## 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 <u>submitting standards web page</u>.

#### **NQF #:** 0029 **NQF Project:** Population Health: Prevention Project

(for Endorsement Maintenance Review)

Original Endorsement Date: Aug 10, 2009 Most Recent Endorsement Date: Aug 10, 2009 Last Updated Date: May 02, 2012

#### **BRIEF MEASURE INFORMATION**

De.1 Measure Title: Counseling on physical activity in older adults - a. Discussing Physical Activity, b. Advising Physical Activity

#### Co.1.1 Measure Steward: National Committee for Quality Assurance

**De.2 Brief Description of Measure:** Discussing Physical Activity: Percentage patients 65 years of age and older who reported: discussing their level of exercise or physical activity with a doctor or other health provider in the last 12 months

Advising Physical Activity: Percentage patients 65 years of age and older who reported receiving advice to start, increase, or maintain their level of exercise or physical activity from a doctor or other health provider in the last 12 months

**2a1.1 Numerator Statement:** This is a patient self-reported survey measure with two rates:

a-Discussing physical activity: The number of patients in the denominator who responded "yes" to the question, "In the past 12 months, did you talk with a doctor or other health provider about your level of exercise or physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise."

b- Advising physical activity: The number of patients in the denominator who responded "yes" to the question, "In the past 12 months, did a doctor or other health provider advise you to start, increase or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day or to maintain your current exercise program."

**2a1.4 Denominator Statement:** a-Discussing physical activity: The number of Medicare members 65 years and older as of December 31st of the measurement year who responded "yes" or "no" to the question "In the past 12 months, did you talk with a doctor or other health provider about your level of exercise or physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise."

b- Advising Physical activity: The number of Medicare members 65 years and older as of December 31st of the measurement year who responded "yes" or "no" to the question, "In the past 12 months, did a doctor or other health provider advise you to start, increase or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day or to maintain your current exercise program."

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: 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** (*title and NQF number if endorsed*): N/A

STAFF NOTES	(issues or questions)	regarding any criteria)
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**Comments on Conditions for Consideration:** 

Is the measure untested?	Yes No	If untested, explain how it meets criteria for consideration for time-limited
endorsement:		

1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (*check De.5*):
5. Similar/related <u>endorsed</u> or submitted measures (*check 5.1*):
Other Criteria:

Staff Reviewer Name(s):

#### 1. IMPACT, OPPORTUITY, 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 <u>guidance on evidence</u>.

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*): Prevention, Prevention : Physical Activity **De.5 Cross Cutting Areas** (*Check all the areas that apply*): Population Health

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, 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):

Older adults age 65 and above are one of the fasting growing age groups in the United States (U.S. Bureau of Census, 2009). Various studies, including recent meta-analyses, have shown that physical activity is strongly associated with maintaining or slowing declines in function, cognition, and health-related quality of life (QOL) among older adults, yet only a small proportion of this population is engaged in regular physical activity (Angevaren et al 2008; Liu & Fielding, 2011; Motl & McAuley,2010). Perceived barriers of the elderly towards physical activity can be personal or environmental, including physical health problems and physical frailty, fear of resultant injury or falling, past sedentary lifestyle, insufficient understanding about physical activity and environmental restriction (Chen, 2010).

Chronic conditions related to physical inactivity are major contributors to health care costs in the United States. Most older adults suffer from at least one chronic condition for which there is a clinical guideline recommending physicians to counsel patients to exercise (AHRQ, 2002). Five of the major chronic conditions account for 32.7 percent of U.S. health care expenditures (\$1.9 trillion overall in 2004) (AHRQ, 2006). Older adults are at particular risk for sedentary lifestyles. The loss of strength and stamina attributed to aging is in part caused by reduced physical activity over time. Inactivity increases with age. By age 75, about one in three men and one in two women engage in no physical activity (CDC,1999). Older adults can obtain significant health benefits even with a moderate amount of physical activity, including longer sessions of moderately intense activities (e.g.,walking) or shorter sessions of more vigorous activities (e.g., fast walking or stairwalking), and effective intervention to promote physical activity in older adults merit wide implementation (CDC 1999; King, 2007).

**1a.4 Citations for Evidence of High Impact cited in 1a.3:** Agency for Healthcare Research and Quality. (2006). The High Concentration of U.S. Health Care Expenditures. Available at: http://www.ahrq.gov/research/ria19/expendria.pdf. Agency for Healthcare Research and Quality. (2002) Physical Activity and Older Americans: Benefits and Strategies.Available at: http://www.ahrq.gov/ppip/activity.htm. Angevaren M, Aufdemkampe G, Verhaar HJ, et al. (2008). Physical Activity and Enhanced Fitness to Improve Cognitive Function in

Older People Without Known Cognitive Impairment. Cochrane Database Syst Rev. 16(2):CD005381.

Centers for Disease Control. Physical Activity and Health Older Adults.1999 http://www.cdc.gov/nccdphp/sgr/olderad.htm. Chen YM. (2010). Perceived Barriers to Physical Activity Among Older Adults Residing in Long-Term Care Institutions. Journal of Clinical Nursing; 19(3-4):432-9.

King AC, Castaneda CA, Sceppa MC, et al. (2007). Physical Activity and Public Health in Older Adults. Recommendation from the American College of Sports Medicine and the American Heart Association. Circulation. 116:1094-1105.

Liu CK & Fielding RA. (2011). Exercise as an Intervention for Frailty. Clinics in Geriatric Medicine; 27(1):101-10.

Motl RW & McAuley E. (2010). Physical Activity, Disability, and Quality of Life in Older Adults. Physical Medicine and Rehabilitation Clinics of North America; 21(2):299-308.

US Bureau of the Census. (2009). Age and Sex. In: 2005-2009 American Community Survey.

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 older adults to increase physical activity will help prevent disease and improve the health of older adults who already suffer from chronic conditions and declining function. While health care cost savings were found across age groups, genders, smokers and nonsmokers and people with or without physical limitations, older adults stand to benefit the most from increased activity.

**1b.2 Summary of Data Demonstrating Performance Gap** (Variation or overall less than optimal performance across providers): [For <u>Maintenance</u> – Descriptive statistics for performance results <u>for this measure</u> - distribution of scores for measured entities by guartile/decile, mean, median, SD, min, max, etc.]

Adults Discussion Rate Data Element; 2009; 2008; 2007; N (Health plans); 465; 419; 357; MEAN; 52.5; 51.9; 52; STDEV; 5.68; 5.83; 5.47; STDERR; 0.26; 0.29; 0.29; MIN; 32.2; 31.3; 36.2; MAX; 65.6; 66.4; 64.9; P10; 45; 44.1; 45; P25; 48.7; 48; 48.4; P50; 52.9; 52.2; 51.8; P75; 56.6; 56.3; 56; P90; 59.7; 59.8; 59.1;

Adults Advise Rate Data Element; 2009; 2008; 2007; N (Health plans); 465; 419; 357; MEAN; 47.6; 46.9; 46.8; STDEV; 5.06; 5.2; 5.21; STDERR; 0.23; 0.25; 0.28; MIN; 28.3; 29.1; 29.6; MAX; 62.6; 62.2; 66; P10; 41.5; 40.2; 40.5; P25; 44.3; 43.6; 43.5; P50; 47.8; 46.9; 46.4; P75; 50.8; 50.1; 50.4; P90; 53.8; 53.2; 53;

Across Medicare plans, the rates for the discussing physical activity and advising physical activity have shown little change. The national average for 2007 was 52.0% for discussing and 46.8% for advising physical activity, with a range of about 13-14% between the 10th percentile and the 90th percentile on both rates. In 2008, this average decreased slightly to 51.9% for discussing and increased very slightly to 46.9% for advising. By 2009, only very slight increases were again observed (to 52.5% discussing and

47.6% advising). The 10th to 90th percentile variation also remained steady between 2007 and 2009. These performance reports indicate room for improvement.

**1b.3 Citations for Data on Performance Gap:** [For <u>Maintenance</u> – 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 HEDIS. The data in section 1b.2 includes percentiles, mean, min, max, standard deviation and standard errors. These data are calculated at the health plan level.

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

NCQA has participated with IOM and others in attempting to include information on disparities in measure data collection. However, at the present time, this data, at all levels (claims data, paper chart review, and electronic records), is not coded in a standard manner, and is incompletely captured. There are no consistent standards for what entity (physician, group, plan, 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, NCQA 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 <u>Maintenance</u> – 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	

L	М-Н	М	harms: otherwise <b>No</b>
M-H	L	M-H	Yes IF potential benefits to patients clearly outweigh potential harms: otherwise No
L-M-H	L-M-H	L	No 🗌

 Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service
 Does the measure pass subcriterion1c?

 Yes
 IF rationale supports relationship

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

Health care provider asking about physical activity >> Health care provider advising about physical activity >> Patient increasing physical activity >> Improved or maintained functioning, improved or maintained cognition, improved or maintained health related quality of life.

Engaging in 150 minutes or more of moderate physical activity per week is recommended for adults older than 65 by the United States Department of Health and Human Services. In cases when individuals cannot attain this goal due to their chronic condition(s), they should be as physically active as their body and abilities will allow (DHHS, 2008). The benefits of regular aerobic, muscle strengthening, and balance exercises in older adults are extensive (AAFP, 2010). Compared to younger, healthier and more active adults, older adults stand to reap greater benefits from engaging in physical activity due to the high morbidity and mortality in

a predominantly sedentary population. Most older adults suffer from at least one chronic condition for which there is a clinical guideline recommending physicians to counsel patients to exercise. (AHRQ, 2002).

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

**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): Many individual studies have shown physical inactivity to be an independent risk factor for a range of chronic diseases and conditions that threaten the health of the nation (King, 2001; Valentine, et al., 2011; Evans, 1999).

Individual studies have also suggested physical activity may reduce the risk of poor cognition and early cognitive decline (Rolland, Abellan van Kan, & Vellas, 2010; Buchman, et al., 2011; Weuve, 2004; Raji, et al., 2010).

Individual studies have shown regular physical activity reduces risk of morbidity and falls (King, 2007; Rose & Hernandez, 2010; AAFP, 2010; Buchner, 2009; Healthy People, 2010; Morey, 2002).

Individual studies have shown regular physical activity helps to maintain or improve quality of life (Peterson & Gordon, 2011; Yeh, et al., 2011).

1c.5 Quantity of Studies in the Body of Evidence (Total number of studies, not articles): >50

**1c.6 Quality of Body of Evidence** (Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events): The quality of the body of evidence is high. The USPSTF is currently in the process of finalizing their recommendations for physical activity. The most recent available report for public comment rated the quality of evidence for physical activity as good.

**1c.7 Consistency of Results across Studies** (Summarize the consistency of the magnitude and direction of the effect): The evidence is consistent in showing the benefits for physical activity in older adults.

**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 shows an overall benefit to older adults from physical activity. The potential for injury from physical activity is a risk. Appropriate guidance from a health care provider can mitigate the risk of injury.

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

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

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

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

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

1c.14 Summary of Controversy/Contradictory Evidence: No controversy or contradictory evidence

**1c.15 Citations for Evidence other than Guidelines** *(Guidelines addressed below)*: American Academy of Family Physicians. (2010). Exercise in Older Adults. American Family Physician; 81(1):60-2.

Buchman AS, Boyle PA, Leurgans SE, Barnes LL, & Bennet DA. (2011). Cognitive Function is Associated With the Development of Mobility Impairments in Community-Dwelling Elders. American Journal of Geriatric Psychiatry; 19(6):571-80. Buchman DM. (2009). Physical Activity and Prevention of Cardiovascular Disease in Older Adults. Clinics in Geriatric Medicine: 25(4):661-75, viii. Centers for Disease Control and Prevention. (2011). Physical Activity for Everyone: Older Adults.Available: http://www.cdc.gov/physicalactivity/everyone/guidelines/olderadults.html Centers for Disease Control and Prevention, Prevalence of Cardiovascular Disease in American Age 20 and Older by Age and Sex. NHANES III:1994.98. Chapman IM. (2011). Weight Loss in Older Persons. Medical Clinics of North America; 95(3):579-93. Department of Health and Human Services. (2008). Physical Activity Guidelines for Americans, Chapter 5: Active Older Adults. Available: http://www.health.gov/paguidelines/guidelines/chapter5.aspx. Evans WJ. Exercise guidelines for the elderly. Med Sci Sports Exerc. 1999;31:12–17. Hart TL, Swartz AM, Cashin SE, & Strath SJ. (2011). How Many Days of Monitoring Predict Physical Activity and Sedentary Behavior in Older Adults? International Journal of Behavioral Nutrition and Physical Activity:8(1):[epub ahead of print]. Health People 2020 Initiative (Dec 2010). Healthy People 2020: Physical Activity – Objectives and Understanding Physical Activity. Available at: http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=33. King, AC: Castaneda, CA: Sceppa, MC: Nelson, ME: Reieski, WJ: Blair, SN: Duncan, PW: et.al, Physical Activity and Public Health in Older Adults. Recommendation From the American College of Sports Medicine and the American Heart Association. Circulation, Aug 2007; 116: 1094 - 1105. King, AC. Interventions to Promote Physical Activity by Older Adults J Gerontol A Biol Sci Med Sci. 2001. 56: 36-46. Ko FC. (2011). The Clinical Care of Frail, Older Adults. Clinics in Geriatric Medicine; 27(1):89-100. Liu CK & Fielding RA. (2011). Exercise as an Intervention for Frailty. Clinics in Geriatric Medicine; 27(1):101-10. Manini, TM; Everhart, JE; Patel, KV; et al. Daily Activity Energy Expenditure and Mortality Among Older Adults JAMA. 2006;296 (2):171-179.Morey, ME et al. Exercise Adherence and 10-Year Mortality in Chronically III Older Adults. JAGS. 2002, 50:1929-1933. Nelson ME, Rejeski WJ, Blair SN, Duncan PW, Judge JO, King AC, Macera CA, Castaneda-Sceppa C, American College of Sports Medicine, American Heart Association. (2007). Physical activity and public health in older adults: recommendation from the American College of Sports Medicine and the American Heart Association. Circulation;116(9):1094-105. Peterson MD & Gordon PM. (2011). Resistance Exercise for the Aging Adult: Clinical Implications and Prescription Guidelines. The American Journal of Medicine: 124(3):194-8. Physical Activity and Older Americans: Benefits and Strategies, June 2002, Agency for Healthcare Research and Quality and the Centers for Disease Control. http://www.ahrq.gov/ppip/activity.htm. Physical Activity and Public Health Guidelines: Guidelines for Adults Over Age 65. American College of Sports Medicine and American Heart Association, 2007. http://www.acsm.org/AM/Template.cfm?Section=Home Page&TEMPLATE=/CM/HTMLDisplay.cfm&CONTENTID=7764#Key point s. Raji C, Ericson K, Lopez O, Becker J, Rosano C, Newman A, Gach HM, Thompson, Ho A, & Kuller L. 2010. Paper presented at the 96th Scientific Assembly and Annual Meeting of the Radiological Society of North America, November 28 – December 3, in Chicago, Illinois. Rolland Y, Abelland van Kan G, & Vellas B. (2010). Healthy Brain Aging: Role of Exercise and Physical Activity. Clinics in Geriatric Medicine: 26(1):75-87. Rose DJ & Hernandez D. (2010). The Role of Exercise in Fall Prevention for Older Adults. Clinics in Geriatric Medicine; 26(4):607-31. US Bureau of the Census. (2009), Age and Sex. In: 2005-2009 American Community Survey U.S. Department of Health and Human Services. Healthy People 2010 Objectives: Draft for Public Comment. Washington, DC: U.S. Government Printing Office; 1998. U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans: Active Older Adults. 2008. http://www.health.gov/paguidelines/guidelines/chapter5.aspx. Valentine RJ, Woods JA, McAuley E, Dantzer R, Evans EM. (2011). The Association of Adiposity, Physical Activity and Inflammation With Fatigue in Older Adults. Brain, Behavior, and Immunity; [Epub ahead of print], doi:10.1016/j.physletb.2003.10.071 van Stralen MM, de Vries H, Mudde AN, Bolman C, & Lechner L. (2011). The Long-Term Efficacy of Two Computer-Tailored Physical Activity Interventions for Older Adults: Main Effects and Mediators. Health Psychology;[epub ahead of print]; DOI:

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van Uffelen JG, Heesch KC, Hill RL, & Brown WJ. (2011). A Qualitative Study of Older Adults' Responses to Sitting-Time Questions: Do We Get the Information We Want? BMC Public Health;11(1):458-[Epub ahead of print].

Weuve, J; Kang, JH; Manson, JE; et.al. Function in Older Women: Physical Activity, Including Walking, and Cognitive. JAMA. 2004;292(12):1454-1461.

Xu Q, Park Y, Huang A, Hollenbeck A, Blair A, Schatzkin A, & Chen H. (2010). Physical Activities and Future Risk of Parkinson Disease. Neurology; 75(4):341-8.

Yeh GY, McCarthy EP, Wayne PM, Stevenson LW, Wood MJ, Forman D, Davis RB, & Phillips RS. (2011). Tai Chi Exercise in Patients With Chronic Heart Failure. Archives of Internal Medicine; 171(8):750-7.

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

Guidelines from the American College of Sports Medicine and the American Heart Association for Adults Over Age 65: The following recommendation for older adults describes the amounts and types of physical activity that promote health and prevent disease. The recommendation applies to all adults aged 65+ years, and to adults aged 50 to 64 with clinically significant chronic conditions or functional limitations that affect movement ability, fitness, or physical activity. For the purposes of this recommendation, a chronic condition is "clinically significant" if a person receives (or should receive) regular medical care and treatment for it. A functional limitation is "clinically significant" if it impairs the ability to engage in physical activity. Thus, adults age 50 to 64 with chronic conditions that do not affect their ability to be active (e.g., controlled hypertension) would follow the adult recommendation. The parts of the recommendation below that are not italicized repeat the recommendation for adults, meaning these parts apply to all adults; the italicized parts are specific for older adults.

\*Aerobic Activity. To promote and maintain health, older adults need moderate-intensity aerobic physical activity for a minimum of 30 min on five days each week or vigorous-intensity aerobic activity for a minimum of 20 min on three days each week. [Class I (Level A)] Also, combinations of moderate- and vigorous-intensity activity can be performed to meet this recommendation. [Class IIa (Level B)] Moderate-intensity aerobic activity involves a moderate level of effort relative to an individual's aerobic fitness. On a 10-point scale, where sitting is 0 and all-out effort is 10, moderate-intensity activity is a 5 or 6 and produces noticeable increases in heart rate and breathing. On the same scale, vigorous-intensity activity is a 7 or 8 and produces large increases in heart rate and breathing. For example, given the heterogeneity of fitness levels in older adults, for some older adults a moderate-intensity walk is a slow walk, and for others it is a brisk walk. This recommended amount of aerobic activity is in addition to routine activities of daily living of light-intensity (e.g., self care, cooking, casual walking or shopping) or moderate-intensity activities lasting less than 10 min in duration (e.g., walking around home or office, walking from the parking lot).

\*Muscle-Strengthening Activity. To promote and maintain health and physical independence, older adults will benefit from performing activities that maintain or increase muscular strength and endurance for a minimum of two days each week. [Class IIa (Level A)] It is recommended that 8 to 10 exercises be performed on two or more nonconsecutive days per week using the major muscle groups. To maximize strength development, a resistance (weight) should be used that allows 10 to 15 repetitions for each exercise. The level of effort for muscle-strengthening activities should be moderate to high. On a 10-point scale, where no movement is 0, and maximal effort of a muscle group is 10, moderate-intensity effort is a 5 or 6 and high-intensity effort is a 7 or 8. Muscle-strengthening activities include a progressive-weight training program, weight bearing calisthenics, and similar resistance exercises that use the major muscle groups.

\*Benefits of Greater Amounts of Activity. Participation in aerobic and muscle-strengthening activities above minimum recommended amounts provides additional health benefits and results in higher levels of physical fitness. [Class I (Level A)] Older adults should exceed the minimum recommended amounts of physical activity if they have no conditions that preclude higher amounts of physical activity, and they wish to do one or more of the following; (a) improve their personal fitness, (b) improve management of an existing disease where it is known that higher levels of physical activity have greater therapeutic benefits for the disease, and/or (c) further reduce their risk for premature chronic health conditions and mortality related to physical inactivity. In addition, to further promote and maintain skeletal health, older adults should engage in extra muscle strengthening activity and higher-impact weight-bearing activities, as tolerated. [Class IIa (Level B)] To help prevent unhealthy weight gain, some older adults may need to exceed minimum recommended amounts of physical activity to a point that is individually effective in achieving energy balance, while considering diet and other factors that affect body weight. [Class IIa (Level B)]

\*Flexibility Activity. To maintain the flexibility necessary for regular physical activity and daily life, older adults should perform activities that maintain or increase flexibility on at least two days each week for at least 10 min each day. [Class IIb (Level B)]

\*Balance Exercise. To reduce risk of injury from falls, community-dwelling older adults with substantial risk of falls (e.g., with frequent falls or mobility problems) should perform exercises that maintain or improve balance. [Class IIa (Level A)]

\*Integration of Preventive and Therapeutic Recommendations. Older adults with one or more medical conditions for which physical activity is therapeutic should perform physical activity in the manner that effectively and safely treats the condition(s). [Class IIa (Level A)] So as to prevent other conditions from developing, older adults should also perform physical activity in the manner recommended for prevention as described herein. When chronic conditions preclude activity at minimum recommended levels for prevention, older adults should engage in regular physical activity according to their abilities and conditions so as to avoid sedentary behavior.

\*Activity Plan. Older adults should have a plan for obtaining sufficient physical activity that addresses each recommended type of activity. [Class IIa (Level C)] In addition, to specifying each type of activity, care should be taken to identify, how, when, and where each activity will be performed. Those with chronic conditions for which activity is therapeutic should have a single plan that integrates prevention and treatment. For older adults who are not active at recommended levels, plans should include a gradual (or stepwise) approach to increase physical activity over time using multiple bouts of physical activity (>10 min) as opposed to continuous bouts when appropriate. Many months of activity at less than recommended levels is appropriate for some older adults (e.g., those with low fitness) as they increase activity in a stepwise manner. Older adults should also be encouraged to self-monitor their physical activity on a regular basis and to re-evaluate plans as their abilities improve or as their health status changes.

Guidelines from US Department of Health and Human Services (DHHS):

The following DHHS Guidelines are the same for adults (age 18-64) and older adults (age 65 and above):

• All older adults should avoid inactivity. Some physical activity is better than none, and older adults who participate in any amount of physical activity gain some health benefits.

• For substantial health benefits, older adults should do at least 150 minutes (2 hours and 30 minutes) a week of moderateintensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week.

• For additional and more extensive health benefits, older adults should increase their aerobic physical activity to 300 minutes (5 hours) a week of moderate-intensity, or 150 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity activity. Additional health benefits are gained by engaging in physical activity beyond this amount.

• Older adults should also do muscle-strengthening activities that are moderate or high intensity and involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.

The following DHHS Guidelines are just for older adults:

• When older adults cannot do 150 minutes of moderate-intensity aerobic activity a week because of chronic conditions, they should be as physically active as their abilities and conditions allow.

• Older adults should do exercises that maintain or improve balance if they are at risk of falling.

Older adults should determine their level of effort for physical activity relative to their level of fitness.

• Older adults with chronic conditions should understand whether and how their conditions affect their ability to do regular physical activity safely.

Guidelines from the Centers for Disease Control and Prevention (CDC):

If you're 65 years of age or older, are generally fit, and have no limiting health conditions you can follow the guidelines listed below. • For important health benefits, older adults need at least:

• 2 hours and 30 minutes (150 minutes) of moderate-intensity aerobic activity (i.e., brisk walking) every week and musclestrengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms), or;

• 1 hour and 15 minutes (75 minutes) of vigorous-intensity aerobic activity (i.e., jogging or running) every week and musclestrengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms), or;

• An equivalent mix of moderate- and vigorous-intensity aerobic activity and muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).

1c.17 Clinical Practice Guideline Citation: Nelson ME, Rejeski WJ, Blair SN, Duncan PW, Judge JO, King AC, Macera CA, Castaneda-Sceppa C, American College of Sports Medicine, American Heart Association. (2007). Physical activity and public health in older adults: recommendation from the American College of Sports Medicine and the American Heart Association. Circulation;116(9):1094-105. Department of Health and Human Services. (2008). Physical Activity Guidelines for Americans, Chapter 5: Active Older Adults. Available: http://www.health.gov/paguidelines/guidelines/chapter5.aspx. Centers for Disease Control and Prevention. (2011). Physical Activity for Everyone: Older Adults.Available: http://www.cdc.gov/physicalactivity/everyone/guidelines/olderadults.html. 1c.18 National Guideline Clearinghouse or other URL: http://www.guideline.gov/content.aspx?id=11691&search=%22physical+activity%22#Section420, http://www.health.gov/paguidelines/guidelines/chapter5.aspx, http://www.cdc.gov/physicalactivity/everyone/guidelines/olderadults.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 College of Sports Medicine and American Heart Association: A multi-stakeholder panel reviewed the evidence for strength, consistency, and validity. The panel had representation from multiple specialties. 1c.21 System Used for Grading the Strength of Guideline Recommendation: Other 1c.22 If other, identify and describe the grading scale with definitions: Levels of Evidence for American College of Sports Medicine and American Heart Association A. Data derived from multiple randomized clinical trials B. Data derived from a single randomized trial or from nonrandomized studies C. Consensus opinion of experts Classification of Recommendations for American College of Sports Medicine and American Heart Association: Class I: Conditions for which there is evidence and/or general agreement that a given procedure or treatment is useful and effective (should: is recommended: is indicated: is useful, effective, beneficial) Class II: Conditions for which there is conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of a procedure or treatment: Ila: Weight of evidence/opinion is in favor of usefulness/efficacy (is reasonable; can be useful, effective or beneficial; is probably recommended or indicated) Ib: Usefulness/efficacy is less well established by evidence/opinion (may/might be considered, may/might be reasonable, usefulness/effectiveness is unknown, unclear/uncertain or not well established) Class III: Conditions for which there is evidence and/or general agreement that the procedure/treatment is not useful/effective and in some cases may be harmful (is not recommended; is not indicated; should not; is not useful/effective, beneficial; may be harmful) Levels of Evidence for DHHS Guideline: N/A Levels of Evidence for CDC Guideline: N/A 1c.23 Grade Assigned to the Recommendation: Class IIa (Level B)

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

NCQA convened an expert panel of diverse stakeholders to review the guidelines and evidence for this measure. The panel determined the measure was scientifically sound using the full body of evidence and guidelines for this measure concept.

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

1c.25 Quantity: High 1c.26 Quality: High1c.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, <u>as specified</u>, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)

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

**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

**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 is a patient self-reported survey measure with two rates:

a- Discussing physical activity: The number of patients in the denominator who responded "yes" to the question, "In the past 12 months, did you talk with a doctor or other health provider about your level of exercise or physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise."

b- Advising physical activity: The number of patients in the denominator who responded "yes" to the question, "In the past 12 months, did a doctor or other health provider advise you to start, increase or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day or to maintain your current exercise program."

**2a1.2 Numerator Time Window** (*The time period in which the target process, condition, event, or outcome is eligible for inclusion*): Measurement year (one calendar 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 the Medicare Health Outcomes Survey - a national survey of Medicare Advantage Organization

members. The survey is collected through mail with a telephone follow up. The two rate for this measure are collected through the following questions.

Discussing physical activity: Response of "yes" to Q46 in the Medicare Health Outcomes Survey (HOS): "In the past 12 months, did you talk with a doctor or other health provider about your level of exercise or physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise."

Advising physical activity: Response of "yes" to Q47 in the Medicare Health Outcomes Survey (HOS): "In the past 12 months, did a doctor or other health provider advise you to start, increase or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day or to maintain your current exercise program."

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

a-Discussing physical activity: The number of Medicare members 65 years and older as of December 31st of the measurement year who responded "yes" or "no" to the question "In the past 12 months, did you talk with a doctor or other health provider about your level of exercise or physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise."

b- Advising Physical activity: The number of Medicare members 65 years and older as of December 31st of the measurement year who responded "yes" or "no" to the question, "In the past 12 months, did a doctor or other health provider advise you to start, increase or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day or to maintain your current exercise program."

**2a1.5 Target Population Category** (Check all the populations for which the measure is specified and tested if any): Adult/Elderly Care

**2a1.6 Denominator Time Window** (*The time period in which cases are eligible for inclusion*): Measurement year (one calendar 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): Medicare members age 65 and above who reported having had a visit to a health care provider in the past 12 months.

**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.):

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

supply login/password if needed:

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

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

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

Step 1: Identify the eligible population (Medicare members aged 65 plus)

Step 2: Identify the denominator (Members responding "yes" or "no" to the question; members responding "I had not visit in the past 12 months are not included in the denominator)

Step 3: Identify the numerator (Members in the denominator responding yes to the questions)

Step 4: Rate is calculated by dividing the numerator by the denominator

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. MAOs must achieve a denominator of at least 100 to obtain a reportable result (e.g. at least 100 members responding "yes" or "no" to the question). 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

2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment: URL http://www.hosonline.org/Content/SurveyInstruments.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): 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 2010

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 0.887 for discussing physical activity, and 0.856 for advising physical activity.

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

**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:** The intent of this measure is to assess the rate of health care provider counseling on physical activity for older adults. The measure is consistent with the evidence in focus and target population.

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): Face validity:

The Physical Activity in Older Adults Measure was tested for face validity with two panels of experts. The Geriatric MAP included 18 experts in geriatric medicine and population aging including representation by consumers, health plans, health care providers and policy makers. The GMAP provides guidance to NCQA in the development and maintenance of measures. 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):

Face Validity

NCQA has 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.

**Cognitive Testing** 

Survey questions comprising this measure were tested in a representative sample of elderly respondents, to examine validity of concepts and comprehension of survey questions so as to elicit a valid response.

**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):

Step 1: Physical Activity in Older Adults measure was developed to address a gap in care concerning physician counseling on physical activity in older adults. NCQA's Performance Measurement Department, the Geriatric Measurement Advisory Panel and the Committee on Performance Measurement worked together to assess the most appropriate tools for monitoring whether health care providers were providing counseling to older patients on physical activity.

Step 2: The measure was written, field-tested, and presented to the CPM in 2004. The CPM recommended to send the measure to public comment with a vote of 14 in favor and none opposed.

Step 3: The measure was released for Public Comment in spring 2004. We received and responded to comments on this measure. The CPM recommended moving this measure to first year data collection with a vote of 14 in favor and none opposed.

Step 4: The Physical Activity measure was introduced in HEDIS 2005. 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 16 in favor and none opposed.

Step 5: The Physical Activity measure was reevaluated in 2010/2011.

**Cognitive Testing** 

Based on the findings from four rounds of cognitive interview, we are confident that the final recommended measure works well and is appropriate for older adults.

**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. <u>Risk stratification</u>: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata): N/A

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

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

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

The data sample is Medicare Advantage Organizations from 2007-2009. In order to achieve a reliable estimate from each health plan, plans were excluded from analysis if they did not have at least 100 members in the measure denominator. The number of plans reporting this measure in 2007 was 357, in 2008 was 419 and in 2009 was 465.

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

Comparison of means and percentiles.

**2b5.3 Results** (*Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance*): Adults Discussion Rate Data Element; 2009; 2008; 2007; N (health plans); 465; 419; 357; MEAN; 52.5; 51.9; 52; STDEV; 5.68; 5.83; 5.47; STDER; 0.26; 0.29; 0.29; MIN; 32.2; 31.3; 36.2; MAX; 65.6; 66.4; 64.9; P10; 45; 44.1; 45; P25; 48.7; 48; 48.4; P50; 52.9; 52.2; 51.8; P75; 56.6; 56.3; 56; P90; 59.7; 59.8; 59.1; Adults Advise Rate Data Element: 2009; 2008; 2007

Data Element; 2009; 2008; 2007; N (health plans); 465; 419; 357; MEAN; 47.6; 46.9; 46.8; STDEV; 5.06; 5.2; 5.21; STDERR; 0.23; 0.25; 0.28; MIN; 28.3; 29.1; 29.6; MAX; 62.6; 62.2; 66; P10; 41.5; 40.2; 40.5; P25; 44.3; 43.6; 43.5; P50; 47.8; 46.9; 46.4; P75; 50.8; 50.1; 50.4; P90; 53.8; 53.2; 53;

Across Medicare plans, the rates for the discussing physical activity and advising physical activity have shown little change. The national average for 2007 was 52.0% for discussing and 46.8% for advising physical activity, with a range of about 13-14% between the 10th percentile and the 90th percentile on both rates. In 2008, this average decreased slightly to 51.9% for discussing and increased very slightly to 46.9% for advising. By 2009, only very slight increases were again observed (to 52.5% discussing and 47.6% advising). The 10th to 90th percentile variation also remained steady between 2007 and 2009. These performance reports indicate room for improvement.

**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):

Information for this measure comes from one data source using the same survey question and survey; data comparability is not an issue.

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

N/A

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

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

**2c.1 If measure is stratified for disparities, provide stratified results** (Scores by stratified categories/cohorts): The Measure is not stratified to detect disparities.

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

explain:

2.1-2.3 Supplemental Testing Methodology Information:

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

If the Committee votes No, STOP

## 3. USABILITY

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

**C.1 Intended 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)*). <u>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 <u>Maintenance</u> – 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.]</u>

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 and the Medicare Advantage Stars Rating program.

**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: HEDIS measures adhere to the desirable attributes of scientific acceptability, feasibility and usability. The measures provide performance rates that are audited for consistency and accuracy.

**3.2 Use for other Accountability Functions (payment, certification, accreditation).** If used in a public accountability program, provide name of program(s), locations, Web page URL(s): This measure is used in the CMS Stars Rating program for Medicare Advantage Organizations.

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 <u>Maintenance</u> – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement*].

This measure is in the Healthcare Effectiveness Data and Information Set (HEDIS) and in the Medicare Advantage Stars rating program.

3b.2. Provid	le rationale for	why the measure	performance resu	ults are meaningfu	II, understandable,	and useful for quality
improveme	nt. If usefulness	s was demonstrated	l (e.a., QI initiative)	. describe the data.	method and results	:

NCQA has a continuous review process during which measures are re-evaluated for relevance, scientific soundness and feasibility. This re-evaluation occurs every three years and includes review by the Geriatric Measurement Advisory Panel and Committee on Performance Measurement, opportunity for public comment, in addition to review of usability for quality improvement. This measure was last re-evaluated in 2010 and was deemed usable and feasible.

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

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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 KL L
<b>4a.1-2 How are the data elements needed to compute measure scores generated?</b> (Check all that apply). Data used in the measure are: Other Patient-reported health survey
4b. Electronic Sources: H M L I
<b>4b.1 Are the data elements needed for the measure as specified available electronically</b> (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 L I
<b>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:</b> 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

compari 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.

The Geriatric Measurement Advisory Panel which developed the measure considered several measurement methods to evaluate provider counseling of physical activity. Due to poor coding of physician counseling in administrative claims data and poor documentation in medical records it was determined that a measure using administrative or medical record data would be difficult and unreliable. Survey questions to assess whether elderly received physician counseling were considered most reliable and accurate method.

To ensure survey questions are reliable and valid, the questions were cognitively tested to identify any difficulty with the wording and response choices. Results of cognitive testing were used to further refine the survey questions comprising the measure.

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

If the Committee votes No, STOP.

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

## 5. COMPARISON TO RELATED AND COMPETING MEASURES

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

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

5a. Harmonization

5a.1 If this measure has EITHER the same measure focus OR the same target population as <u>NQF-endorsed measure(s)</u>: Are the measure specifications completely harmonized?

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

**5b. Competing Measure(s)** 

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

## 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. **Geriatrics MAP** Wade Aubry, BCBS Association Arlene Bierman, University of Toronto and St. Michael's Hospital Jovce Dubow, AARP Peter Hollmann, BCBS of Rhode Island Jerry Johnson, University of Pennsylvania David Martin, Ovations Cheryl Phillips, On Lok Lifeways 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/AHRQ** Liaisons

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

The NCQA Geriatric Measurement Advisory Panel advised NCQA during measure development. They evaluated the way staff specified measures, assessed the content validity of measures, and reviewed cognitive testing 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.

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, Esg., 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: 2005 Ad.4 Month and Year of most recent revision: 11, 2009 Ad.5 What is your frequency for review/update of this measure? Approximately every three years; sooner if the clinical guidelines change significantly Ad.6 When is the next scheduled review/update for this measure? 07, 2013 Ad.7 Copyright statement: © 2012 by the National Committee for Quality Assurance 1100 13th Street, NW, Suite 1000 Washington, DC 20005 Ad.8 Disclaimers: No changes have been made to this measure

Ad.9 Additional Information/Comments:

Date of Submission (*MM/DD/YY*): 07/12/2011