

NATIONAL QUALITY FORUM

Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the [submitting standards web page](#).

NQF #: 0035	NQF Project: Patient Safety Measures-Complications Project
(for Endorsement Maintenance Review)	
Original Endorsement Date: Aug 10, 2009 Most Recent Endorsement Date: Aug 10, 2009 Last Updated Date: Apr 09, 2012	
BRIEF MEASURE INFORMATION	
De.1 Measure Title: Fall Risk Management	
Co.1.1 Measure Steward: National Committee for Quality Assurance	
De.2 Brief Description of Measure: a) Discussing Fall Risk. The percentage of adults 75 years of age and older, or 65–74 years of age with balance or walking problems or a fall in the past 12 months, who were seen by a practitioner in the past 12 months and who discussed falls or problems with balance or walking with their current practitioner.	
b) Managing Fall Risk. The percentage of adults 65 years of age and older who had a fall or had problems with balance or walking in the past 12 months, who were seen by a practitioner in the past 12 months and who received fall risk intervention from their current practitioner.	
2a1.1 Numerator Statement: This measure has two rates. The numerator for the discussing falls rate is the number of older adults who talked with their doctor about falling or problems with balance or walking. The numerator for the managing falls risk rate is the number of older adults who report having their provider suggest an intervention to prevent falls or treat problems with balance or walking.	
2a1.4 Denominator Statement: Each rate has a different denominator. The Discussing Falls measure has two denominators: adults age 75 and older who had a provider visit in the past 12 months and adults age 65-74 who had a provider visit in the past 12 months and report either falling or having a problem with balance or walking in the past 12 months. The Managing Falls Risk measure has only one denominator: Adults age 65 and older who had a provider visit in the past 12 months and report either falling or having a problem with balance or walking in the past 12 months.	
2a1.8 Denominator Exclusions: N/A	
1.1 Measure Type: Process	
2a1. 25-26 Data Source: Patient Reported Data/Survey	
2a1.33 Level of Analysis: Clinician : Individual, Health Plan, Population : National	
1.2-1.4 Is this measure paired with another measure? No	
De.3 If included in a composite, please identify the composite measure (<i>title and NQF number if endorsed</i>): N/A	

STAFF NOTES (<i>issues or questions regarding any criteria</i>)
Comments on Conditions for Consideration:
Is the measure untested? Yes <input type="checkbox"/> No <input type="checkbox"/> If untested, explain how it meets criteria for consideration for time-limited endorsement:
1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (<i>check De.5</i>):
5. Similar/related endorsed or submitted measures (<i>check 5.1</i>):

Other Criteria:

Staff Reviewer Name(s):

1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT

Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See [guidance on evidence](#).

Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria)

1a. High Impact: H M L I

(The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.)

De.4 Subject/Topic Areas (Check all the areas that apply): Musculoskeletal, Musculoskeletal : Functional Status, Musculoskeletal : Hip/Pelvic Fracture, Prevention, Prevention : Physical Activity, Prevention : Screening

De.5 Cross Cutting Areas (Check all the areas that apply): Care Coordination, Functional Status, Palliative Care and End of Life Care, Population Health, Safety, Safety : Complications

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, A leading cause of morbidity/mortality, High resource use, Patient/societal consequences of poor quality

1a.2 If "Other," please describe:

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

Falls are a serious public health problem for older adults. Moreover, the rate of falls increases with age (Dykes et al., 2010). Older adults are five times more likely to be hospitalized for fall-related injuries than any other cause-related injury. It is estimated that one in every three adults over 65 will fall each year (CDC, 2010). In those over age 80, the rate of falls increases to fifty percent (Doherty et al., 2009).

The injuries older adults could sustain after falling can have very severe and life-limiting affects on an individual. Between 20% and 30% of people who fall experience an injury (CDC, 2010). Roughly 10% of all falls cause major injuries such as fractures, serious soft tissue damage and traumatic brain injury (Tinetti, 2010). Lacerations are another common, and sometimes severe, injury incurred by falling. The majority of fractures among older adults are caused by falling, fracturing the spine, hip, forearm, leg, pelvis, upper arm, and/or hand (CDC, 2010). Of fall-related fractures, hip fractures are one of the more serious, often resulting in long-term functional limitation, nursing home admission and increased mortality. Over 90% percent of hip fractures result from falls (CDC, 2010). Hip fractures have a significant impact on older adults' independence and quality of life. Only half of older adults hospitalized for a hip fracture are able to return home or live independently after the injury (Wolinsky et al., 2009).

Falls can also have serious psychological and social consequences. Developing a fear of falling is another common outcome even if no injury was sustained in the first fall. Living in fear of a fall can limit an older adult's quality of life because it causes them to limit their activities, leading to reduced mobility and loss of physical fitness, which ultimately increases their risk of falling (CDC, 2010). Recurrent falls are a common reason for long-term care admissions (Soriano et al., 2007). According a statistical brief released by the Agency for Healthcare Research and Quality, falls were a significant factor in 40.9 percent of admissions to long-term care facilities (Owens et al., 2009). Adults 75 and older are about 5 times more likely to be admitted to a long-term care facility for a year or longer than those between 65 and 74 (CDC, 2010).

Falls have a significant economic cost. In 2005, total direct cost of fall injuries for adults age 65 and older was over \$34 billion (NCOA, 2010). The direct costs for fall-related care include fees for hospital and nursing home care, doctors and other professional services, rehabilitation, community-based services, use of medical equipment, prescription drugs, changes made to the home, and insurance processing. It is estimated that by 2020, the annual direct and indirect cost of fall injuries is expected to reach \$54.9 billion (CDC, 2010).

1a.4 Citations for Evidence of High Impact cited in 1a.3: Centers for Disease Control and Prevention. Injury Prevention & Control: Home and Recreational Safety. Falls Among Older Adults: An Overview. September 13, 2010.

Doherty M, Crossen-Sills J. Bonus Content Geriatric Care Fall Risk: Keep your patients in balance. The Nurse Practitioner: The American Journal of Primary Health Care. December 2009. Vol.34(12):46 – 51.

Dykes PC, Carroll DL, Hurley A, Lipsitz S, Benoit A, Chang F, Meltzer S, Tsurikova R, Zuyov L, Middleton B. Fall Prevention in Acute Care Hospitals. JAMA. 2010;304(17):1912-1918.

National Council on Aging (NCOA). Improving the Lives of Older Americans. May 13, 2010. Found at: <http://www.ncoa.org/press-room/press-release/ncoa-and-phi-launch-falls.html>

Owens PL, Russo CA, Spector W, Mutter R. Agency for Healthcare Research and Quality. H-CUP Statistical Brief #80: Emergency Department Visits for Injurious Falls among the Elderly, 2006. October 2009.

Soriano TA, DeCherrie LV, Thomas DC. Falls in the community-dwelling older adult: A review for primary-care providers. Clin Interv Aging. 2007 December; 2(4): 545–553.

Tinetti, ME. The Patient Who Falls: "It's Always a Trade-off". JAMA. 2010;303(3):258-266.

Wolinsky FD, Bentler SE, Liu L, Obrizan M, Cook EA, Wright KB, Geweke JF, Chrischilles EA, Pavlik CE, Ohsfeldt RL, Jones MP, Richardson KK, Rosenthal GE, Wallace RB. Recent Hospitalization and the Risk of Hip Fracture Among Older Americans. J Gerontol A Biol Sci Med Sci. 2009 February; 64A(2): 249–255.

1b. Opportunity for Improvement: H M L I

(There is a demonstrated performance gap - variability or overall less than optimal performance)

1b.1 Briefly explain the benefits (improvements in quality) envisioned by use of this measure:

Encouraging falls risk management in older adults helps prevent injury susceptibility and risk of death. Falls are the leading cause of death due to injury for the 65 and older population as well as the most common cause of nonfatal injuries and trauma related hospital admissions. In 2007, 18,000+ adults above the age of 64 died due to unintentional fall injuries. In 2008, over two million older adults required emergency care as a result of a fall, 559,000 of which needed hospitalization (CDC, 2010).

1b.2 Summary of Data Demonstrating Performance Gap (Variation or overall less than optimal performance across providers):

[For **Maintenance** – Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.]

The data below show the two rates (Discussing falls and managing falls risk) for Medicare Advantage Plans. The "N" below is the number of plans reporting. The mean is the average rate across plans.

Discussing Fall Risk	2009	2008	2007			
N	463	416	355			
MEAN	32.4	30.9	31.1			
STDEV	7.11	6.38	6.98	STDERR	0.33	0.31 0.37
MIN	19.6	19.5	18.8			
MAX	62.3	55.6	57.6	P10	25.3	24.6 24.7
P25	27.9	26.7	26.2			
P50	30.3	29.4	29.1			
P75	35	32.9	34.7			
P90	43.3	40.3	41.3			

Managing Fall Risk	2009	2008	2007
N	458	406	339
MEAN	58.7	56.9	56.8
STDEV	8.44	7.42	7.79
STDERR	0.39	0.37	0.42
MIN	40.4	40.9	40.8
MAX	88.8	80.2	83.8

P10	49.7	48.2	47.9			
P25	53	52.2	51.4	P50	57.5	56 55.8
P75	62.7	61	61			
P90	69.5	67	67.3			

1b.3 Citations for Data on Performance Gap: [*For Maintenance* – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included] Section 1b.2 references data from the most recent three years of measurement for this measure. The data in section 1b.2 includes percentiles, mean, min, max, standard deviations and errors.

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

This measure is not stratified for disparities. NCOA has participated with IOM and others in attempting to include information on disparities in measure data collection. However, at the present time, this data, at all levels (claims data, paper chart review, and electronic records), is not coded in a standard manner, and is incompletely captured. There are no consistent standards for what entity (physician, group, plan, employer) should capture and report this data. While “requiring” reporting of the data could push the field forward, it has been our position that doing so would create substantial burden with inability to use the data because of its inconsistency. At the present time, we agree with the IOM report that disparities are best considered by the use of zip code analysis which has limited applicability in most reporting situations. At the health plan level, for HEDIS health plan data collection, NCOA does have extensive data related to our use of stratification by insurance status (Medicare, Medicaid and private-commercial) and would strongly recommend this process where the data base supporting the measurement includes this information. However, we believe that the measure specifications should NOT require this since the measure is still useful where the data needed to determine disparities cannot be ascertained from the data available.

1b.5 Citations for Data on Disparities Cited in 1b.4: [*For Maintenance* – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

N/A

1c. Evidence (Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.) Is the measure focus a health outcome? Yes No **If not a health outcome, rate the body of evidence.**

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

Quantity	Quality	Consistency	Does the measure pass subcriterion1c?
M-H	M-H	M-H	Yes <input type="checkbox"/>
L	M-H	M	Yes <input type="checkbox"/> IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No <input type="checkbox"/>
M-H	L	M-H	Yes <input type="checkbox"/> IF potential benefits to patients clearly outweigh potential harms: otherwise No <input type="checkbox"/>
L-M-H	L-M-H	L	No <input type="checkbox"/>

Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service	Does the measure pass subcriterion1c? Yes <input type="checkbox"/> IF rationale supports relationship
--	--

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

Identify population at risk (Discussing falls rate) >> develop a plan of care for falls (Managing falls risk rate) >> reduced number of falls

The goal of screening for falls and identifying fall risk is to prevent or reduce fall risk.

The American Geriatrics Society along with the British Geriatrics Society recommends fall risk assessment based on epidemiological studies demonstrating an association between certain risk factors and falls and from experimental studies in which assessment followed by intervention demonstrated benefit. Assuming that the interventions are carried out, falls risk assessment

and management programs could be one of the most effective intervention for reducing both the risk for falling and the monthly rate of falling (Chang, 2004; Gillespie, 2010).

Individuals who have experienced two or more falls in the last year or who have gait or balance issues have an increased likelihood of falling, therefore would benefit from risk management (AGS, 2010).

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

Clinical Practice Guideline, Systematic review of body of evidence (other than within guideline development)

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

This measure evaluates the management of falls risk in the elderly population. The measure intent and the body of evidence are congruent.

1c.5 **Quantity of Studies in the Body of Evidence** (Total number of studies, not articles): 111

1c.6 **Quality of Body of Evidence** (Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events): Good quality of evidence based on consistency of guidelines and evidence review.

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

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

The evidence cited here all discuss the consequences of falls and many address the need for fall risk management. This measure seeks to address this via office consultations with physicians.

1c.9 **Grading of Strength/Quality of the Body of Evidence.** Has the body of evidence been graded? No

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: N/A

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

1c.12 If other, identify and describe the grading scale with definitions: N/A

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

1c.14 **Summary of Controversy/Contradictory Evidence:** No areas of controversy

1c.15 **Citations for Evidence other than Guidelines**(Guidelines addressed below):

Chang JT, Morton SC, Rubenstein LZ, et al. Interventions for the prevention of falls in older adults: systematic review and meta-analysis of randomized clinical trials. *BMJ* 2004; 328:680-3.

Gillespie LD, Robertson MC, Gillespie WJ, Lam WE, Gates S, Cumming RG, Rowe BH. Interventions for preventing falls in older people living in the community. *Cochrane Database of Systematic Reviews* 2009, Issue 2. Art. No.: CD007146. DOI: 10.1002/14651858.CD007146.pub2.

The American Geriatrics Society. AGS Clinical Practice Guideline: Prevention of Falls in Older Persons (2010). Accessed at: http://www.americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guidelines_recommendations/prevention_of_falls_summary_of_recommendations

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

Three sets of guidelines/recommendations are listed below: American Geriatric Society/British Geriatric Society (AGS/BGS), National Institute for Clinical Excellence (NICE), and Assessing Care of Vulnerable Adults (ACOVE).

AGS/BGS Clinical Practice Guideline: Prevention of Falls in Older Persons

Screening for Risk:

1. All older individuals should be asked whether they have fallen (in the past year).
2. An older person who reports a fall should be asked about the frequency and circumstances of the fall(s).

AGS/BGS Guideline

Interventions for older persons living in the community

1. The multifactorial fall risk assessment should be followed by direct interventions tailored to the identified risk factors, coupled with an appropriate exercise program. [A]
2. A strategy to reduce the risk of falls should include multifactorial assessment of known fall risk factors and management of the risk factors identified. [A]
3. The components most commonly included in efficacious interventions were:
 - a. Adaptation or modification of home environment [A]
 - b. Withdrawal or minimization of psychoactive medications [B]
 - c. Withdrawal or minimization of other medications [C]
 - d. Management of postural hypotension [C]
 - e. Management of foot problems and footwear [C]
 - f. Exercise, particularly balance, strength, and gait training [A]
4. All older adults who are at risk of falling should be offered an exercise program incorporating balance, gait, and strength training. Flexibility and endurance training should also be offered, but not as sole components of the program. [A]
5. Multifactorial/multicomponent intervention should include an education component complementing and addressing issues specific to the intervention being provided, tailored to individual cognitive function and language. [C]
6. The health professional or team conducting the fall risk assessment should directly implement the interventions or should assure that the interventions are carried out by other qualified healthcare professionals. [A]
7. Psychoactive medications (including sedative hypnotics, anxiolytics, antidepressants) and antipsychotics (including new antidepressants or antipsychotics) should be minimized or withdrawn, with appropriate tapering if indicated. [B]
8. A reduction in the total number of medications or dose of individual medications should be pursued. All medications should be reviewed, and minimized or withdrawn. [B]
9. Exercise should be included as a component of multifactorial interventions for fall prevention in community-residing older persons. [A]
10. An exercise program that targets strength, gait and balance, such as Tai Chi or physical therapy, is recommended as an effective intervention to reduce falls [A]
11. Exercise may be performed in groups or as individual (home) exercises, as both are effective in preventing falls. [B]
12. Exercise programs should take into account the physical capabilities and health profile of the older person, (i.e., be tailored) and be prescribed by qualified health professionals or fitness instructors. [I]
13. The exercise program should include regular review, progression and adjustment of the exercise prescription as appropriate. [I]
14. In older women in whom cataract surgery is indicated, surgery should be expedited as it reduces the risk of falling. [B]
15. There is insufficient evidence to recommend for or against the inclusion of vision interventions within multifactorial fall prevention interventions. [I]
16. There is insufficient evidence to recommend vision assessment and intervention as a single intervention for the purpose of reducing falls. [D]
17. An older person should be advised not to wear multifocal lenses while walking, particularly on stairs. [C]
18. Assessment and treatment of postural hypotension should be included as components of multifactorial interventions to prevent falls in older persons. [B]
19. Dual chamber cardiac pacing should be considered for older persons with cardioinhibitory carotid sinus hypersensitivity who experience unexplained recurrent falls. [B]
20. Vitamin D supplements of at least 800 IU per day should be provided to older persons with proven vitamin D deficiency. [A]
21. Vitamin D supplements of at least 800 IU per day should be considered for people with suspected vitamin D deficiency or who are otherwise at increased risk for falls. [B]

22. Identification of foot problems and appropriate treatment should be included in multifactorial fall risk assessments and interventions for older persons living in the community. [C]
23. Older people should be advised that walking with shoes of low heel height and high surface contact area may reduce the risk of falls. [C]
24. Home environment assessment and intervention carried out by a health care professional should be included in a multifactorial assessment and intervention for older persons who have fallen or who have risk factors for falling. [A]
25. The intervention should include mitigation of identified hazards in the home, and evaluation and interventions to promote the safe performance of daily activities. [A]
26. Education and information programs should be considered part of a multifactorial intervention for older persons living in the community. [C]
27. Education should not be provided as a single intervention to reduce falls in older persons living in the community. [D]

AGS/BGS Guideline Interventions for older persons in long-term care facilities

1. Multifactorial/multicomponent interventions should be considered in long-term care to reduce falls. [C]
2. Exercise programs should be considered to reduce falls in older persons living in long-term care settings with caution regarding risk of injury in frail persons. (C)
3. Vitamin D supplements of at least 800 IU per day should be provided to older persons residing in long-term care settings with proven or suspected vitamin D insufficiency. [A]
4. Vitamin D supplements of at least 800 IU per day should be considered in older persons residing in long-term care settings who have abnormal gait or balance or who are otherwise at increased risk for falls. [B]

ACOVE

Quality Indicators

- Inquiring about Falls. ALL vulnerable elders should have documentation that they were asked at least annually about the occurrence of recent falls.
- Detecting Balance and Gait Disturbances. ALL vulnerable elders should have documentation that they were asked about or examined for the presence of balance or gait disturbances at least once.
- Basic Fall Evaluation. IF a vulnerable elder reported two or more falls in the past year, or a single fall with injury requiring treatment, THEN there should be documentation that a basic fall evaluation was performed that resulted in specific diagnostic and therapeutic recommendations.
- Gait-Mobility and Balance Evaluation. IF a vulnerable elder reports or is found to have new or worsening difficulty with ambulation, balance, or mobility, THEN there should be documentation that a basic gait, mobility, and balance evaluation was performed within 6 months that resulted in specific diagnostic and therapeutic recommendations.
- Exercise and Assistive-Device Prescription for Balance problems. IF a vulnerable elder demonstrates decreased balance or proprioception, or increased postural sway, THEN an appropriate exercise program should be offered and an evaluation for an assistive device performed.
- Exercise Prescription for Gait Problems and Weakness. IF a vulnerable elder is found to have problems with gait, strength (for example, =4 out of 5 on manual muscle testing, or the need to use his or her arms to rise from a chair), or endurance (for example, dyspnea on mild exertion), THEN an exercise program should be offered.

NICE Clinical Practice Guideline

- 1.1.1 Older people in contact with health care professionals should be asked routinely whether they have fallen in the past year and asked about the frequency, context and characteristics of the fall/s. [C]
- 1.1.2 Older people reporting a fall or considered at risk of falling should be observed for balance and gait deficits and considered for their ability to benefit from interventions to improve strength and balance. (Tests of balance and gait commonly used in the UK are detailed in the full guideline, see Section 5.) [C]

1.3 Multifactorial interventions

- 1.3.1 All older people with recurrent falls or assessed as being at increased risk of falling should be considered for an individualised multifactorial intervention. [A]

In successful multifactorial intervention programmes the following specific components are common – against a background of the general diagnosis and management of causes and recognised risk factors: [A]

? strength and balance training
? home hazard assessment and intervention
? vision assessment and referral
? medication review with modification/withdrawal.
1.3.2 Following treatment for an injurious fall, older people should be offered a multidisciplinary assessment to identify and address future risk and individualised intervention aimed at promoting independence and improving physical and psychological function. [A]

1.4 Strength and balance training

1.4.1 Strength and balance training is recommended. Those most likely to benefit are older community dwelling people with a history of recurrent falls and/or balance and gait deficit. A muscle strengthening and balance programme should be offered. This should be individually prescribed and monitored by an appropriately trained professional. [A]

1.5 Exercise in extended care settings

1.5.1 Multifactorial interventions with an exercise component are recommended for older people in extended care settings who are at risk of falling. [A]

1.6 Home hazard and safety intervention

1.6.1 Older people who have received treatment in hospital following a fall should be offered a home hazard assessment and safety intervention/modifications by a suitably trained health care professional. Normally this should be part of discharge planning and be carried out within a timescale agreed by the patient or carer, and appropriate members of the health care team.

[A]

1.6.2 Home hazard assessment is shown to be effective only in conjunction with follow-up and intervention, not in isolation. [A]

1c.17 Clinical Practice Guideline Citation: The American Geriatrics Society. AGS Clinical Practice Guideline: Prevention of Falls in Older Persons (2010).

National Institute for Clinical Excellence (NICE). (2004). Clinical practice guideline for the assessment and prevention of falls in older people. Royal College of Nursing: London.

Rubenstein LZ, Powers CM, MacLean CH. Quality Indicators for the Management and Prevention of Falls and Mobility Problems in Vulnerable Elders. RAND Health. ACOVE. Ann Intern Med. 2001; 135:686-693.

1c.18 National Guideline Clearinghouse or other URL:

http://americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guidelines_recommendations/2010/;
<http://www.rand.org/pubs/reprints/RP1132.html>

1c.19 Grading of Strength of Guideline Recommendation. Has the recommendation been graded? Yes

1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: American Geriatric Society and British Geriatric Society, expert consensus with evidence review. National Institute for Clinical Excellence, expert consensus with evidence review.

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

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

1c.23 Grade Assigned to the Recommendation: AgS/ BGS Grade A; NICE Grade C

1c.24 Rationale for Using this Guideline Over Others: It is NCOA policy to use guidelines which are evidence-based, applicable to physicians and other healthcare providers, and developed by a national specialty organization or government agency.

Based on the NQF descriptions for rating the evidence, what was the developer's assessment of the quantity, quality, and consistency of the body of evidence?

1c.25 Quantity: **High** 1c.26 Quality: **High** 1c.27 Consistency: **High**
 1c.28 Attach evidence submission form:
 1c.29 Attach appendix for supplemental materials:

Was the threshold criterion, *Importance to Measure and Report*, met?
 (1a & 1b must be rated moderate or high and 1c yes) Yes No
 Provide rationale based on specific subcriteria:

For a new measure if the Committee votes NO, then STOP.
For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See [guidance on measure testing](#).

S.1 **Measure Web Page** (*In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained*). Do you have a web page where current detailed specifications for this measure can be obtained? **No**

S.2 If yes, provide web page URL:

2a. **RELIABILITY. Precise Specifications and Reliability Testing:** H M L I

2a1. **Precise Measure Specifications.** (*The measure specifications precise and unambiguous.*)

2a1.1 **Numerator Statement** (*Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome*):

This measure has two rates. The numerator for the discussing falls rate is the number of older adults who talked with their doctor about falling or problems with balance or walking. The numerator for the managing falls risk rate is the number of older adults who report having their provider suggest an intervention to prevent falls or treat problems with balance or walking.

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

2a1.3 **Numerator Details** (*All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses*):

This measure is collected through patient self-report on a mailed (phone follow-up) survey. The questions used to identify the numerator for the two rates are:

a) **Discussing Falls**

Q1: "A fall is when your body goes to the ground without being pushed. In the past 12 months, did you talk with your doctor or other health provider about falling or problems with balance or walking?" Answer choices: Yes, No, I had not visits in the past 12 month. (an answer of "Yes" is required for the numerator)

b) **Managing Fall Risk**

Q4: "Has your doctor or other health provider done anything to help prevent falls or treat problems with balance or walking? Some things they might do include: Suggest that you use a cane or walker, check your blood pressure lying or standing, suggest that you do an exercise or physical therapy program, and suggest a vision or hearing testing." Answer choices: Yes, No, I had not visits in the past 12 month. (an answer of "Yes" is required for the numerator)

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

Each rate has a different denominator. The Discussing Falls measure has two denominators: adults age 75 and older who had a provider visit in the past 12 months and adults age 65-74 who had a provider visit in the past 12 months and report either falling or

having a problem with balance or walking in the past 12 months. The Managing Falls Risk measure has only one denominator: Adults age 65 and older who had a provider visit in the past 12 months and report either falling or having a problem with balance or walking in the past 12 months.

2a1.5 Target Population Category (Check all the populations for which the measure is specified and tested if any): [Adult/Elderly Care](#), [Populations at Risk](#)

2a1.6 Denominator Time Window (The time period in which cases are eligible for inclusion):
12 month measurement year

2a1.7 Denominator Details (All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):

The denominator is collected through patient self-report on a mailed (phone follow-up) survey. The questions used to identify the denominator are:

A1) Discussing Falls members aged 65-75

Q1: "A fall is when your body goes to the ground without being pushed. In the past 12 months, did your doctor or other health provider talk with you about falling or problems with balance or walking?" Answer choices: yes, no, I had not visits in the past 12 months (Answer choice of yes or no is required for denominator inclusion).

AND

Q2: "Did you fall in the past 12 months?" Answer choices: Yes, No (answer choice of yes for denominator inclusion)

OR

Q3: "= "Yes" or Q50 In the past 12 months, have you had a problem with balance or walking?" Answer choice: Yes, No (answer choice of yes for denominator inclusion)

A2) Discussing Falls members aged 75+:

Q1: "A fall is when your body goes to the ground without being pushed. In the past 12 months, did your doctor or other health provider talk with you about falling or problems with balance or walking?" Answer choices: yes, no, I had not visits in the past 12 months (Answer choice of yes or no is required for denominator inclusion).

B) Managing Fall Risk:

Q1: "A fall is when your body goes to the ground without being pushed. In the past 12 months, did your doctor or other health provider talk with you about falling or problems with balance or walking?" (Answer choice of yes or no is required for denominator inclusion)

AND

Q2: "Did you fall in the past 12 months?" Answer choices: Yes, No (answer choice of yes for denominator inclusion) OR Q3: "In the past 12 months, have you had a problem with balance or walking?" Answer choice: Yes, No (answer choice of yes for denominator inclusion)

AND

Q4: Has your doctor or other health provider done anything to help prevent falls or treat problems with balance or walking? Some things they might do include: Suggest that you use a cane or walker; Check your blood pressure lying or standing; suggest that you do an exercise or physical therapy program; suggest a vision or hearing testing. Answer choices: yes, no, I had not visits in the past 12 months (Answer choice of yes or no is required for denominator inclusion).

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

N/A

2a1.9 Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):

N/A

2a1.10 Stratification Details/Variables (All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses):

N/A

2a1.11 Risk Adjustment Type (Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13): No risk adjustment or risk stratification **2a1.12 If "Other," please describe:**

2a1.13 Statistical Risk Model and Variables (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.):

N/A

2a1.14-16 Detailed Risk Model Available at Web page URL (or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:

2a1.17-18. Type of Score: Rate/proportion

2a1.19 Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score): Better quality = Higher score

2a1.20 Calculation Algorithm/Measure Logic(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.):

Discussing Falls

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

Step 2: Determine the number of patients meeting the denominator criteria. The denominator includes all patients aged 65-74 with a self-reported provider visit in the past year (Q1) who report having had a fall (Q2) or problem with balance or walking in the past year (Q3) OR all patients aged 75 and older with a self-reported provider visit in the past year (Q1).

Step 3: Determine the number of patients meeting the numerator criteria. The numerator includes all patients in the denominator population who reported discussing falls or a problem with walking or balance with a provider in the past year (Q1).

Step 4: Calculate the rate by dividing the total from step 3 by the total from step 3.

Managing Falls Risk

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

Step 2: Determine the number of patients meeting the denominator criteria. The denominator includes all patients aged 65 and older with a self-reported provider visit in the past year (Q1 and Q4) who report having had a fall (Q2) or problem with balance or walking in the past year (Q3).

Step 3: Determine the number of patients meeting the numerator criteria. The numerator includes all patients in the denominator population who indicated their provider provided suggestions for falls risk management (Q4).

Step 4: Calculate the rate by dividing the total from step 3 by the total from step 3.

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

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

The measure is collected in the Medicare Health Outcomes Survey (HOS). Medicare Advantage Organizations (MAOs) reporting the measure must contract with a NCQA-Certified HOS Survey Vendor to administer the survey. A minimum of 1,200 members per MAO are randomly selected for the survey. Plan-level results are calculated by NCQA using data collected in the combined HOS Baseline and Follow-Up Survey samples from the same measurement year. MAOs must achieve a denominator of at least 100 to obtain a reportable result. If the denominator is less than 100, NCQA assigns a measure result of NA.

NCQA outlines the sampling criteria for all HOS measures. The complete data collection method and sampling guidelines are outlined in NCQA's HEDIS Technical Specifications for the HOS, Volume 6.

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

2a1.26 Data Source/Data Collection Instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): Medicare Health Outcomes Survey (HOS)

2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment: URL
<http://www.hosonline.org/Content/Default.aspx>

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

2a1.33 Level of Analysis (Check the levels of analysis for which the measure is specified and tested): Clinician : Individual, Health Plan, Population : National

2a1.34-35 Care Setting (Check all the settings for which the measure is specified and tested): Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinician Office/Clinic, Ambulatory Care : Outpatient Rehabilitation, Ambulatory Care : Urgent Care, Behavioral Health/Psychiatric : Inpatient, Behavioral Health/Psychiatric : Outpatient, Dialysis Facility, Emergency Medical Services/Ambulance, Home Health, Hospice, Hospital/Acute Care Facility, Imaging Facility, Laboratory, Pharmacy, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

2a2. Reliability Testing. (Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.)

2a2.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
HEDIS Health Plan performance data for 2009; Number of Plans: 463 (for Discuss) 458 (for Manage); Plans had minimum of 100 patients in the denominator.

2a2.2 Analytic Method (Describe method of reliability testing & rationale):
Reliability was estimated by using the beta-binomial model. Beta-binomial is a better fit when estimating the reliability of simple pass/fail rate measures as is the case with most HEDIS® health plan measures. The beta-binomial model assumes the plan score is a binomial random variable conditional on the plan's true value that comes from the beta distribution. The beta distribution is

usually defined by two parameters, alpha and beta. Alpha and beta can be thought of as intermediate calculations to get to the needed variance estimates. The beta distribution can be symmetric, skewed or even U-shaped. Reliability used here is the ratio of signal to noise. The signal in this case is the proportion of the variability in measured performance that can be explained by real differences in performance. A reliability of zero implies that all the variability in a measure is attributable to measurement error. A reliability of one implies that all the variability is attributable to real differences in performance. The higher the reliability score, the greater is the confidence with which one can distinguish the performance of one plan from another. A reliability score greater than or equal to 0.7 is considered very good.

2a2.3 Testing Results (*Reliability statistics, assessment of adequacy in the context of norms for the test conducted*): Reliability for this measure was calculated as 0.89135 for discussing fall risk, and 0.88482 for managing fall risk.

2b. VALIDITY. Validity, Testing, including all Threats to Validity: H M L I

2b1.1 Describe how the measure specifications (*measure focus, target population, and exclusions*) **are consistent with the evidence cited in support of the measure focus** (*criterion 1c*) **and identify any differences from the evidence:**
This measure aligns with current guidelines.

2b2. Validity Testing. (*Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.*)

2b2.1 Data/Sample (*Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*):

Cognitive testing

Research Triangle Institute (RTI) conducted cognitive testing of the survey questions in two geographic areas: Research Triangle Park, North Carolina, and Boston, Massachusetts.

Recruitment criteria for the cognitive testing was:

- Medicare beneficiaries over the age of 65— mix of both Medicare Advantage enrollees and traditional FFS enrollees
- Problems with balance, walking, or falls within the past 12 months
- At least one visit with a provider where problems with balance, walking, or falls was discussed (a subset to have received fall risk intervention). NOTE: This component no longer applies to current specifications.

Face Validity:

The Fall Risk Management measure was tested for face validity with two panels of experts. Measurement Advisory Panels (MAP) provide the clinical and technical knowledge required to develop the measures. The Geriatric MAP included 18 experts in geriatric medicine and population aging including representation by consumers, health plans, health care providers and policy makers. NCQA's Committee on Performance Measurement (CPM) oversees the evolution of the measurement set and includes representation by purchasers, consumers, health plans, health care providers and policy makers. This panel is made up of 21 members. The CPM is organized and managed by NCQA, and is responsible for advising NCQA staff on the development and maintenance of performance measures. The CPM also meets with the NCQA Board of Directors to recommend measures for inclusion in HEDIS. CPM members reflect the diversity of constituencies that performance measurement serves; some bring other perspectives and additional expertise in quality management and the science of measurement. Additional HEDIS Expert Panels and the Technical Advisory Group (TAG) provide invaluable assistance by identifying methodological issues and giving feedback on new and existing measures. See Additional Information: Ad.1. Workgroup/Expert Panel Involved in Measure Development for names and affiliation of expert panel.

2b2.2 Analytic Method (*Describe method of validity testing and rationale; if face validity, describe systematic assessment*): NCQA identified and refined measure management into a standardized process called the HEDIS measure life cycle.

*Step 1: Topic selection is the process of identifying measures that meet criteria consistent with the overall model for performance measurement. There is a huge universe of potential performance measures for future versions of HEDIS. The first step is identifying measures that meet formal criteria for further development.

NCQA staff identifies areas of interest or gaps in care. Clinical expert panels (MAPs—whose members are authorities on clinical priorities for measurement) participate in this process. Once topics are identified, a literature review is conducted to find supporting documentation on their importance, scientific soundness and feasibility. This information is gathered into a work-up format. Refer to What Makes a Measure "Desirable"? The work-up is vetted by NCQA's MAPs, the TAG, the HEDIS Policy Panel and various other

panels.

*Step 2: Development ensures that measures are fully defined and tested before the organization collects them. MAPs participate in this process by helping identify the best measures for assessing health care performance in clinical areas identified in the topic selection phase.

Development includes the following tasks.

1. Ensure funding throughout measure testing
2. Prepare a detailed conceptual and operational work-up that includes a testing proposal
3. Collaborate with health plans to conduct field-tests that assess the feasibility and validity of potential measures

The CPM uses testing results and proposed final specifications to determine if the measure will move forward to Public Comment.

*Step 3: Public Comment is a 30-day period of review that allows interested parties to offer feedback to the CPM about new measures or about changes to existing measures.

NCQA MAPs and technical panels consider all comments and advise NCQA staff on appropriate recommendations brought to the CPM. The CPM reviews all comments before making a final decision about Public Comment measures. New measures and changes to existing measures approved by the CPM will be included in the next HEDIS year and reported as first-year measures.

*Step 4: First-year data collection requires organizations to collect, be audited on and report these measures, but results are not publicly reported in the first year and are not included in NCQA's Quality Compass? or in accreditation scoring.

The first-year distinction guarantees that a measure can be efficiently collected, reported and audited before it is used for public accountability or accreditation. This is not testing—the measure was already tested as part of its development—rather, it ensures that there are no unforeseen problems when the measure is implemented in the real world. NCQA's experience is that the first year of large-scale data collection often reveals unanticipated issues.

After collection, reporting and auditing on a one-year introductory basis, NCQA conducts a detailed evaluation of first-year data. The CPM uses evaluation results to decide whether the measure should become publicly reportable or whether it needs further modifications.

*Step 5: Public reporting is based on the first-year measure evaluation results. If the measure is approved, it will be reported in Quality Compass and may be used for scoring in accreditation.

Step 6: Evaluation is the ongoing review of a measure's performance and recommendations for its modification or retirement. Every measure is reevaluated at least every three years. NCQA staff continually monitors the performance of publicly reported measures. Statistical analysis, audit result review and user comments contribute to measure evaluation. Information derived from analyzing the performance of existing measures is used to improve development of the next generation of measures.

Each year, a third of the measurement set is researched for changes in clinical guidelines or health care delivery systems, and the results from previous years are analyzed. Measure work-ups are updated with new information gathered from the literature review, and the appropriate MAPs review the work-ups and the previous year's data. If necessary, the measure specification may be updated or the measure may be recommended for retirement. The CPM reviews recommendations from the evaluation process and approves or rejects the recommendation. If approved, the change is included in the next year's HEDIS Volume 2.

What makes a measure "Desirable"?

Whether considering the value of a new measure or the continuing worth of an existing one, we must define what makes a measure useful. HEDIS measures encourage improvement. The defining question for all performance measurement—"Where can measurement make a difference?"—can be answered only after considering many factors. NCQA has established three areas of desirable characteristics for HEDIS measures, discussed below.

1. Relevance: Measures should address features that apply to purchasers or consumers, or which will stimulate internal efforts toward quality improvement. More specifically, relevance includes the following attributes.

Meaningful: What is the significance of the measure to the different groups concerned with health care? Is the measure easily interpreted? Are the results meaningful to target audiences?

Measures should be meaningful to at least one HEDIS audience (e.g., individual consumers, purchasers or health care systems). Decision makers should be able to understand a measure's clinical and economic significance.

Important to health: What is the prevalence and overall impact of the condition in the U.S. population? What significant health care aspects will the measure address?

We should consider the type of measure (e.g., outcome or process), the prevalence of medical condition addressed by the measure and the seriousness of affected health outcomes.

Financially important: What financial implications result from actions evaluated by the measure? Does the measure relate to activities with high financial impact?

Measures should relate to activities that have high financial impact.

Cost effective: What is the cost benefit of implementing the change in the health care system? Does the measure encourage the use of cost-effective activities or discourage the use of activities that have low cost-effectiveness? Measures should encourage the use of cost-effective activities or discourage the use of activities that have low cost-effectiveness.

Strategically important: What are the policy implications? Does the measure encourage activities that use resources efficiently?

Measures should encourage activities that use resources most efficiently to maximize member health.

Controllable: What impact can the organization have on the condition or disease? What impact can the organization have on the measure? Health care systems should be able to improve their performance. For outcome measures, at least one process should be controlled and have an important effect on outcome. For process measures, there should be a strong link between the process and desired outcome.

Variation across systems: Will there be variation across systems? There should be the potential for wide variation across systems.

Potential for improvement: Will organizations be able to improve performance? There should be substantial room for performance improvement.

2. Scientific soundness: Perhaps in no other industry is scientific soundness as important as in health care. Scientific soundness must be a core value of our health care system—a system that has extended and improved the lives of countless individuals.

Clinical evidence: Is there strong evidence to support the measure? Are there published guidelines for the condition? Do the guidelines discuss aspects of the measure? Does evidence document a link between clinical processes and outcomes addressed by the measure? There should be evidence documenting a link between clinical processes and outcomes.

Reproducible: Are results consistent? Measures should produce the same results when repeated in the same population and setting.

Valid: Does the measure make sense? Measures should make sense logically and clinically, and should correlate well with other measures of the same aspects of care.

Accurate: How well does the measure evaluate what is happening? Measures should precisely evaluate what is actually happening.

Risk adjustment: Is it appropriate to stratify the measure by age or another variable? Measure variables should not differ appreciably beyond the health care system's control, or variables should be known and measurable. Risk stratification or a validated model for calculating an adjusted result can be used for measures with confounding variables.

Comparability of data sources: How do different systems affect accuracy, reproducibility and validity? Accuracy, reproducibility and validity should not be affected if different systems use different data sources for a measure.

3. Feasibility:

The goal is not only to include feasible measures, but also to catalyze a process whereby relevant measures can be made feasible.

Precise specifications: Are there clear specifications for data sources and methods for data collection and reporting? Measures should have clear specifications for data sources and methods for data collection and reporting.

Reasonable cost: Does the measure impose a burden on health care systems? Measures should not impose an inappropriate burden on health care systems.

Confidentiality: Does data collection meet accepted standards of member confidentiality?

Data collection should not violate accepted standards of member confidentiality. Logistical feasibility

Are the required data available?

Auditability: Is the measure susceptible to exploitation or "gaming" that would be undetectable in an audit? Measures should not be susceptible to manipulation that would be undetectable in an audit.

2b2.3 Testing Results (*Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment*):

Cognitive testing

The wording of the proposed series of survey questions was revised based on the results of cognitive testing the question in elderly respondents by RTI. Through cognitive testing we found that overall respondents understood that problems with balance and walking were linked with falling. Providing a definition of fall improved the focus of the question on whether respondents had previously fallen. Respondents also indicated they had talked to their doctor either if they had fallen or had problem with balance and walking, therefore two questions are recommended to identify respondents for the measure denominator. The numerator question on talking to a doctor worked well and was understood by respondents. The second numerator question on whether the doctor suggested to the patient ways to prevent falls was simplified and shortened with a list of most commonly recommended treatments as examples.

Many of the cognitive testing respondents had problems with balance and walking, and most had fallen at least once in the past year, some more than 3 times in the past year. All indicated they were "limited a lot" in moderate activities due to these problems and were unable to do any vigorous activities. Fear of falling further limited their activities. This further demonstrates the importance of the measure to address and prevent falls in the elderly.

Face Validity:

Step 1: Fall Risk Management measure was developed to address the prevention of falls in the elderly. NCOA's Performance Measurement Department and the Geriatric MAP worked together to assess the most appropriate tools for monitoring follow-up for mental illness.

Step 2: The measure was written, field-tested, and presented to the CPM and incorporated into HEDIS in 2006. The CPM recommended to send the measure to public comment with a vote of 12 in favor and none opposed.

Step 3: The measure was released for Public Comment prior to publication in HEDIS. We received and responded to comments on this measure. The CPM recommended moving this measure to first year data collection with a vote of 10 in favor and none opposed.

Step 4: The Fall Risk Management measure was introduced in HEDIS 2006. Organizations reported the measures in the first year and the results were analyzed for public reporting in the following year. The CPM recommended moving this measure public reporting with a vote of 10 in favor 1 opposed, and 1 abstained.

Step 5: The Fall Risk Management measure was reevaluated in 2011/2012.

POTENTIAL THREATS TO VALIDITY. (*All potential threats to validity were appropriately tested with adequate results.*)

2b3. Measure Exclusions. (*Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.*)

2b3.1 Data/Sample for analysis of exclusions (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

N/A

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

N/A

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

N/A

2b4. Risk Adjustment Strategy. (For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.)

2b4.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

N/A

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

N/A

2b4.3 Testing Results (Statistical risk model: Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata):

N/A

2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment: This is a process of care measure assessing discussion and management of fall risk in older persons at risk for a fall; risk-adjustment is not indicated.

It is expected that vulnerable elderly should discuss their fall risk with their health provider and receive fall risk management.

2b5. Identification of Meaningful Differences in Performance. (The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.)

2b5.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

Data analysis demonstrates that methods for analyzing the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

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

Comparison of means and percentiles; MAOs with enrollment size <100 are not used because the small sample would not allow for statistically significant differences in performance.

2b5.3 Results (Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningful differences in performance):

Discussing Fall Risk	2009	2008	2007			
N	463	416	355			
MEAN	32.4	30.9	31.1			
STDEV	7.11	6.38	6.98	STDERR	0.33	0.31 0.37
MIN	19.6	19.5	18.8			
MAX	62.3	55.6	57.6	P10	25.3	24.6 24.7
P25	27.9	26.7	26.2			
P50	30.3	29.4	29.1			

P75	35	32.9	34.7			
P90	43.3	40.3	41.3			
Managing Fall Risk		2009	2008	2007		
N	458	406	339			
MEAN	58.7	56.9	56.8			
STDEV	8.44	7.42	7.79			
STDERR	0.39	0.37	0.42			
MIN	40.4	40.9	40.8			
MAX	88.8	80.2	83.8			
P10	49.7	48.2	47.9			
P25	53	52.2	51.4	P50	57.5	56 55.8
P75	62.7	61	61			
P90	69.5	67	67.3			

2b6. Comparability of Multiple Data Sources/Methods. (If specified for more than one data source, the various approaches result in comparable scores.)

2b6.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
N/A

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

2b6.3 Testing Results (Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted):
N/A

2c. Disparities in Care: H M L I NA (If applicable, the measure specifications allow identification of disparities.)

2c.1 If measure is stratified for disparities, provide stratified results (Scores by stratified categories/cohorts): This measure is not stratified to detect disparities. NCOA has participated with IOM and others in attempting to include information on disparities in measure data collection. However, at the present time, this data, at all levels (claims data, paper chart review, and electronic records), is not coded in a standard manner, and is incompletely captured. There are no consistent standards for what entity (physician, group, plan, employer) should capture and report this data. While "requiring" reporting of the data could push the field forward, it has been our position that doing so would create substantial burden with inability to use the data because of its inconsistency. At the present time, we agree with the IOM report that disparities are best considered by the use of zip code analysis which has limited applicability in most reporting situations. At the health plan level, for HEDIS health plan data collection, NCOA does have extensive data related to our use of stratification by insurance status (Medicare, Medicaid and private-commercial) and would strongly recommend this process where the data base supporting the measurement includes this information. However, we believe that the measure specifications should NOT require this since the measure is still useful where the data needed to determine disparities cannot be ascertained from the data available.

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

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, Scientific Acceptability of Measure Properties, met? (Reliability and Validity must be rated moderate or high) Yes No
Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. **(evaluation criteria)**

C.1 Intended Actual/Planned Use (Check all the planned uses for which the measure is intended): [Payment Program](#), [Public Reporting](#), [Quality Improvement \(Internal to the specific organization\)](#), [Quality Improvement with Benchmarking \(external benchmarking to multiple organizations\)](#)

3.1 Current Use (Check all that apply; for any that are checked, provide the specific program information in the following questions): [Public Reporting](#), [Payment Program](#), [Quality Improvement with Benchmarking \(external benchmarking to multiple organizations\)](#), [Quality Improvement \(Internal to the specific organization\)](#)

3a. Usefulness for Public Reporting: H M L I
 (The measure is meaningful, understandable and useful for public reporting.)

3a.1. Use in Public Reporting - disclosure of performance results to the public at large (If used in a public reporting program, provide name of program(s), locations, Web page URL(s)). If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: **[For Maintenance** – If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.]

This measure is used in public reporting for plans only through Healthcare Effectiveness Data and Information Set (HEDIS) and is reported through venues such as the annual State of Healthcare Quality report, Quality Compass, America's Best Health Plans.

3a.2. Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting. If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results: Upon review of public comment results, the Committee on Performance Measurement approved the NCOA staff recommendation to add the measure to HEDIS. After reviewing first-year analysis results, the CPM approved the staff recommendation to publicly report the measure. The measure was deemed usable and feasible.

3.2 Use for other Accountability Functions (payment, certification, accreditation). If used in a public accountability program, provide name of program(s), locations, Web page URL(s): N/A

3b. Usefulness for Quality Improvement: H M L I
 (The measure is meaningful, understandable and useful for quality improvement.)

3b.1. Use in QI. If used in quality improvement program, provide name of program(s), locations, Web page URL(s): **[For Maintenance** – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement].

This measure is a measure in the Healthcare Effectiveness Data and Information Set (HEDIS).

3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement. If usefulness was demonstrated (e.g., QI initiative), describe the data, method and results:

N/A. NCOA reports on performance of health plans and providers nationally. Our results are not part of an internal NCOA QI program.

Overall, to what extent was the criterion, Usability, met? H M L I
 Provide rationale based on specific subcriteria:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. **(evaluation criteria)**

4a. Data Generated as a Byproduct of Care Processes: H M L I

4a.1-2 How are the data elements needed to compute measure scores generated? (Check all that apply).

Data used in the measure are:

Other

Patient-reported health survey

4b. Electronic Sources: H M L I

4b.1 Are the data elements needed for the measure as specified available electronically (Elements that are needed to compute measure scores are in defined, computer-readable fields): No data elements are in electronic sources

4b.2 If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources: Data are collected via a patient mail (or telephone) survey. Electronic surveys may be available in the future.

4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: H M L I

4c.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results:

NCQA recognizes that, despite the clear specifications defined for HEDIS measures, data collection and calculation methods may vary, and other errors may taint the results, diminishing the usefulness of HEDIS data for managed care organization (MCO) comparison. In order for HEDIS to reach its full potential, NCQA conducts an independent audit of all HEDIS collection and reporting processes, as well as an audit of the data which are manipulated by those processes, in order to verify that HEDIS specifications are met. NCQA has developed a precise, standardized methodology for verifying the integrity of HEDIS collection and calculation processes through a two-part program consisting of an overall information systems capabilities assessment followed by an evaluation of the MCO's ability to comply with HEDIS specifications. NCQA-certified auditors using standard audit methodologies will help enable purchasers to make more reliable "apples-to-apples" comparisons between health plans. The HEDIS Compliance Audit addresses the following functions:

- 1) information practices and control procedures
- 2) sampling methods and procedures
- 3) data integrity
- 4) compliance with HEDIS specifications
- 5) analytic file production
- 6) reporting and documentation

4d. Data Collection Strategy/Implementation: H M L I

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

4d.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues (e.g., fees for use of proprietary measures):

This measure is precisely specified using the survey data collection method. This measure has detailed, precise specifications that clearly define the numerator, denominator, data sources, allowable values, methods of measurement and method of reporting.

Overall, to what extent was the criterion, Feasibility, met? H M L I

Provide rationale based on specific subcriteria:

OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement? Yes No

Rationale:

If the Committee votes No, STOP.

If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.

5. COMPARISON TO RELATED AND COMPETING MEASURES

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure before a final recommendation is made.

5.1 If there are related measures (either same measure focus or target population) or competing measures (both the same measure focus and same target population), list the NQF # and title of all related and/or competing measures:

0101 : Falls: Screening for Future Fall Risk

0141 : Patient Fall Rate

0202 : Falls with injury

0537 : Multifactor Fall Risk Assessment Conducted in Patients 65 and Older

1730 : Falls: Risk Assessment for Falls

1733 : Falls: Plan of Care for Falls

5a. Harmonization

5a.1 If this measure has EITHER the same measure focus OR the same target population as [NQF-endorsed measure\(s\)](#): Are the measure specifications completely harmonized? No

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

NQF# 0141 measures patient fall rate in the hospital setting during one month. This measure is related but not competing. The target population overlap but are different in focus (#0035 – all adults; #0141 – adults in the hospital setting) and the measure concept is different (#0035 discussing and managing fall risk with provider; #0141 rate of falls outcome measure).;NQF #0202 measures patient fall with injury rate in the hospital setting. This measure is related by not competing. The target population overlap but are different in focus (#0035- all adults; #0202 – adults in the hospital setting) and the measure concept is different (#0035 – discussing and managing fall risk with provider; #0202 – rate of falls with injury outcome measure).

5b. Competing Measure(s)

5b.1 If this measure has both the same measure focus and the same target population as NQF-endorsed measure(s): Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible):

NQF #0537 measures risk assessment for falls in the home health setting. This measure could be considered competing. The target population overlap but are different in focus (#0035-all adults; #0537 – adults in the home health setting) and the measure concept is similar (#0035 – discuss and manage fall risk with provider (no structured risk assessment defined); #0537 – multi-factorial risk assessment for falls).

NQF #0101, #1730, #1733 may also be considered competing. The target population is the same, however the measure concept is different (#0101 – Screening of for falls risk; #1730 – Multifactorial falls risk assessment; #1733 – Plan of care for falls prevention documented; #0035 patient report of discussing balance, walking or falls problem and receiving an intervention). NQF #0035 is a health plan level measure and uses a different data source (patient reported) from #1733 (administrative claims).

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner): National Committee for Quality Assurance, 1100 13th Street NW, Suite 1000, Washington, District Of Columbia, 20005

Co.2 Point of Contact: Bob, Rehm, Assistant Vice President, Performance Measurement, Rehm@ncqa.org, 202-955-1728-

Co.3 Measure Developer if different from Measure Steward: National Committee for Quality Assurance, 1100 13th Street NW, Washington, District Of Columbia, 20005

Co.4 Point of Contact: Dawn, Alayon, MPH, CPH, alayon@ncqa.org, 202-955-3533-

Co.5 Submitter: Dawn, Alayon, MPH, CPH, Senior Health Care Analyst, alayon@ncqa.org, 202-955-3533-, National Committee for Quality Assurance

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

Co.7 Public Contact: [Bob, Rehm, Assistant Vice President, Performance Measurement, Rehm@ncqa.org, 202-955-1728-](#), National Committee for Quality Assurance

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.

List the workgroup/panel members' names and organizations.

The NCOA Geriatric Measurement Advisory Group advised NCOA during measure development. They evaluated the way staff specified measures, assessed the content validity of measures, and reviewed field test results. As you can see from the list, the MAP consisted of a balanced group of experts, including representatives from medical research and education, health plans, the federal Medicare program, and older adult associations. Note that, in addition to the MAP, we also vetted these measures with a host of other stakeholders, as is our process. Thus, our measures are the result of consensus from a broad and diverse group of stakeholders, in addition to the MAP.

Geriatric Measurement Advisory Panel Members

Wade Aubry, BCBS Association
 Arlene Bierman, University of Toronto and St. Michael's Hospital
 Joyce Dubow, AARP
 Peter Hollmann, BCBS of Rhode Island
 Jerry Johnson, University of Pennsylvania
 David Martin, Ovations
 Steven Phillips, Sierra Health Services, Inc.
 Scott Sarran, BCBS of Illinois
 Eric G Tangalos, Mayo Clinic
 Joan Weiss, Health Resources and Services Administration
 Neil Wenger, UCLA Division of General Internal Medicine and RAND

CMS/AHRO Liaisons

Marsha Davenport
 Jeffrey Kelman
 Elizabeth Goldstein
 Morgot Blige Holloway
 Rosemary Lee
 Alice Lee Martin
 Chris Haffer
 Sonya Bowen
 Mary B. Barton

Committee on Performance Measurement (CPM)

Peter Bach, MD, Memorial Sloan Kettering Cancer Center
 Bruce Bagley, MD, American Academy of Family Physicians
 Andrew Baskin, MD, Aetna
 A. John Blair III, MD, Taconic IPA, Inc
 Patrick Conway, MD, MSC, Center for Medicare & Medicaid Services
 John A. Cutler, Esq., U.S. Office of Personnel Management
 Jonathan D. Darer, MD, Geisinger Health System
 Helen Darling, National Business Group on Health
 Foster Gesten, MD, NYSDOH Office of Managed Care
 Marge Ginsburg, Center for Healthcare Decisions

George J. Isham, MD, MS, HealthPartners
Jeffrey Kelman, MMSc, MD, Centers for Medicare & Medicaid Services
Lisa Latts, MD, MSPH, MBA, Well Point, Inc.
Arthur Levin, MPH (Co-Chair), Center for Medical Consumers
Philip Madvig, MD, The Permanente Medical Group
Susan Reinhard, RN, PhD, AARP
Ted Rooney, RN, MPH, Pathways to Excellence
Bernard M. Rosof, MD, MACP, Huntington Hospital
Eric C. Schneider, MD, MSc (Co-Chair), RAND Corporation
Jane E. Sisk, PhD, Division of Health Care Statistics
Kevin Weiss, MD, FACP, American Board of Medical Specialties

Ad.2 If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.3 Year the measure was first released: 2006

Ad.4 Month and Year of most recent revision: 01, 2011

Ad.5 What is your frequency for review/update of this measure? Approximately every 3 years, sooner if the clinical guidelines have changed significantly.

Ad.6 When is the next scheduled review/update for this measure?

Ad.7 Copyright statement: © 2011 by the National Committee for Quality Assurance
1100 13th Street, NW, Suite 1000
Washington, DC 20005

Ad.8 Disclaimers: These performance Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

Ad.9 Additional Information/Comments:

Date of Submission (MM/DD/YY): 09/14/2011