.7 Month and Year of most recent revision: 02, 2009

Ad.8 What is your frequency for review/update of this measure? Reliability testing scheduled within 24 months

Ad.9 When is the next scheduled review/update for this measure?

Ad.10 Copyright statement/disclaimers: The American Nurses Association (ANA) National Database of Nursing Quality Indicators® (“The NDNQI® Database”) is a repository of data related to health care facilities, including data collected from NDNQI® Participating Facilities with respect to the ANA Quality Measures and Complex Measures. “NDNQI® Participating Facility” shall mean any health care facility that has contracted to receive services from ANA, ANA’s National Center for Nursing Quality (NCNQ®) or ANA’s subcontractors that are related to the NDNQI® Database. The NDNQI® Database shall not be considered a Measure, and no aspect of the development of the NDNQI® Database, including the collection of data from NDNQI® Participating Facilities shall be considered a non-proprietary Measure. Nothing in the foregoing Agreement with Measure Stewards, these Exhibits and the Measure Submission Forms shall implicate or diminish ANA’s intellectual property rights in the NDNQI® Database, including but not limited to data and benchmarks. Similarly, nothing in the foregoing Agreement with Measure Stewards, these Exhibits and the Measure Submission Forms shall implicate or diminish ANA’s intellectual property rights with respect to refinements and improvements to the Measures and Complex Measures, or the application of the Measures and Complex Measures, that are related to the NDNQI® Database, including but not limited to the NDNQI® guidelines and tutorials, stratification details, definitions and data collection methodologies. ANA expressly reserves all copyright, patent and trademark rights with respect to its Measures, Complex Measures and related materials.

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Ad.11 -13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): 04/06/2010

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1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;

OR

- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 - o Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 - o Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
 - o Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
 - o Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
 - o Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
 - o Efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

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4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

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USPSTF grading system <http://www.ahrq.gov/clinic/uspstf/grades.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

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9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure focus is the most important aspect of quality for the specific topic.

Page 8: [5] Comment [KP14] Karen Pace 10/5/2009 8:59:00 AM

2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;

- if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
- if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

Page 8: [6] Comment [KP16] Karen Pace 10/5/2009 8:59:00 AM

2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care;^{Error! Bookmark not defined.} OR rationale/data support no risk adjustment.

Page 8: [7] Comment [k17] Karen Pace 10/5/2009 8:59:00 AM

13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

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14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.

NATIONAL QUALITY FORUM
National Voluntary Consensus Standards for Nursing Homes 2010

Measure Number/Title: NH-006-10: Skill Mix (Registered Nurses [RN], Licensed Vocational/Practical Nurse [LPN/LVN], unlicensed assistive personal [UAP], and contract)

Description: NSC-12.1 - Percentage of productive nursing hours worked by RN staff (employee and contract) with direct patient care responsibilities by type of unit
NSC-12.2 - Percentage of productive nursing hours worked by LPN/LVN staff (employee and contract) with direct patient care responsibilities by type of unit
NSC-12.3 - Percentage of productive nursing hours worked by UAP staff (employee and contract) with direct patient care responsibilities by type of unit
NSC-12.4 - Percentage of productive nursing hours worked by contract staff (RN, LPN/LVN, and UAP) with direct patient care responsibilities by type of unit

Numerator Statement: Number of productive hours worked by nursing staff with direct patient care responsibilities by Type of Unit during the calendar month.

Denominator Statement: Total number of productive hours worked by nursing staff [RN, LPN/LVN, UAP (employee and contract)] with direct patient care responsibilities by Type of Unit during the calendar month.

Level of Analysis: Facility/Agency

Data Source: Management data

Measure developer: American Nurses Association

Status: Not Recommended for Endorsement

Attachments: None

NATIONAL QUALITY FORUM

Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

- C = Completely (unquestionably demonstrated to meet the criterion)
- P = Partially (demonstrated to partially meet the criterion)
- M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
- N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
- NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) NQF Review #: NH-006-10 NQF Project: Nursing Homes 2010	
MEASURE DESCRIPTIVE INFORMATION	
De.1 Measure Title: Skill Mix (Registered Nurses [RN], Licensed Vocational/Practical Nurse [LPN/LVN], unlicensed assistive personal [UAP], and contract)	
De.2 Brief description of measure: NSC-12.1 - Percentage of productive nursing hours worked by RN staff (employee and contract) with direct patient care responsibilities by type of unit NSC-12.2 - Percentage of productive nursing hours worked by LPN/LVN staff (employee and contract) with direct patient care responsibilities by type of unit NSC-12.3 - Percentage of productive nursing hours worked by UAP staff (employee and contract) with direct patient care responsibilities by type of unit NSC-12.4 - Percentage of productive nursing hours worked by contract staff (RN, LPN/LVN, and UAP) with direct patient care responsibilities by type of unit	
1.1-2 Type of Measure: Structure/management	
De.3 If included in a composite or paired with another measure, please identify composite or paired measure	
De.4 National Priority Partners Priority Area: Care coordination, Safety	
De.5 IOM Quality Domain: Safety	
De.6 Consumer Care Need:	

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i> A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes	A Y <input type="checkbox"/> N <input type="checkbox"/>

<p>A.2 Indicate if Proprietary Measure (as defined in measure steward agreement): Proprietary measure</p> <p>A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission</p> <p>A.4 Measure Steward Agreement attached: NQF Agreement 121409-634018534315871467.pdf</p>	
<p>B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section</p>	<p>B</p> <p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement.</p> <p>► Purpose: Public reporting, Internal quality improvement</p>	<p>C</p> <p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement.</p> <p>D.1 Testing: No, testing will be completed within 24 months</p> <p>D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes</p>	<p>D</p> <p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>(for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (if submission returned):</p>	<p>Met</p> <p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>Staff Notes to Reviewers (issues or questions regarding any criteria):</p>	
<p>Staff Reviewer Name(s):</p>	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
<p>Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance.</p> <p><i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.</i> (evaluation criteria)</p> <p>1a. High Impact _____</p>	Eval Rating
<p>(for NQF staff use) Specific NPP goal:</p>	
<p>1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, High resource use, Patient/societal consequences of poor quality</p> <p>1a.2</p> <p>1a.3 Summary of Evidence of High Impact: At any point in time, approximately 1.6 million people age 65 and over reside in the nation's 16,500+ Medicare skilled and Medicaid nursing facilities (1). Approximately one-third of the people turning age 65 in 2010 will need nursing home care for either a short- or long-term stay during their lifetimes (2). Whereas short-stay residents are in a nursing home for a period of rehabilitation following a hospitalization, long-stay residents tend to be frail with many chronic physical illnesses and changes in mental status. Given residents' medical, functional and cognitive complexity, one in every three nursing home residents is hospitalized each year. Risk factors for admission to a nursing home include advanced age, having a diagnosed medical condition, living alone, loss of self-care ability, decreased mental status, lack of informal supports, poverty, hospital admission, bed immobility and female gender (3). Virtually all nursing homes provide rehabilitative services, but the intensity of the service (skilled or maintenance) varies with the home's program operation and Medicare participation. More than</p>	<p>1a</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>

Comment [KP1]: 1a. The measure focus addresses:

- a specific national health goal/priority identified by NQF's National Priorities Partners; OR
- a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).

3,000 nursing homes have formally defined special care units (e.g. respirator units, dementia care units), constituting almost 7% of all beds.

Registered nurses (RNs) and Licensed Practical Nurses (LPNs) together constitute the licensed nurse workforce in nursing homes. In 2004, only 6.3% of the working 2.6 million RNs were employed in nursing homes. Approximately 32% of the nation's 596,000 LPN/LVNs are employed in long-term care. Certified nursing assistants (CNAs) constitute 70% of the total nursing workforce in long-term care.

With few exceptions, outcomes of nursing and quality of care in nursing homes are associated with staffing types and amounts. Overall, higher nurse staffing hours and higher total nurse staffing are significantly related to improved functionality of short-stay residents and decreased probability of death (4), improved resident functionality and fewer medication errors and survey deficiencies (5), reduced adverse outcomes and costs (6), and to improved performance of CNA-administered care processes (7).

1a.4 Citations for Evidence of High Impact: 1. Harrington, C., Carillo, H., & Wolesslagle Blank, B. (2007). Nursing Facilities, Staffing, Residents, and Facility Deficiencies, 2000 through 2006. Department of Social and Behavioral Sciences, University of California, San Francisco, September, 2007. Retrieved January 6, 2009.
http://www.Itcombudsman.org/ombpublic/49_346_4549.CFM
 2. Alliance for Health Reform (2008) Issue Brief: Changing the nursing home culture.
http://www.allhealth.org/publications/Longterm_care/Changing_the_Nursing_Home_Culture_79.pdf
 3. Gaugler, J. E., Duval, S., Anderson, K. A., Kane, R. L. (2007). Predicting nursing home admission in the U.S.: a meta-analysis. BMC Geriatrics, 7(13).
 4. Bleismer, M. M., Smayling, M., Kane, R. L., & Shannon, I. (1998). The relationship between nursing staffing levels and nursing home outcomes. Journal of Aging and Health (10): 351-371.
 5. Dellefield, M. E. (2000). The relationship between nurse staffing on nursing homes and quality indicators. Journal of Gerontological Nursing 26(6): 14-28.
 6. Dorr, D. A., S. D. Horn, and R. J. Smout. 2005. Cost Analysis of Nursing Home Registered Nurse Staffing Times. Journal of the American Geriatrics Society, 53(5), 840-845.
 7. Schnelle, J. F., Simmons, S. F., Harrington, C., & Cadogan, M. (2004). Relationship of nursing staffing to quality of care. HSR 39(2): 225-250.

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Endorsement of the proposed measure will provide a standardized means for clarifying the impact of various levels of nursing care on the quality of care in the long term care setting.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
 Staffing matters, in one report, there was a significant decrease in staffing levels for both nurses and CNAs during the day shift on weekends. Increased omission of required daily nursing notes, of meal documentation and increased falls appears to be associated with lower levels of weekend staffing.¹

1b.3 Citations for data on performance gap:
 1 Quality Care Indicators and Staffing Levels in a Nursing Facility Subacute Unit
 Andrew D. Weinberg, A. Jefferson Lesesne, Chesley L. Richards, Jean K. Pals
 Journal of the American Medical Directors Association - January 2002 (Vol. 3, Issue 1, Pages 1-4).

1b.4 Summary of Data on disparities by population group:
 Staffing may play a significant role in nursing home disparities. Majority-black nursing homes had lower amounts of staff care overall, and that less of that care was provided by registered nurses, the most skilled workers, than in majority-white homes. Nearly 85 percent of homes where a majority of residents are black got the lowest rating for nurse staffing, compared with just 21 percent of white homes.¹

1b.5 Citations for data on Disparities:
 1 Illinois Department of Public Health, Illinois Department of Healthcare and Family Services, U.S. Census

1b
 C
 P
 M
 N

Comment [KP2]: 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

Bureau, Vincent Mor of Brown University and Nursing Home Compare; analyzed by The Chicago Reporter.	
<p>1c. Outcome or Evidence to Support Measure Focus</p> <p>1c.1 Relationship to Outcomes (<i>For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population</i>): A positive, significant relationship existed between nursing home quality and the ratio of RN hours to licensed vocational nurse (LVN) hours per resident day.</p> <p>1c.2-3. Type of Evidence: Systematic synthesis of research</p> <p>1c.4 Summary of Evidence (<i>as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome</i>): In one study, in the year after admission, licensed (but not nonlicensed) nursing hours were significantly related to improved functional ability, increased probability of discharge home, and decreased probability of death. Another analysis, based on approximately 2,500 residents in 80 nursing homes in Rhode Island, used multivariate models to estimate which aspects of care are associated with resident outcomes after controlling for resident characteristics. Outcomes, measured over a 6-month period included death, functional decline, and functional improvement. Results suggest that higher staff levels and lower RN turnover were related to functional improvement.</p> <p>1c.5 Rating of strength/quality of evidence (<i>also provide narrative description of the rating and by whom</i>): A</p> <p>1c.6 Method for rating evidence: The evidence rating is based on a review of the literature which found consistent results in quantitative studies.</p> <p>1c.7 Summary of Controversy/Contradictory Evidence: Not Available</p> <p>1c.8 Citations for Evidence (<i>other than guidelines</i>): Not Available</p> <p>1c.9 Quote the Specific guideline recommendation (<i>including guideline number and/or page number</i>): Adequate nurse staffing is critical to the delivery of quality patient care. Identifying and maintaining the appropriate number and mix of nursing staff is a problem experienced by nurses at every level in all settings. Regardless of organizational mission, tempering the realities of cost containment and cyclical nursing shortages with the priority of safe, quality care has been difficult, in part, because of the paucity of empirical data to guide decision-making.</p> <p>1c.10 Clinical Practice Guideline Citation: American Nurses Association (2005). Principles for Nurse Staffing. Silver Spring, MD: Author.</p> <p>1c.11 National Guideline Clearinghouse or other URL: http://www.safestaffingsaveslives.org/WhatIsSafeStaffing/SafeStaffingPrinciples.aspx</p> <p>1c.12 Rating of strength of recommendation (<i>also provide narrative description of the rating and by whom</i>): Grade = 1.</p> <p>1c.13 Method for rating strength of recommendation (<i>If different from USPSTF system, also describe rating and how it relates to USPSTF</i>): Grade = 1. A review of the literature found good quality patient-oriented evidence that increased staffing and increased licensed staffing resulted in lower rates of adverse events.</p> <p>1c.14 Rationale for using this guideline over others: Relevance of the source to those most likely to be impacted by measurement.</p>	<p>1c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Importance to Measure and Report</i> ?	1
Steering Committee: Was the threshold criterion, <i>Importance to Measure and Report</i> , met?	1

Comment [k4]: 1c. The measure focus is:
 •an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
 OR
 •if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 oIntermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 oProcess - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step [... [1]

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a [... [2]

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system <http://www.ahrq.gov/clinic/uspstf07/methods/benefit.htm>). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.

Comment [k7]: USPSTF grading system <http://www.ahrq.gov/clinic/uspstf/grades.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the [... [3]

Rationale:	Y <input type="checkbox"/> N <input type="checkbox"/>
2. 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)	Eval Rating
2a. MEASURE SPECIFICATIONS	
S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL:	2a- specs C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
2a. Precisely Specified <u>1</u>	
2a.1 Numerator Statement (<i>Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome</i>): Number of productive hours worked by nursing staff with direct patient care responsibilities by Type of Unit during the calendar month.	
2a.2 Numerator Time Window (<i>The time period in which cases are eligible for inclusion in the numerator</i>): Calendar Month	
2a.3 Numerator Details (<i>All information required to collect/calculate the numerator, including all codes, logic, and definitions</i>): RN, LPN/LVN, or UAP strata. Included Populations: <ul style="list-style-type: none"> • Productive hours worked by RN, LPN/LVN, or UAP with direct patient care responsibilities for greater than 50% of their shift. Include: <ul style="list-style-type: none"> • Staff who are counted in the staffing matrix, and • Who are replaced if they call in sick, and • Work hours are charged to the unit's cost center • Contract staff Excluded populations: <ul style="list-style-type: none"> • Persons whose primary responsibility is administrative in nature. • Specialty teams, patient educators, or case managers who are not assigned to a specific unit. • Unit clerks, monitor techs, and others with no direct patient care responsibilities. Contract Staff Strata. Included Populations <ul style="list-style-type: none"> • Productive hours worked by contract staff (RN, LPN/LVN, and UAP) with direct patient care responsibilities for greater than 50% of their shift. Include in contract staff: <ul style="list-style-type: none"> • Staff not employed by your facility • Staff hired on a contractual basis to fill staffing needs for a designated shift or on another short-term basis • Registry staff from outside the facility (e.g., not floating staff from within the facility) • Traveling nurse staff contracted to the facility for a designated period of time Persons counting in the staffing matrix would include all nursing staff who spend at least 50% of their regular shift in direct patient care. Persons are included in the staffing matrix if they are replaced when they are on leave status.	
2a.4 Denominator Statement (<i>Brief, text description of the denominator - target population being measured</i>): Total number of productive hours worked by nursing staff [RN, LPN/LVN, UAP (employee and contract)] with direct patient care responsibilities by Type of Unit during the calendar month.	

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF's Health Information Technology Expert Panel (HITEP) .

<p>2a.5 Target population gender: Female, Male</p> <p>2a.6 Target population age range: ALL</p> <p>2a.7 Denominator Time Window (<i>The time period in which cases are eligible for inclusion in the denominator</i>): Calendar Month</p> <p>2a.8 Denominator Details (<i>All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions</i>): NB: The definitions provided in the numerator section also apply to the denominator.</p> <p>Included Populations: Productive hours worked by nursing staff with direct patient care responsibilities.</p> <p>Data Elements: <ul style="list-style-type: none"> •LPN/LVN Hours [Contract/Agency] •LPN/LVN Hours [Employee] •RN Hours [Contract/Agency] •RN Hours [Employee] •UAP Hours [Contract/Agency] •UAP Hours [Employee] • Month • Year </p> <p>Nursing staff are not interchangeable. RNs in LTC settings have different roles, and are subject to different practice acts, than LPNs or Certified Nursing Assistants.</p>
<p>2a.9 Denominator Exclusions (<i>Brief text description of exclusions from the target population</i>): Excluded Populations: Other unit types (e.g., pediatric, psychaitric, obstetrical)</p>
<p>2a.10 Denominator Exclusion Details (<i>All information required to collect exclusions to the denominator, including all codes, logic, and definitions</i>): Not Available</p>
<p>2a.11 Stratification Details/Variables (<i>All information required to stratify the measure including the stratification variables, all codes, logic, and definitions</i>): Stratification by unit type</p>
<p>2a.12-13 Risk Adjustment Type: No risk adjustment necessary</p>
<p>2a.14 Risk Adjustment Methodology/Variables (<i>List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method</i>): Not Available</p>
<p>2a.15-17 Detailed risk model available Web page URL or attachment:</p>
<p>2a.18-19 Type of Score: Rate/proportion</p> <p>2a.20 Interpretation of Score:</p> <p>2a.21 Calculation Algorithm (<i>Describe the calculation of the measure as a flowchart or series of steps</i>):</p> <p>NSC-12.1 - Percentage of productive nursing hours worked by RN staff (employee and contract) with direct patient care responsibilities by type of unit</p> <p>NSC-12.2 - Percentage of productive nursing hours worked by LPN/LVN staff (employee and contract) with direct patient care responsibilities by type of unit</p> <p>NSC-12.3 - Percentage of productive nursing hours worked by UAP staff (employee and contract) with direct patient care responsibilities by type of unit</p> <p>NSC-12.4 - Percentage of productive nursing hours worked by contract staff (RN, LPN/LVN, and UAP) with direct patient care responsibilities by type of unit</p>

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
 12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

Productive Hours. Actual direct hours worked, not budgeted or scheduled hours. Excludes vacation, sick time, orientation, education leave, or committee time. Orientation time is considered non-productive. However, orientation programs vary from hospital to hospital. Once orientees reach the point where they are considered part of the staffing matrix, their work hours are charged to the unit and they would be replaced if they call in sick, then count their hours as productive.

Patient Care Responsibilities. Patient centered nursing activities by unit-based staff in the presence of the patient and activities that occur away from the patient that are patient related:

- Medication administration
- Nursing treatments
- Nursing rounds
- Admission, transfer, discharge activities
- Patient teaching
- Patient communication
- Coordination of patient care
- Documentation time
- Treatment planning

Unlicensed Assistive Personnel. Individuals trained to function in an assistive role to nurses in the provision of patient care, as delegated by and under the supervision of the registered nurse. Typical activities performed by UAPs may include (but are not limited to):

- Taking vital signs
- Bathing, feeding, or dressing patients
- Assisting patient with transfers, ambulation, or toileting

Include:

- Nursing assistants
- Orderlies
- Patient care technicians/assistants
- Graduate nurses (not yet licensed) who have completed unit orientation

Exclude:

- Unit secretaries or clerks
- Monitor technicians
- Therapy assistants
- Student nurses who are fulfilling educational requirements
- Sitters who either are not employed by the facility or who are employed by the facility, but are not providing typical UAP activities

NOTE: In some states assistive nursing personnel may be licensed. For the purposes of this indicator, include these persons in the UAP category.

Staffing Matrix. Daily roster of individual nursing staff scheduled for each shift on a unit.

Rate calculated for a quarter, as the average of the three monthly rates. The numerator and denominator statements below provide the calculation details for the monthly rates that are the basis for the quarterly rates.

Skill mix is produced for each unit.

Unit type skill mix may be calculated as the average of skill mix percentages for all the units in the hospital of the same type for the same quarter.

2a.22 Describe the method for discriminating performance (e.g., significance testing):

Significance testing is not recommended for evaluating performance. Units should compare themselves against the median or other percentile rankings provided from national convenience samples.

2a.23 Sampling (Survey) Methodology *If measure is based on a sample (or survey), provide instructions for*

<p>obtaining the sample, conducting the survey and guidance on minimum sample size (response rate): Not Available</p>	
<p>2a.24 Data Source (Check the source(s) for which the measure is specified and tested) Management data</p>	
<p>2a.25 Data source/data collection instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): payroll, time/attendance tracking systems</p>	
<p>2a.26-28 Data source/data collection instrument reference web page URL or attachment: URL www.nursingquality.org</p>	
<p>2a.29-31 Data dictionary/code table web page URL or attachment: URL www.nursingquality.org</p>	
<p>2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested) Facility/Agency</p>	
<p>2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested) Hospice, Long term acute care hospital, Nursing home (NH) /Skilled Nursing Facility (SNF), Rehabilitation Facility</p>	
<p>2a.38-41 Clinical Services (Healthcare services being measured, check all that apply) Hospice/ Palliative Care, Clinicians: Pharmacist</p>	
TESTING/ANALYSIS	
<p>2b. Reliability testing</p>	
<p>2b.1 Data/sample (description of data/sample and size): Reliability testing will be conducted within 24 months.</p>	
<p>2b.2 Analytic Method (type of reliability & rationale, method for testing): Not Available</p>	<p>2b</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted): Not Available</p>	
<p>2c. Validity testing</p>	
<p>2c.1 Data/sample (description of data/sample and size): Not Available</p>	
<p>2c.2 Analytic Method (type of validity & rationale, method for testing): Face validity is predicated on an inter-rater reliability study conducted on the initial measure (in the HOSPITAL setting) in 2007.</p>	
<p>2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): The inter-rater reliability study compared routinely submitted nursing care hours data with data independently collected through payroll or staffing systems for the same time period. Intra-class correlations were performed for data submitted by 158 units across 11 hospitals. There were strong ICCs for all skill mix categories, indicating that data can be reproduced reliably with multiple "raters" (data collectors). Thirty-nine ICCs were calculated, with 30 being above 0.90.</p> <p>The study also included a qualitative component with semi-structured interviews conducted by the study PI with a database stakeholder at each hospital--a person identified as having a major role in the collection of nursing care hour data. Interviews were conducted with individuals at 10 of the 11 study sites. The interviewees reported that in order to submit accurate nursing care hours, data cleaning was performed</p>	<p>2c</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>

Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

Comment [k11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

Comment [KP12]: 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

Comment [k13]: 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure focus is the most important aspect of quality for the specific topic.

<p>either by the site coordinator or unit manager prior to submission. In addition, the study PI learned that hours for agency and traveling nurses frequently were collected from a source separate from the hospital staffing or time/attendance programs and, therefore, present a greater degree of difficulty to obtain in a timely and accurate manner.</p> <p>A survey of NDNQI site coordinators (N=714, 70% response rate) found that a very large majority (84%-95%) of the hospitals had separate job codes for RN, LPN/LVN and UAP. Seventy percent said their hospitals could produce daily nursing care hours reports or that they used the NDNQI nursing care hours calculator to separate bi-weekly pay period data into distinct months. Over 75% of the site coordinators reported that they used at least one method to verify their nursing care hours before reporting to NDNQI.</p> <p>Citation for study: Klaus, et al. (2008). Reliability of the Nursing Care Hour Measure. (Presentation) Council for the Advancement of Nursing Science, 2008 State of the Science Congress on Nursing Research, Washington, D.C, October 2, 2008.</p>	
<p>2d. Exclusions Justified</p> <p>2d.1 Summary of Evidence supporting exclusion(s): Not Available</p> <p>2d.2 Citations for Evidence: Not Available</p> <p>2d.3 Data/sample (description of data/sample and size): Not Available</p> <p>2d.4 Analytic Method (type analysis & rationale): Not Available</p> <p>2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): Not Available</p>	<p>2d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>2e. Risk Adjustment for Outcomes/ Resource Use Measures</p> <p>2e.1 Data/sample (description of data/sample and size): Not Available</p> <p>2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): Not Available</p> <p>2e.3 Testing Results (risk model performance metrics): Not Available</p> <p>2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: Not Available</p>	<p>2e</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>2f. Identification of Meaningful Differences in Performance</p> <p>2f.1 Data/sample from Testing or Current Use (description of data/sample and size): Not Available</p> <p>2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale): Not Available</p> <p>2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance): Not Available</p>	<p>2f</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>2g. Comparability of Multiple Data Sources/Methods</p> <p>2g.1 Data/sample (description of data/sample and size): Not Available</p>	<p>2g</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p>

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
- AND
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
- AND
- precisely defined and specified:
 - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
 - if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

Comment [k15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care; OR ... [4]

Comment [k17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race ... [5]

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [k19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically ... [6]

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

<p>2g.2 Analytic Method (type of analysis & rationale): Not Available</p> <p>2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): Not Available</p>	<p>M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>2h. Disparities in Care</p> <p>2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): Not Available</p> <p>2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: Not Available</p>	<p>2h C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Scientific Acceptability of Measure Properties</i>?</p>	<p>2</p>
<p>Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i>, met? Rationale:</p>	<p>2 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p style="text-align: center;">3. USABILITY</p>	
<p>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)</p>	<p>Eval Rating</p>
<p>3a. Meaningful, Understandable, and Useful Information</p> <p>3a.1 Current Use: In use</p> <p>3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years): Data on Nursing Home Staffing are currently reported on NursingHomeCompare.gov. CMS obtains data from the states and converts the staffing hours reported by the nursing home into a measure that shows the number of staff hours per resident per day.</p> <p>3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years): According to the Center for Medicare Advocacy, Inc. (2007, November 15) testimony before the House Ways and Means Committee, "Nurse staffing is the single best predictor of good quality of care. Residents need to be cared for by professional nurses and by sufficient numbers of well-trained, well-supervised, and well-supported paraprofessional workers...Over the years, the industry has also developed a series of voluntary "quality initiatives" - Quest for Quality, Quality First, Advancing Excellence in America's Nursing Homes - that promise a commitment to high quality care, but that undermine the regulatory system by establishing alternative criteria for evaluating nursing facilities. In contrast to the criteria established by the regulatory system, these industry criteria reflect secret goals and targets for improvement that are voluntary, self-reported and unaudited, and lack public accountability".</p> <p>Testing of Interpretability (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)</p> <p>3a.4 Data/sample (description of data/sample and size): Not Available</p> <p>3a.5 Methods (e.g., focus group, survey, QI project): Not Available</p>	<p>3a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender);OR rationale/data justifies why stratification is not necessary or not feasible.

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

3a.6 Results (qualitative and/or quantitative results and conclusions): Not Available	
3b/3c. Relation to other NQF-endorsed measures	
3b.1 NQF # and Title of similar or related measures: 0204: Skill mix (Registered Nurse [RN], Licensed Vocational/Practical Nurse [LVN/LPN], unlicensed assistive personnel [UAP], and contract)	
(for NQF staff use) Notes on similar/related endorsed or submitted measures:	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population): 3b.2 Are the measure specifications harmonized? If not, why? 0204 is specified for the hospital setting. The proposed measure is applicable to long term care.	3b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
3c. Distinctive or Additive Value 3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures: Amplifies the settings in which the measure may be used. 5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality: This measure is an adaptation of 0204: Skill mix (Registered Nurse [RN], Licensed Vocational/Practical Nurse [LVN/LPN], unlicensed assistive personnel [UAP], and contract) for use in the nursing home setting.	3c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?	3
Steering Committee: Overall, to what extent was the criterion, Usability, met? Rationale:	3 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes 4a.1-2 How are the data elements that are needed to compute measure scores generated? Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)	4a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4b. Electronic Sources 4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims) No 4b.2 If not, specify the near-term path to achieve electronic capture by most providers.	4b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4c. Exclusions 4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No	4c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>

Comment [KP23]: 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

Comment [k24]: 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., influenza immunization of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for patients with diabetes), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

Comment [KP25]: 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).

Comment [KP26]: 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

Comment [KP27]: 4b. The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

Comment [KP28]: 4c. Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

4c.2 If yes, provide justification.	
<p>4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences</p> <p>4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. Payroll or staffing records should be audited to remove non-direct care hours (education, sick leave, vacation leave, etc.) and to ensure that ineligible staff are not included (e.g., unit secretary, monitor techs, etc.).</p> <p>Consistent and thorough training using standardized definitions, detailed data collection guidelines and electronic forms are required to produce reliable data. Research, including NDNQI's reliability studies, has shown a few areas where data collectors are likely to misinterpret inclusion/exclusion criteria. Based on these findings, revisions to the data collection guidelines and user training have been completed.</p>	<p>4d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>4e. Data Collection Strategy/Implementation</p> <p>4e.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/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: Not Available</p> <p>4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures): Relatively low cost as the data are obtained from facility records.</p> <p>4e.3 Evidence for costs: Not Available</p> <p>4e.4 Business case documentation: Better nurse staffing in nursing homes results in reduced use of hospital emergency room visits and inpatient stays for nursing home patients (Aiken, LH. Policy Polit Nurs Pract. 2008 May ; 9(2): 73-79).</p>	<p>4e</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Feasibility</i> ?	4
Steering Committee: Overall, to what extent was the criterion, <i>Feasibility</i> , met? Rationale:	<p>4</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
RECOMMENDATION	
(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.	<p>Time-limited</p> <p><input type="checkbox"/></p>
Steering Committee: Do you recommend for endorsement? Comments:	<p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>A <input type="checkbox"/></p>
CONTACT INFORMATION	
<p>Co.1 Measure Steward (Intellectual Property Owner)</p> <p>Co.1 <u>Organization</u> American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, Maryland, 20910-3492</p> <p>Co.2 <u>Point of Contact</u> Isis, Montalvo, MBA, MS, RN, Isis.Montalvo@ANA.org, 301-628-5047-</p>	

Comment [KP29]: 4d. Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

Comment [KP30]: 4e. Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).

<p>Measure Developer If different from Measure Steward Co.3 Organization American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, Maryland, 20910-3492</p> <p>Co.4 Point of Contact Isis, Montalvo, MBA, MS, RN, Isis.Montalvo@ANA.org, 301-628-5047-</p> <p>Co.5 Submitter If different from Measure Steward POC Rita Munley, Gallagher, PhD, RN, Rita.Gallagher@ANA.org, 301-628-5062-, American Nurses Association</p> <p>Co.6 Additional organizations that sponsored/participated in measure development</p>
ADDITIONAL INFORMATION
<p>Workgroup/Expert Panel involved in measure development Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development. In 1994, ANA launched the Patient Safety and Quality Initiative (ANA, 1995). A series of pilot studies across the United States were funded by ANA to evaluate linkages between nurse staffing and quality of care. Multiple quality indicators were identified initially. Evidence of the effectiveness of these indicators was used to adopt a final set of 10 nursing-sensitive indicators to use in evaluating patient care quality. In 1998, the National Database of Nursing Quality Indicators was established by ANA so that ANA could continue to collect and build on data obtained from earlier studies and further develop nursing's body of knowledge related to factors which influence the quality of nursing care. Linkages between nurse staffing and patient outcomes had already been identified, but continued data collection and reporting was necessary to evaluate nursing care quality at the unit level and thus fulfill nursing's commitment to evaluating and improving patient care. In 2007-2008, ANA participated in an expert advisory panel that evaluated the implementation of multiple nursing measures. The Robert Wood Johnson Foundation (RWJF) funded the study with the Joint Commission took the lead role in the development of uniform, standardized technical specifications for the measure set. The advisory panel consisted of:</p> <ul style="list-style-type: none"> • Marilyn P. Chow, RN, DNSc, FAAN (Chair) Vice President, Patient Care Services Kaiser Permanente Oakland, CA • Nancy E. Donaldson RN, DNSc. FAAN Director, Center for Research & Innovation in Patient Care, Department of Physiological Nursing UCSF School of Nursing San Francisco, CA • Marybeth Farquhar, PhD, RN, MSN (Liaison) Managing Director, Performance Measures National Quality Forum Washington, DC • Lillie S. Gelinas RN, MSN, FAAN Vice President and Chief Nursing Officer VHA, Inc. Irving, TX • Ann Hendrich, RN, MSN, FAAN Vice President, Clinical Excellence Operations Ascension Health St. Louis, Mo • Teresa C. Horan, MPH Captain, US Public Health Service, Leader Performance Measurement Team, Healthcare Outcomes Branch, Division of Healthcare Quality Promotion Centers for Disease Control and Prevention

Atlanta, GA

- Gail Keenan, RN, PHD
Associate Professor of Nursing and Director of the Nursing Informatics Initiative, College of Nursing
University of Illinois at Chicago
Chicago, IL
- Ellen T. Kurtzman, MPH, RN
Assistant Research Professor, Department of Nursing Education, School of Medicine and Health Sciences
The George Washington University
Washington, DC
- Eileen Lake, PhD, RN
Assistant Professor, School of Nursing
University of Pennsylvania
Philadelphia, Pennsylvania
- Jack Needleman, PhD
Associate Professor, Department of Health Services
UCLA School of Public Health
Los Angeles, CA
- Mamatha S. Pancholi
Senior Social Science Research Analyst
Center for Delivery, Organization, and Markets
Agency for Healthcare Research and Quality
Rockville, Maryland
- Michael T. Rapp, MD, JD
Director, Quality Measurement and Health Assessment Group
Centers for Medicare and Medicaid Services
Baltimore, MD
- Cathy Rick, RN, CNAA, FACHE
Chief Nursing Officer, Office of Nursing Services
Department of Veterans Affairs
Washington, DC
- Mary Jean Schumann, MSN, RN, MBA, CPNP
Director, Department of Nursing Practice & Policy
American Nurses Association
Silver Spring, MD

Ad.2 If adapted, provide name of original measure: Skill Mix (Registered Nurses [RN], Licensed Vocational/Practical Nurse [LPN/LVN], unlicensed assistive personal [UAP], and contract) (in the inpatient setting)

NB: Since initial endorsement in 2004, the research literature has been monitored for changes in inclusion/exclusion criteria, comments from hospitals collecting data have been collected. Definitions and data collection guidelines (an web-based data collection training tutorials for data entry) have been updated. Reliability testing in the HOSPITAL setting was completed in 2008.

Ad.3-5 If adapted, provide original specifications URL or attachment www.nursingquality.org

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.6 Year the measure was first released: 1998

Ad.7 Month and Year of most recent revision: 02, 2009

Ad.8 What is your frequency for review/update of this measure? Reliability testing scheduled within 24 months

Ad.9 When is the next scheduled review/update for this measure?

Ad.10 Copyright statement/disclaimers: The American Nurses Association (ANA) National Database of Nursing Quality Indicators® ("The NDNQI® Database") is a repository of data related to health care facilities, including

data collected from NDNQI® Participating Facilities with respect to the ANA Quality Measures and Complex Measures. “NDNQI® Participating Facility” shall mean any health care facility that has contracted to receive services from ANA, ANA’s National Center for Nursing Quality (NCNQ®) or ANA’s subcontractors that are related to the NDNQI® Database. The NDNQI® Database shall not be considered a Measure, and no aspect of the development of the NDNQI® Database, including the collection of data from NDNQI® Participating Facilities shall be considered a non-proprietary Measure. Nothing in the foregoing Agreement with Measure Stewards, these Exhibits and the Measure Submission Forms shall implicate or diminish ANA’s intellectual property rights in the NDNQI® Database, including but not limited to data and benchmarks. Similarly, nothing in the foregoing Agreement with Measure Stewards, these Exhibits and the Measure Submission Forms shall implicate or diminish ANA’s intellectual property rights with respect to refinements and improvements to the Measures and Complex Measures, or the application of the Measures and Complex Measures, that are related to the NDNQI® Database, including but not limited to the NDNQI® guidelines and tutorials, stratification details, definitions and data collection methodologies. ANA expressly reserves all copyright, patent and trademark rights with respect to its Measures, Complex Measures and related materials.

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Ad.11 -13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): [04/06/2010](#)

Page 4: [1] Comment [k4] Karen Pace 10/5/2009 8:59:00 AM

1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;

OR

- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 - o Intermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 - o Process - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
 - o Structure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
 - o Patient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
 - o Access - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
 - o Efficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Page 4: [2] Comment [k5] Karen Pace 10/5/2009 8:59:00 AM

4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

Page 4: [3] Comment [k7] Karen Pace 10/5/2009 8:59:00 AM

USPSTF grading system <http://www.ahrq.gov/clinic/uspstf/grades.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

Page 9: [4] Comment [KP16] Karen Pace 10/5/2009 8:59:00 AM

2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care;^{Error! Bookmark not defined.} OR

rationale/data support no risk adjustment.

Page 9: [5] Comment [k17] Karen Pace 10/5/2009 8:59:00 AM

13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.

NATIONAL QUALITY FORUM
National Voluntary Consensus Standards for Nursing Homes 2010

Measure Number/Title: NH-007-10: Nursing Care Hours per Patient Day

Description: NSC-13.1 The number of productive hours worked by RNs with direct patient care responsibilities per patient day.

NSC-13.2 The number of productive hours worked by nursing staff (RN, LPN/LVN, and UAP) with direct patient care responsibilities per patient day.

Numerator Statement: Total number of productive hours worked by nursing staff with direct patient care responsibilities by Type of Unit during the calendar month.

Denominator Statement: Patient days during the calendar month

Level of Analysis: Facility/Agency

Data Source: Management data

Measure developer: American Nurses Association

Status: Not Recommended for Endorsement

Attachments: None

NATIONAL QUALITY FORUM

Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

- C = Completely (unquestionably demonstrated to meet the criterion)
- P = Partially (demonstrated to partially meet the criterion)
- M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
- N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
- NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) NQF Review #: NH-007-10 NQF Project: Nursing Homes 2010	
MEASURE DESCRIPTIVE INFORMATION	
De.1 Measure Title: Nursing Care Hours per Patient Day	
De.2 Brief description of measure: NSC-13.1 The number of productive hours worked by RNs with direct patient care responsibilities per patient day. NSC-13.2 The number of productive hours worked by nursing staff (RN, LPN/LVN, and UAP) with direct patient care responsibilities per patient day.	
1.1-2 Type of Measure: Structure/management De.3 If included in a composite or paired with another measure, please identify composite or paired measure	
De.4 National Priority Partners Priority Area: Care coordination, Safety De.5 IOM Quality Domain: Safety De.6 Consumer Care Need:	

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
<p>A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i></p> <p>A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes</p> <p>A.2 Indicate if Proprietary Measure (as defined in measure steward agreement): Proprietary measure</p> <p>A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission</p> <p>A.4 Measure Steward Agreement attached: NQF Agreement 121409-634018530937143091.pdf</p>	<p>A</p> <p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>

B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	B Y <input type="checkbox"/> N <input type="checkbox"/>
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ► Purpose: Public reporting, Internal quality improvement	C Y <input type="checkbox"/> N <input type="checkbox"/>
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1 Testing: No, testing will be completed within 24 months D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes (for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (<i>if submission returned</i>): Staff Notes to Reviewers (<i>issues or questions regarding any criteria</i>): Staff Reviewer Name(s):	D Y <input type="checkbox"/> N <input type="checkbox"/> Met Y <input type="checkbox"/> N <input type="checkbox"/>

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. <i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.</i> (evaluation criteria) 1a. High Impact _____	Eval Rating
(for NQF staff use) Specific NPP goal:	
1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Patient/societal consequences of poor quality 1a.2 1a.3 Summary of Evidence of High Impact: At any point in time, approximately 1.6 million people age 65 and over reside in the nation's 16,500+ Medicare skilled and Medicaid nursing facilities (1). Approximately one-third of the people turning age 65 in 2010 will need nursing home care for either a short- or long-term stay during their lifetimes (2). Whereas short-stay residents are in a nursing home for a period of rehabilitation following a hospitalization, long-stay residents tend to be frail with many chronic physical illnesses and changes in mental status. Given residents' medical, functional and cognitive complexity, one in every three nursing home residents is hospitalized each year. Risk factors for admission to a nursing home include advanced age, having a diagnosed medical condition, living alone, loss of self-care ability, decreased mental status, lack of informal supports, poverty, hospital admission, bed immobility and female gender (3). Virtually all nursing homes provide rehabilitative services, but the intensity of the service (skilled or maintenance) varies with the home's program operation and Medicare participation. More than 3,000 nursing homes have formally defined special care units (e.g. respirator units, dementia care units), constituting almost 7% of all beds. Registered nurses (RNs) and Licensed Practical Nurses (LPNs) together constitute the licensed nurse	1a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

Comment [KP1]: 1a. The measure focus addresses:
 • a specific national health goal/priority identified by NQF's National Priorities Partners; OR
 • a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).

<p>workforce in nursing homes. In 2004, only 6.3% of the working 2.6 million RNs were employed in nursing homes. Approximately 32% of the nation's 596,000 LPN/LVNs are employed in long-term care. Certified nursing assistants (CNAs) constitute 70% of the total nursing workforce in long-term care.</p> <p>With few exceptions, outcomes of nursing and quality of care in nursing homes are associated with staffing types and amounts. Overall, higher nurse staffing hours and higher total nurse staffing are significantly related to improved functionality of short-stay residents and decreased probability of death (4), improved resident functionality and fewer medication errors and survey deficiencies (5), reduced adverse outcomes and costs (6), and to improved performance of CNA-administered care processes (7).</p> <p>1a.4 Citations for Evidence of High Impact: 1. Harrington, C., Carillo, H., & Woleslagle Blank, B. (2007). Nursing Facilities, Staffing, Residents, and Facility Deficiencies, 2000 through 2006. Department of Social and Behavioral Sciences, University of California, San Francisco, September, 2007. Retrieved January 6, 2009. http://www.Itombudsman.org/ombpublic/49_346_4549.CFM 2. Alliance for Health Reform (2008) Issue Brief: Changing the nursing home culture. http://www.allhealth.org/publications/Longterm_care/Changing_the_Nursing_Home_Culture_79.pdf 3. Gaugler, J. E., Duval, S., Anderson, K. A., Kane, R. L. (2007). Predicting nursing home admission in the U.S.: a meta-analysis. BMC Geriatrics, 7(13). 4. Bleismer, M. M., Smayling, M., Kane, R. L., & Shannon, I. (1998). The relationship between nursing staffing levels and nursing home outcomes. Journal of Aging and Health (10): 351-371. 5. Dellefield, M. E. (2000). The relationship between nurse staffing on nursing homes and quality indicators. Journal of Gerontological Nursing 26(6): 14-28. 6. Dorr, D. A., S. D. Horn, and R. J. Smout. 2005. Cost Analysis of Nursing Home Registered Nurse Staffing Times. Journal of the American Geriatrics Society, 53(5), 840-845. 7. Schnelle, J. F., Simmons, S. F., Harrington, C., & Cadogan, M. (2004). Relationship of nursing staffing to quality of care. HSR 39(2): 225-250.</p>	
<p>1b. Opportunity for Improvement</p> <p>1b.1 Benefits (improvements in quality) envisioned by use of this measure: Endorsement of the proposed measure will allow for the standardized capturing of the amount of nursing care provided in the long term care setting.</p> <p>1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers: Staffing matters, in one report, there was a significant decrease in staffing levels for both nurses and CNAs during the day shift on weekends. Increased omission of required daily nursing notes, of meal documentation and increased falls appears to be associated with lower levels of weekend staffing.1</p> <p>1b.3 Citations for data on performance gap: 1 Quality Care Indicators and Staffing Levels in a Nursing Facility Subacute Unit. Andrew D. Weinberg, A. Jefferson Lesesne, Chesley L. Richards, Jean K. Pals Journal of the American Medical Directors Association - January 2002 (Vol. 3, Issue 1, Pages 1-4).</p> <p>1b.4 Summary of Data on disparities by population group: Staffing may play a significant role in nursing home disparities. Majority-black nursing homes had lower amounts of staff care overall, and that less of that care was provided by registered nurses, the most skilled workers, than in majority-white homes. Nearly 85 percent of homes where a majority of residents are black got the lowest rating for nurse staffing, compared with just 21 percent of white homes.1</p> <p>1b.5 Citations for data on Disparities: 1 Illinois Department of Public Health, Illinois Department of Healthcare and Family Services, U.S. Census Bureau, Vincent Mor of Brown University and Nursing Home Compare; analyzed by The Chicago Reporter.</p>	<p>1b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p>1c. Outcome or Evidence to Support Measure Focus</p> <p>1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population): The highest-staffed NHs</p>	<p>1c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/></p>

Comment [KP2]: 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

Comment [k4]: 1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
- OR
- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:
 - oIntermediate outcome - evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
 - oProcess - evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
 - oStructure - evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
 - oPatient experience - evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
 - oAccess - evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
 - oEfficiency - demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., ... [1])

<p>reported significantly lower resident care loads on all staffing reports and provided better care than all other homes.</p> <p>1c.2-3. Type of Evidence: Systematic synthesis of research</p> <p>1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome): In one study, in the year after admission, licensed (but not nonlicensed) nursing hours were significantly related to improved functional ability, increased probability of discharge home, and decreased probability of death. Another analysis, based on approximately 2,500 residents in 80 nursing homes in Rhode Island, used multivariate models to estimate which aspects of care are associated with resident outcomes after controlling for resident characteristics. Outcomes, measured over a 6-month period included death, functional decline, and functional improvement. Results suggest that higher staff levels and lower RN turnover were related to functional improvement.</p> <p>1c.5 Rating of strength/quality of evidence (also provide narrative description of the rating and by whom): A</p> <p>1c.6 Method for rating evidence: The evidence rating is based on a review of the literature which found consistent results in quantitative studies.</p> <p>1c.7 Summary of Controversy/Contradictory Evidence: Not Available</p> <p>1c.8 Citations for Evidence (other than guidelines): Not Available</p> <p>1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): Adequate nurse staffing is critical to the delivery of quality patient care. Identifying and maintaining the appropriate number and mix of nursing staff is a problem experienced by nurses at every level in all settings. Regardless of organizational mission, tempering the realities of cost containment and cyclical nursing shortages with the priority of safe, quality care has been difficult, in part, because of the paucity of empirical data to guide decision-making.</p> <p>1c.10 Clinical Practice Guideline Citation: American Nurses Association (2005). Principles for Nurse Staffing. Silver Spring, MD: Author.</p> <p>1c.11 National Guideline Clearinghouse or other URL: http://www.safestaffingsaveslives.org/WhatisSafeStaffing/SafeStaffingPrinciples.aspx</p> <p>1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom): Grade = 1.</p> <p>1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF): A review of the literature found good quality patient-oriented evidence that increased staffing and increased licensed staffing resulted in lower rates of adverse events.</p> <p>1c.14 Rationale for using this guideline over others: Relevance of the source to those most likely to be impacted by measurement.</p>	<p>N <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?</p>	<p>1</p>
<p>Steering Committee: Was the threshold criterion, Importance to Measure and Report, met? Rationale:</p>	<p>1 Y <input type="checkbox"/> N <input type="checkbox"/></p>
<p>2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES</p>	

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system <http://www.ahrq.gov/clinic/uspstf07/methods/benefit.htm>). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.

Comment [k7]: USPSTF grading system <http://www.ahrq.gov/clinic/uspstf/grades.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

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)	Eval Rating
2a. MEASURE SPECIFICATIONS	
S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL:	
2a. Precisely Specified 	
<p>2a.1 Numerator Statement (<i>Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome</i>): Total number of productive hours worked by nursing staff with direct patient care responsibilities by Type of Unit during the calendar month.</p> <p>2a.2 Numerator Time Window (<i>The time period in which cases are eligible for inclusion in the numerator</i>): Calendar Month</p> <p>2a.3 Numerator Details (<i>All information required to collect/calculate the numerator, including all codes, logic, and definitions</i>): Included Populations: Productive hours worked by nursing staff with direct patient care responsibilities for greater than 50% of their shift. Include: •Staff who are counted in the staffing matrix, and •Who are replaced if they call in sick, and •Work hours are charged to the unit's cost center •Contract staff</p> <p>Excluded Populations: •Persons whose primary responsibility is administrative in nature •Specialty teams, patient educators or case managers who are not assigned to a specific unit. •Unit clerks, monitor techs, and others with no direct patient care responsibilities</p> <p>Data Elements: RN Hours [Contract/Agency] RN Hours [Employee] LPN/LVN Hours [Contract/Agency] LPN/LVN Hours [Employee] UAP Hours [Contract/Agency] UAP Hours [Employee] Month Year Type of Unit</p>	
<p>2a.4 Denominator Statement (<i>Brief, text description of the denominator - target population being measured</i>): Patient days during the calendar month</p>	
<p>2a.5 Target population gender: Female, Male 2a.6 Target population age range: All</p>	
<p>2a.7 Denominator Time Window (<i>The time period in which cases are eligible for inclusion in the denominator</i>): Calendar Month</p>	
<p>2a.8 Denominator Details (<i>All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions</i>): Included Populations:</p>	<p>2a-specs C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF's Health Information Technology Expert Panel (HITEP) .

<p>•All patients - inpatient, short stay patients, observation patients and same day surgery patients who receive care on an eligible reporting unit for all or part of a day.</p> <p>Midnight Census The daily number should be summed for every day in the month.</p> <p>Data Elements:</p> <ul style="list-style-type: none"> • Month • Year • Patient Days Reporting method which includes midnight census and short stay patient days
<p>2a.9 Denominator Exclusions (<i>Brief text description of exclusions from the target population</i>): Excluded Populations: Other unit types (e.g., pediatric, psychiatric, obstetrical)</p>
<p>2a.10 Denominator Exclusion Details (<i>All information required to collect exclusions to the denominator, including all codes, logic, and definitions</i>): Not Available</p>
<p>2a.11 Stratification Details/Variables (<i>All information required to stratify the measure including the stratification variables, all codes, logic, and definitions</i>): No stratification necessary</p>
<p>2a.12-13 Risk Adjustment Type: No risk adjustment necessary</p>
<p>2a.14 Risk Adjustment Methodology/Variables (<i>List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method</i>): Not Available</p>
<p>2a.15-17 Detailed risk model available Web page URL or attachment:</p>
<p>2a.18-19 Type of Score: Rate/proportion 2a.20 Interpretation of Score: 2a.21 Calculation Algorithm (<i>Describe the calculation of the measure as a flowchart or series of steps</i>): NSC-13.1 The number of productive hours worked by RNs with direct patient care responsibilities per patient day. NSC-13.2 The number of productive hours worked by nursing staff (RN, LPN/LVN, and UAP) with direct patient care responsibilities per patient day.</p> <p>Productive Hours. Actual direct hours worked, not budgeted or scheduled hours. Excludes vacation, sick time, orientation, education leave, or committee time. Orientation time is considered non-productive. However, orientation programs vary from hospital to hospital. Once orientees reach the point where they are considered part of the staffing matrix, their work hours are charged and they would be replaced if they call in sick, then count their hours as productive.</p> <p>Patient Care Responsibilities. Patient centered nursing activities by staff in the presence of the patient and activities that occur away from the patient that are patient related:</p> <ul style="list-style-type: none"> • Medication administration • Nursing treatments • Nursing rounds • Admission, transfer, discharge activities • Patient teaching • Patient communication • Coordination of patient care • Documentation time • Treatment planning <p>Unlicensed Assistive Personnel. Individuals trained to function in an assistive role to nurses in the provision</p>

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

of patient care, as delegated by and under the supervision of the registered nurse. Typical activities performed by UAPs may include (but are not limited to):

- Taking vital signs
- Bathing, feeding, or dressing patients
- Assisting patient with transfers, ambulation, or toileting

Include:

- Nursing assistants
- Orderlies
- Patient care technicians/assistants
- Graduate nurses (not yet licensed) who have completed orientation

Exclude:

- Unit secretaries or clerks
- Monitor technicians
- Therapy assistants
- Student nurses who are fulfilling educational requirements
- Sitters who either are not employed by the facility or who are employed by the facility, but are not providing typical UAP activities

NOTE: In some states assistive nursing personnel may be licensed. For the purposes of this indicator, include these persons in the UAP category.

Staffing Matrix. Daily roster of individual nursing staff scheduled for each shift.

Rate calculated for a quarter, as the average of the three monthly rates. The numerator and denominator statements below (items #6 and #7) provide the calculation details for the monthly rates that are the basis for the quarterly rates.

2a.22 Describe the method for discriminating performance (e.g., significance testing):
Significance testing is not recommended for evaluating performance. Units should compare themselves against the median or other percentile rankings provided from national convenience samples.

2a.23 Sampling (Survey) Methodology *If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):*
Not Available

2a.24 Data Source *(Check the source(s) for which the measure is specified and tested)*
Management data

2a.25 Data source/data collection instrument *(Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):*
Payroll, time/attendance tracking systems; accounting, billing, admission/discharge/ transfer or census reports

2a.26-28 Data source/data collection instrument reference web page URL or attachment: URL www.nursingquality.org

2a.29-31 Data dictionary/code table web page URL or attachment: URL www.nursingquality.org

2a.32-35 Level of Measurement/Analysis *(Check the level(s) for which the measure is specified and tested)*
Facility/Agency

2a.36-37 Care Settings *(Check the setting(s) for which the measure is specified and tested)*
Hospice, Long term acute care hospital, Nursing home (NH) /Skilled Nursing Facility (SNF), Rehabilitation Facility

<p>2a.38-41 Clinical Services (<i>Healthcare services being measured, check all that apply</i>) Hospice/ Palliative Care, Clinicians: Pharmacist</p>	
<p>TESTING/ANALYSIS</p>	
<p>2b. Reliability testing</p> <p>2b.1 Data/sample (<i>description of data/sample and size</i>): Reliability testing will be conducted within 24 months.</p> <p>2b.2 Analytic Method (<i>type of reliability & rationale, method for testing</i>): Not Available</p> <p>2b.3 Testing Results (<i>reliability statistics, assessment of adequacy in the context of norms for the test conducted</i>): Not Available</p>	<p>2b</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>2c. Validity testing</p> <p>2c.1 Data/sample (<i>description of data/sample and size</i>): Not Available</p> <p>2c.2 Analytic Method (<i>type of validity & rationale, method for testing</i>): Face validity is predicated on an inter-rater reliability study conducted on the initial measure (in the HOSPITAL setting) in 2007.</p> <p>2c.3 Testing Results (<i>statistical results, assessment of adequacy in the context of norms for the test conducted</i>): The inter-rater reliability study compared routinely submitted nursing care hours data with data independently collected through payroll or staffing systems for the same time period. Intra-class correlations were performed for data submitted by 158 units across 11 hospitals. There were strong ICCs for all skill mix categories, indicating that data can be reproduced reliably with multiple "raters" (data collectors). Thirty-nine ICCs were calculated, with 30 being above 0.90.</p> <p>The study also included a qualitative component with semi-structured interviews conducted by the study PI with a database stakeholder at each hospital--a person identified as having a major role in the collection of nursing care hour data. Interviews were conducted with individuals at 10 of the 11 study sites. The interviewees reported that in order to submit accurate nursing care hours, data cleaning was performed either by the site coordinator or unit manager prior to submission. In addition, the study PI learned that hours for agency and traveling nurses frequently were collected from a source separate from the hospital staffing or time/attendance programs and, therefore, present a greater degree of difficulty to obtain in a timely and accurate manner.</p> <p>A survey of NDNQI site coordinators (n=714, 70% response rate) found that a very large majority (84%-95%) of the hospitals had separate job codes for RN, LPN/LVN and UAP. Seventy percent said their hospitals could produce daily nursing care hours reports or that they used the NDNQI nursing care hours calculator to separate bi-weekly pay period data into distinct months. Over 75% of the site coordinators reported that they used at least one method to verify their nursing care hours before reporting to NDNQI.</p> <p>Patient Days Reliability Study The patient days reliability study was conducted by NDNQI in 2008. The aim of this study was to assess the reliability of the five patient day reporting methods endorsed by the NDNQI.</p> <p>Study Design: This study compared the patient day data routinely reported by hospitals to NDNQI with data from a special data collection. Hospital units volunteered to collect data on seven randomly assigned days throughout one month. On each data collection day, RNs counted the number of patients every two hours for a period of 24 hours. To assess measurement agreement intra-class correlations (ICC) and regression analyses were conducted.</p> <p>Population Studied: 282 patient care units in 54 hospitals enrolled in the study. 260 units (92.1%) sent data</p>	<p>2c</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>

Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

Comment [k11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

Comment [KP12]: 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

Comment [k13]: 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure focus is the most important aspect of quality for the specific topic.

<p>for 1,974 days (90.7%) signifying a high response rate. All five NDNQI patient day collection methods were represented among the study units: 59% used midnight census (M1), 24% used midnight census with actual hours for short stay patients (M2), 6% used midnight census with average hours for short stay patients (M3), 7% used patient days from actual hours for inpatients and short stay patients (M4), and 3% used patient days from multiple census reports (M5).</p> <p>Principal Findings: Overall, the agreement between quarterly data and special study data was excellent, with an ICC [95% CI] of 0.967 [0.958-0.974]. There was also excellent agreement for four of the reporting methods: M1 (0.98 [0.970-0.984]), M2 (0.96 [0.942-0.978]), M4 (0.996 [0.989-0.998]) and M5 (0.955 [0.812-0.991]). However, the measurement agreement for M3 was considerably lower (0.643 [0.246-0.857]).</p> <p>Conclusions: Except for M3, all patient day data collection methods presented excellent agreement between routine and study data. Units using M3 had higher volatility and reported more short stay patients. For units using M3, it may be reasonable to continue to use M3, rather than fall back to midnight census and not capture any short stay patients. Nonetheless, it is recommended that units using M3 change to either M2 or M4 when it becomes feasible.</p>	
<p>2d. Exclusions Justified</p> <p>2d.1 Summary of Evidence supporting exclusion(s): Not Available</p> <p>2d.2 Citations for Evidence: Not Available</p> <p>2d.3 Data/sample (description of data/sample and size): Not Available</p> <p>2d.4 Analytic Method (type analysis & rationale): Not Available</p> <p>2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): Not Available</p>	<p>2d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>2e. Risk Adjustment for Outcomes/ Resource Use Measures</p> <p>2e.1 Data/sample (description of data/sample and size): Not Available</p> <p>2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): Not Available</p> <p>2e.3 Testing Results (risk model performance metrics): Not Available</p> <p>2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: Not Available</p>	<p>2e</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>2f. Identification of Meaningful Differences in Performance</p> <p>2f.1 Data/sample from Testing or Current Use (description of data/sample and size): Not Available</p> <p>2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale): Not Available</p> <p>2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance): Not Available</p>	<p>2f</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p>2g. Comparability of Multiple Data Sources/Methods</p>	<p>2g</p> <p>C <input type="checkbox"/></p>

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be:

- supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
- AND
- a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
- AND
- precisely defined and specified:
 - if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
 - if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

Comment [k15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care; Error! Bookmark not defined. OR ... [2]

Comment [k17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race ... [3]

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [k19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically ... [4]

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

<p>2g.1 Data/sample (description of data/sample and size): Not Available</p> <p>2g.2 Analytic Method (type of analysis & rationale): Not Available</p> <p>2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): Not Available</p>	<p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>2h. Disparities in Care</p> <p>2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): Not Available</p> <p>2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: Not Available</p>	<p>2h</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?</p>	<p>2</p>
<p>Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i>, met? Rationale:</p>	<p>2</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
3. USABILITY	
<p>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)</p>	<p>Eval Rating</p>
<p>3a. Meaningful, Understandable, and Useful Information</p> <p>3a.1 Current Use: In use</p> <p>3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). <u>If not publicly reported</u>, state the plans to achieve public reporting within 3 years): Data on Nursing Home Staffing are currently reported on NursingHomeCompare.gov. CMS obtains data from the states and converts the staffing hours reported by the nursing home into a measure that shows the number of staff hours per resident per day.</p> <p>3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). <u>If not used for QI</u>, state the plans to achieve use for QI within 3 years): According to the Center for Medicare Advocacy, Inc. (2007, November 15) testimony before the House Ways and Means Committee, "Nurse staffing is the single best predictor of good quality of care. Residents need to be cared for by professional nurses and by sufficient numbers of well-trained, well-supervised, and well-supported paraprofessional workers...Over the years, the industry has also developed a series of voluntary "quality initiatives" - Quest for Quality, Quality First, Advancing Excellence in America's Nursing Homes - that promise a commitment to high quality care, but that undermine the regulatory system by establishing alternative criteria for evaluating nursing facilities. In contrast to the criteria established by the regulatory system, these industry criteria reflect secret goals and targets for improvement that are voluntary, self-reported and unaudited, and lack public accountability".</p> <p>Testing of Interpretability (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)</p> <p>3a.4 Data/sample (description of data/sample and size): Not Available</p> <p>3a.5 Methods (e.g., focus group, survey, QI project): Not Available</p>	<p>3a</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender);OR rationale/data justifies why stratification is not necessary or not feasible.

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

3a.6 Results (qualitative and/or quantitative results and conclusions): Not Available	
3b/3c. Relation to other NQF-endorsed measures	
3b.1 NQF # and Title of similar or related measures: 0205: Nursing care hours per patient day (RN, LPN, and UAP) and 0190: Nurse staffing hours - 4 parts	
(for NQF staff use) Notes on similar/related endorsed or submitted measures:	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population): 3b.2 Are the measure specifications harmonized? If not, why? 0205 is specified for the hospital setting and rehabilitation, pediatric and psychiatric settings. The proposed measure is applicable to long term care.	3b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
3c. Distinctive or Additive Value 3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures: Amplifies the settings in which the measure may be used (0205) and provides a higher level of granularity (0190). 5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality: This measure is an adaptation of 0205: Nursing care hours per patient day (RN, LPN, and UAP) for use in the nursing home setting	3c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?	3
Steering Committee: Overall, to what extent was the criterion, Usability, met? Rationale:	3 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes 4a.1-2 How are the data elements that are needed to compute measure scores generated? Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)	4a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4b. Electronic Sources 4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims) No 4b.2 If not, specify the near-term path to achieve electronic capture by most providers.	4b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4c. Exclusions 4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No	4c C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/>

Comment [KP23]: 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

Comment [k24]: 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., influenza immunization of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for patients with diabetes), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

Comment [KP25]: 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).

Comment [KP26]: 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

Comment [KP27]: 4b. The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

Comment [KP28]: 4c. Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

4c.2 If yes, provide justification.	
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences	
<p>4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. Consistent and thorough training using standardized definitions, detailed data collection guidelines and electronic forms are required to produce reliable data. Research, including NDNQ's reliability studies, has shown a few areas where data collectors are likely to misinterpret inclusion/exclusion criteria. Based on these findings, revisions to the data collection guidelines and user training have been completed.</p>	4d C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
4e. Data Collection Strategy/Implementation	
<p>4e.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/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: See 4d.1</p> <p>4e.2 Costs to implement the measure (<i>costs of data collection, fees associated with proprietary measures</i>):</p> <p>4e.3 Evidence for costs:</p> <p>4e.4 Business case documentation: Better nurse staffing in nursing homes results in reduced use of hospital emergency room visits and inpatient stays for nursing home patients (Aiken, LH. Policy Polit Nurs Pract. 2008 May; 9(2):73-79).</p>	4e C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Feasibility</i> ?	4
Steering Committee: Overall, to what extent was the criterion, <i>Feasibility</i> , met? Rationale:	4 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
RECOMMENDATION	
(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.	Time-limited <input type="checkbox"/>
Steering Committee: Do you recommend for endorsement? Comments:	Y <input type="checkbox"/> N <input type="checkbox"/> A <input type="checkbox"/>
CONTACT INFORMATION	
Co.1 Measure Steward (Intellectual Property Owner) Co.1 <u>Organization</u> American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, Maryland, 20910-3492 Co.2 <u>Point of Contact</u> Isis, Montalvo, MBA, MS, RN, Isis.Montalvo@ANA.org, 301-628-5047-	
Measure Developer If different from Measure Steward Co.3 <u>Organization</u> American Nurses Association, 8515 Georgia Avenue, Suite 400, Silver Spring, Maryland, 20910-3492	

Comment [KP29]: 4d. Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

Comment [KP30]: 4e. Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).

Co.4 Point of Contact

Isis, Montalvo, MBA, MS, RN, Isis.Montalvo@ANA.org, 301-628-5047-

Co.5 Submitter If different from Measure Steward POC

Rita Munley, Gallagher, PhD, RN, Rita.Gallagher@ANA.org, 301-628-5062-, American Nurses Association

Co.6 Additional organizations that sponsored/participated in measure development**ADDITIONAL INFORMATION****Workgroup/Expert Panel involved in measure development****Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations.**

Describe the members' role in measure development.

In 1994, ANA launched the Patient Safety and Quality Initiative (ANA, 1995). A series of pilot studies across the United States were funded by ANA to evaluate linkages between nurse staffing and quality of care. Multiple quality indicators were identified initially. Evidence of the effectiveness of these indicators was used to adopt a final set of 10 nursing-sensitive indicators to use in evaluating patient care quality.

In 1998, the National Database of Nursing Quality Indicators was established by ANA so that ANA could continue to collect and build on data obtained from earlier studies and further develop nursing's body of knowledge related to factors which influence the quality of nursing care. Linkages between nurse staffing and patient outcomes had already been identified, but continued data collection and reporting was necessary to evaluate nursing care quality at the unit level and thus fulfill nursing's commitment to evaluating and improving patient care.

In 2007-2008, ANA participated in an expert advisory panel that evaluated the implementation of multiple nursing measures. The Robert Wood Johnson Foundation (RWJF) funded the study and the Joint Commission took the lead role in the development of uniform, standardized technical specifications for the measure set. The advisory panel consisted of:

- Marilyn P. Chow, RN, DNSc, FAAN (Chair)

Vice President, Patient Care Services

Kaiser Permanente

Oakland, CA

- Nancy E. Donaldson RN, DNSc. FAAN

Director, Center for Research & Innovation in Patient Care, Department of Physiological Nursing

UCSF School of Nursing

San Francisco, CA

- Marybeth Farquhar, PhD, RN, MSN (Liaison)

Managing Director, Performance Measures

National Quality Forum

Washington, DC

- Lillie S. Gelinas RN, MSN, FAAN

Vice President and Chief Nursing Officer

VHA, Inc.

Irving, TX

- Ann Hendrich, RN, MSN, FAAN

Vice President, Clinical Excellence Operations Ascension Health

St. Louis, Mo

- Teresa C. Horan, MPH

Captain, US Public Health Service, Leader Performance Measurement Team, Healthcare Outcomes Branch, Division of Healthcare Quality Promotion

Centers for Disease Control and Prevention

Atlanta, GA

- Gail Keenan, RN, PHD

Associate Professor of Nursing and Director of the Nursing Informatics Initiative, College of Nursing

University of Illinois at Chicago
Chicago, IL

- Ellen T. Kurtzman, MPH, RN
Assistant Research Professor, Department of Nursing Education, School of Medicine and Health Sciences
The George Washington University
Washington, DC

- Eileen Lake, PhD, RN
Assistant Professor, School of Nursing
University of Pennsylvania
Philadelphia, Pennsylvania

- Jack Needleman, PhD
Associate Professor, Department of Health Services
UCLA School of Public Health
Los Angeles, CA

- Mamatha S. Pancholi
Senior Social Science Research Analyst
Center for Delivery, Organization, and Markets
Agency for Healthcare Research and Quality
Rockville, Maryland

- Michael T. Rapp, MD, JD
Director, Quality Measurement and Health Assessment Group
Centers for Medicare and Medicaid Services
Baltimore, MD

- Cathy Rick, RN, CNAA, FACHE
Chief Nursing Officer, Office of Nursing Services
Department of Veterans Affairs
Washington, DC

- Mary Jean Schumann, MSN, RN, MBA, CPNP
Director, Department of Nursing Practice & Policy
American Nurses Association
Silver Spring, MD

Ad.2 If adapted, provide name of original measure: [Nursing care hours per patient day \(in the inpatient setting\)](#)

NB: Since initial endorsement in 2004, the research literature has been monitored for changes in inclusion/exclusion criteria, comments from hospitals collecting data have been collected. Definitions and data collection guidelines (an web-based data collection training tutorials for data entry) have been updated. Reliability testing in the HOSPITAL setting was completed in 2008.

Ad.3-5 If adapted, provide original specifications URL or attachment www.nursingquality.org

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.6 Year the measure was first released: 1998

Ad.7 Month and Year of most recent revision: 02, 2009

Ad.8 What is your frequency for review/update of this measure? Reliability testing scheduled within 24 months

Ad.9 When is the next scheduled review/update for this measure?

Ad.10 Copyright statement/disclaimers: The American Nurses Association (ANA) National Database of Nursing Quality Indicators® (“The NDNQI® Database”) is a repository of data related to health care facilities, including data collected from NDNQI® Participating Facilities with respect to the ANA Quality Measures and Complex Measures. “NDNQI® Participating Facility” shall mean any health care facility that has contracted to receive services from ANA, ANA’s National Center for Nursing Quality (NCNQ®) or ANA’s subcontractors that are related to the NDNQI® Database. The NDNQI® Database shall not be considered a Measure, and no aspect of the development of the NDNQI® Database, including the collection of data from NDNQI® Participating Facilities shall be considered

a non-proprietary Measure. Nothing in the foregoing Agreement with Measure Stewards, these Exhibits and the Measure Submission Forms shall implicate or diminish ANA's intellectual property rights in the NDNQI® Database, including but not limited to data and benchmarks. Similarly, nothing in the foregoing Agreement with Measure Stewards, these Exhibits and the Measure Submission Forms shall implicate or diminish ANA's intellectual property rights with respect to refinements and improvements to the Measures and Complex Measures, or the application of the Measures and Complex Measures, that are related to the NDNQI® Database, including but not limited to the NDNQI® guidelines and tutorials, stratification details, definitions and data collection methodologies. ANA expressly reserves all copyright, patent and trademark rights with respect to its Measures, Complex Measures and related materials.

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Ad.11 -13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): 04/06/2010

Page 3: [1] Comment [k5] **Karen Pace** **10/5/2009 8:59:00 AM**

4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status - patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

Page 9: [2] Comment [KP16] **Karen Pace** **10/5/2009 8:59:00 AM**

2e. For outcome measures and other measures (e.g., resource use) when indicated:

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care;^{Error! Bookmark not defined.} OR rationale/data support no risk adjustment.

Page 9: [3] Comment [k17] **Karen Pace** **10/5/2009 8:59:00 AM**

13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

Page 9: [4] Comment [k19] **Karen Pace** **10/5/2009 8:59:00 AM**

14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.