



## Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to subcriterion 1b).

### Brief Measure Information

**NQF #:** 0693

**Corresponding Measures:**

**De.2. Measure Title:** Consumer Assessment of Health Providers and Systems (CAHPS®) Nursing Home Survey: Family Member Instrument

**Co.1.1. Measure Steward:** Agency for Healthcare Research and Quality

**De.3. Brief Description of Measure:** The CAHPS Nursing Home Survey: Family Member Instrument is a mail survey instrument to gather information on the experiences of family members of long stay (greater than 100 days) residents currently in nursing homes. The Centers for Medicare & Medicaid Services requested development of this questionnaire, which is intended to complement the CAHPS Nursing Home Survey: Long-Stay Resident Instrument and the Discharged resident Instrument. The Family Member Instrument asks respondents to report on their own experiences (not the resident's) with the nursing home and their perceptions of the quality of care provided to a family member living in a nursing home. The survey instrument provides nursing home level scores on 4 topics valued by patients and families: (1) Meeting Basic Needs: Help with Eating, Drinking, and Toileting; (2) Nurses/Aides' Kindness/ Respect Towards Resident; (3)Nursing Home Provides Information/Encourages Respondent Involvement; and (4) Nursing Home Staffing, Care of Belongings, and Cleanliness. In addition, the survey provides nursing home scores on 3 global items including an overall Rating of Care.

**1b.1. Developer Rationale:** The goal would be to use this family member survey as feedback to transform nursing home care to be resident-directed/centered and achieve the highest quality of life and quality of care for this vulnerable nursing home population.

**S.4. Numerator Statement:** The following topics are measured for nursing homes from a family members perspective:

Composite 1: Meeting Basic Needs – sum of applicable family member scores on 3 survey items (see codebook for points assigned to each response category) related to basic activities of daily living needs (help with eating, drinking, and toileting)

Composite 2: Nurses and Aides' Kindness and Respect towards Resident - sum of applicable family member scores on 5 survey items

Composite 3: How Well the Nursing Home Provides Information and Encourages Family Involvement - sum of applicable family member scores on 6 survey items

Composite 4: Nursing Home Staffing, Care of Belongings, and Cleanliness - sum of applicable family member scores on 7 survey items

Global Items:

Global Rating of care item: sum of family member scores on 0 to 10 scale

Global item whether ever unhappy with nursing home care: sum of family member scores on item (see codebook for points assigned to each response category)

Global item whether respondent would recommend nursing home: sum of family member scores on item (see codebook for points assigned to each response category).

**S.7. Denominator Statement:** The denominator is the total number of surveys for respondents that meet CAHPS completion standard and any applicable screener (discussed in details below).

**S.10. Denominator Exclusions:** We exclude family member respondents (1) who are under age 18, (2) who did not visit the nursing home resident at least twice in 6 months, (3)whose resident was discharged, and (4)those with a resident who had been in the nursing home for less than or equal to 100 days. In addition, screener questions may reduce the denominator size – those questions with screeners are noted in 2a.8 above.

**De.1. Measure Type:** Outcome: PRO-PM

**S.23. Data Source:** Instrument-Based Data, Other

<b>S.26. Level of Analysis:</b> <a href="#">Facility</a>
<b>IF Endorsement Maintenance – Original Endorsement Date:</b> <a href="#">Mar 03, 2011</a> <b>Most Recent Endorsement Date:</b> <a href="#">Mar 03, 2011</a>
<b>IF this measure is included in a composite, NQF Composite#/title:</b>
<b>IF this measure is paired/grouped, NQF#/title:</b>
<b>De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?</b>

<b>1. Evidence, Performance Gap, Priority – Importance to Measure and Report</b>
Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. <b><i>Measures must be judged to meet all subcriteria to pass this criterion and be evaluated against the remaining criteria.</i></b>
<b>1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form</b> <a href="#">0693_Evidence_MSFS.0_Data.doc</a>
<p><b>1b. Performance Gap</b> Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:</p> <ul style="list-style-type: none"> <li>considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or</li> <li>disparities in care across population groups.</li> </ul> <p><b>1b.1. Briefly explain the rationale for this measure</b> (e.g., the benefits or improvements in quality envisioned by use of this measure) <a href="#">The goal would be to use this family member survey as feedback to transform nursing home care to be resident-directed/centered and achieve the highest quality of life and quality of care for this vulnerable nursing home population.</a></p> <p><b>1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis.</b> (This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use. <a href="#">The 2008 National Ombudsmen Reporting System (NORS) data showed that the top complaint of nursing home residents and their families, eliciting some 14,329 complaints to ombudsmen, was failing to respond to requests for assistance. The first composite, meeting basic needs, covers the top complaint identified by ombudsmen, indicating a critical need to assess how well and how poorly a nursing home provides basic care. Specific complaints relating to these items include lack of assistance with toileting which had 3,404 complaints; lack of assistance with drinking which had 2,899 complaints; and lack of assistance with eating which had 1,529 complaints (NORS, 2008). Similarly, most of the other negative items were also major sources of complaints. While no specific complaint used the word rude, complaints relating to dignity, respect and staff attitudes totaled 9,075. Fear of reprisals totaled 687—which may not seem high, but given the research indicating that people seldom complain about fear of reprisals, it suggests a significant issue. Finally, loss of laundry was mentioned 1,771 times in 2008. These common complaints are covered in the family member survey instrument.</a></p> <p><a href="#">Under contract with CMS, states conduct nursing home inspections, known as surveys, to assess compliance with federal quality and safety requirements, including requirements for resident rights and quality of life. According to the CMS Nursing Home Compare website, the US average number of nursing home deficiencies issued as of March 2010 was 8; however the range of deficiencies by state was 0 to 68.</a></p> <p><b>1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.</b> <a href="#">1. National Ombudsmen Reporting System (NORS,2008). Top 20 complaints by category for nursing facilities (FFY 1996-2008). 2008</a></p>

National Ombudsman Reporting System Data Tables (Unlettered Tables in Appendix B). Retrieved on December 31, 2009 from [http://www.aoa.gov/AoARoot/AoA\\_Programs/Elder\\_Rights/Ombudsman/National\\_State\\_Data/2008/Index.aspx](http://www.aoa.gov/AoARoot/AoA_Programs/Elder_Rights/Ombudsman/National_State_Data/2008/Index.aspx).

2. CMS Nursing Home Compare website contains information on U.S. average number of deficiency citations at [www.medicare.gov/NHCompare](http://www.medicare.gov/NHCompare)

**1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability.** *(This is required for endorsement maintenance. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.*

not available

**1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.**

not available

**1c. High Priority** (previously referred to as High Impact)

The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

**1c.1. Demonstrated high priority aspect of healthcare**

Patient/societal consequences of poor quality

**1c.2. If Other:**

**1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare.**

**List citations in 1c.4.**

According to the 2004 National Nursing Home Survey (NNHS), there were approximately 1.5 million nursing home residents in 16,100 nursing home facilities (Jones et al, 2009). They are a population with significant limitations in activities of daily living (ADLs) with 51% receiving assistance with all 5 ADLs (bathing, dressing, toileting, transferring or eating) and less than 3% receiving no ADL help (Jones et al 2009); about 69% have cognitive impairment as measured by the Cognitive Performance Scale (CMS 2008). The National Health Expenditures Accounts (CMS, 2009) estimate that nursing home costs totaled \$131 billion in 2008.

With the passage of the Omnibus Reconciliation Act of 1987 (OBRA'87) Congress responded to growing concerns about the quality of care that nursing home residents received by requiring reforms in the federal certification and oversight of nursing homes. OBRA'87 shifted evaluations of health care quality from a focus on structure, and process criteria to clinical outcomes, resident satisfaction and quality of life. Since OBRA'87 implementation, GAO (2005; 2007) has continued to investigate quality of care in nursing homes and quality oversight activities of CMS and the states.

Concurrent with changes from OBRA'87 implementation, a radical rethinking of the long term care system known as "culture change" began more than a decade ago. Culture change refers to the transformation of nursing homes from an "acute care" model to a consumer-directed model. Common themes of changes include: autonomy in personal choices for the residents, improved communication between residents and staff, and more homelike environments ([www.pioneernetwork.net](http://www.pioneernetwork.net)). The Pioneer Network estimates that 5% of nursing homes have fully adopted culture change ([www.pioneernetwork.net](http://www.pioneernetwork.net)). Resident/Patient Experience surveys are one tool for a nursing home to use to become more resident-centered. Surveying family members is a very important source of feedback for nursing home residents who cannot respond independently to a survey (for example, residents with advanced dementia). The family also can often add information to the resident's viewpoint. The Institute of Medicine (2010) recently updated its conceptual framework for categorizing health care quality and disparities measurement to add family-centeredness to patient-centeredness. The National Priorities Partnership (<http://www.nationalprioritiespartnership.org/PriorityDetails.aspx?id=596>) also includes patient and family engagement as one of its priorities.

**1c.4. Citations for data demonstrating high priority provided in 1a.3**

Jones, A. L., Dwyer, L.L., Bercovitz, A.R., Strahan, G. The National Nursing Home Survey: 2004 Overview. National Center for Health Statistics. Vital Health Stat. 13(167). 2009

CMS, Nursing Home Data Compendium, 2008 edition.

CMS national Health Expenditure Data is at <http://www.cms.gov/NationalHealthExpendData/>

GAO (Dec. 2005). "Despite increased oversight, challenges remain in ensuring high-quality care and resident safety" [www.gao.gov/cgi-bin/getrpt?GAO-06-117](http://www.gao.gov/cgi-bin/getrpt?GAO-06-117).

GAO (May 2007). "Continued attention is needed to improve quality of care in small but significant share of homes." [www.gao.gov/cgi-bin/getrpt?GAO-07-794T](http://www.gao.gov/cgi-bin/getrpt?GAO-07-794T).

Institute of Medicine Committee on Future Directions for the National Healthcare Quality and Disparities Reports; Cheryl Ulmer, Michelle Bruno, and Sheila Burke, Editors; Future Directions for the National Healthcare Quality and Disparities Reports. Washington, DC: National Academy Press, 2010

**1c.5. If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. (Describe how and from whom their input was obtained.)**

## 2. Reliability and 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. **Measures must be judged to meet the subcriteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

**2a.1. Specifications** The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

**De.5. Subject/Topic Area** (check all the areas that apply):

**De.6. Non-Condition Specific** (check all the areas that apply):

[Person-and Family-Centered Care](#)

**S.1. Measure-specific Web Page** (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

[https://www.cahps.ahrq.gov/content/products/NH/PROD\\_NH\\_Family.asp?p=1022&s=223](https://www.cahps.ahrq.gov/content/products/NH/PROD_NH_Family.asp?p=1022&s=223)

**S.2a. If this is an eMeasure**, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

**Attachment:**

**S.2b. Data Dictionary, Code Table, or Value Sets** (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

**Attachment Attachment:** [CODEBOOK FAMILY MEMBER NURSING HOME SURVEY final 5\\_7\\_10.doc](#)

**S.3. For endorsement maintenance**, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.

**S.4. Numerator Statement** (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome)

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

The following topics are measured for nursing homes from a family members perspective:

Composite 1: Meeting Basic Needs – sum of applicable family member scores on 3 survey items (see codebook for points assigned to each response category) related to basic activities of daily living needs (help with eating, drinking, and toileting)

Composite 2: Nurses and Aides' Kindness and Respect towards Resident - sum of applicable family member scores on 5 survey items

Composite 3: How Well the Nursing Home Provides Information and Encourages Family Involvement - sum of applicable family member scores on 6 survey items

Composite 4: Nursing Home Staffing, Care of Belongings, and Cleanliness - sum of applicable family member scores on 7 survey items

Global Items:

Global Rating of care item: sum of family member scores on 0 to 10 scale

Global item whether ever unhappy with nursing home care: sum of family member scores on item (see codebook for points assigned to each response category)

Global item whether respondent would recommend nursing home: sum of family member scores on item (see codebook for points assigned to each response category).

**S.5. Time Period for Data** (What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)

last six months

**S.6. 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, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

Composite 1: 3 survey items Q17, Q19, Q21

Composite 2: 5 survey items Q12, Q13, Q14, Q15, Q24

Composite 3: 6 survey items Q26, Q27, Q28, Q35, Q37, Q42

Composite 4: 7 survey items Q11, Q22, Q29, Q30, Q31, Q32, Q33, Q40

Global items: 3 survey items Q34, Q38, Q39

**S.7. Denominator Statement** (Brief, narrative description of the target population being measured)

The denominator is the total number of surveys for respondents that meet CAHPS completion standard and any applicable screener (discussed in details below).

**S.8. Target Population Category** (Check all the populations for which the measure is specified and tested if any):

Elderly

**S.9. Denominator Details** (All information required to identify and calculate the target population/denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

Composite 1: Meeting Basic Needs:

Q17: the number of surveys completed by all those who responded "yes" to screener Q16

Q19: the number of surveys completed by all those who responded "yes" to screener Q18

Q21: the number of surveys completed by all those who responded "yes" to screener Q20

Composite 2: Nurses and Aides' Kindness and Respect towards Resident:

the denominator is the total number of completed surveys for 4 out of 5 questions in this composite excluding Q24; for Q24, its denominator is the number of surveys completed by all those who responded "yes" to screener Q23

Composite 3: How Well the Nursing Home Provides Information and Encourages Family Involvement:

the denominator is the total number of completed surveys for 2 out of 6 questions (Q27 and Q28) in this composite excluding these questions:

Q26: the number of surveys completed by all those who responded “yes” to screener Q25

Q35: the number of surveys completed by all those who responded “yes” to screener Q34

Q37: the number of surveys completed by all those who responded “yes” to screener Q36

Q42: the number of surveys completed by all those who responded “yes” to screener Q41

Composite 4: Nursing Home Staffing, Care of Belongings, and Cleanliness:

the denominator is the total number of completed surveys for 6 out of 7 questions in this composite excluding Q33; for Q33, its denominator is the number of surveys completed by all those who responded “yes” to screener Q32

Global Items: for all 3 global items the denominator is the total number of completed surveys.

**S.10. Denominator Exclusions** *(Brief narrative description of exclusions from the target population)*

We exclude family member respondents (1) who are under age 18, (2) who did not visit the nursing home resident at least twice in 6 months, (3) whose resident was discharged, and (4) those with a resident who had been in the nursing home for less than or equal to 100 days. In addition, screener questions may reduce the denominator size – those questions with screeners are noted in 2a.8 above.

**S.11. Denominator Exclusion Details** *(All information required to identify and calculate exclusions from the denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*

Q43-respondents age

Q9 -number of times visited nursing home resident in last 6 month

Q2 & Q3 resident was discharged

resident in the nursing home for 100 days or less -- Q5 will work for some categories (6 months or more) but will need to combine with facility information (including MDS 3.0) to get more precise information for under 6 months. AHRQ will harmonize its long stay specifications with CMS.

**S.12. Stratification Details/Variables** *(All information required to stratify the measure results including the stratification variables, definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b)*

not applicable

**S.13. Risk Adjustment Type** (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)

Statistical risk model

If other:

**S.14. Identify the statistical risk model method and variables** *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)*

The CAHPS team recommends four items to be case-mix adjusters for the CAHPS Nursing Home Family Survey: 1) respondent age, 2) respondent education, 3) whether the respondent believes the resident will permanently live in the nursing home, and 4) respondent’s belief about whether the resident was capable of making decisions (See Table 10 on page 29 in AIR Final Report). Several additional items were considered as potential adjusters but were rejected for a variety of reasons. A full description of the risk adjustment process is available in the AIR Final Report on pages 26-33.

**S.15. Detailed risk model specifications** *(must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)*

Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

**S.15a. Detailed risk model specifications** *(if not provided in excel or csv file at S.2b)*

**S.16. Type of score:**



Non-weighted score/composite/scale

If other:

**S.17. 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)

**S.18. 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.)

SCORING AND PATIENT-MIX ADJUSTMENTS

1. Global rating and items

- Measured by family member's overall rating of the care at the nursing home on a scale of 0-10 (Q38)
- Measured by whether the family member was ever unhappy with the care their family member received at the nursing home on a Yes/No scale (Q34) Note: "No" represents better quality
- Measured by whether the family member would recommend the nursing home to others on a four-point scale: Definitely No, Probably No, Probably Yes, Definitely Yes (Q39)

2. Domains of care

1. Meeting Basic Needs – Help with Eating, Drinking and Toileting (Q17, Q19, & Q21)
2. Nurses and Aides' Kindness and Respect towards Resident (Q12, Q13, Q14, Q15, & Q24)
3. How Well the Nursing Home Provides Information and Encourages Family Involvement (Q26, Q27, Q28, Q53, Q37 & Q42)
4. Nursing Home Staffing, Care of Belongings, and Cleanliness (Q11, Q22, Q29, Q30, Q31, Q33 & Q40)

3. Production of nursing home scores – Global items

- Q38 Nursing home level ratings are presented using percentages for three-categories for the 0-10 scale question: 0-6, 7-8, and 9-10.
- Q39 Nursing home level scores are presented using percentages for the following three categories: definitely would recommend, probably would recommend, and definitely not or probably not recommend
- Q34 Nursing home level scores are presented using percentages for two categories (reverse coded): yes, happy with nursing home care in past 6 months; and no, not happy with nursing home care in past 6 months

4. Production of nursing home scores - Domain-level composites

There are four domain-level composites included in the Nursing Home Family Member Questionnaire: 1) Meeting Basic Needs – Help with Eating, Drinking and Toileting; 2) Nurses and Aides' Kindness and Respect towards Resident; 3) How Well the Nursing Home Provides Information and Encourages Family Involvement; 4) Nursing Home Staffing, Care of Belongings, and Cleanliness.

- Meeting Basic Needs – Help with Eating, Drinking and Toileting  
This composite is produced by combining responses to three questions:
- Q17: Family member helped nursing home resident with eating. "Was it because the nurses or aides either didn't help or made him or her wait too long?"
- Q19: Family member helped nursing home resident with drinking. "Was it because the nurses or aides either didn't help or made him or her wait too long?"
- Q21: Family member helped nursing home resident with toileting. "Was it because the nurses or aides either didn't help or made him or her wait too long?"

Respondents can answer "yes" or "no" to each. (note: "yes" represents lower quality" A nursing home's score on the "Meeting Basic Needs – Help with Eating, Drinking and Toileting" composite is the proportion of cases in each response category.

The steps to calculate a nursing home provider's composite score follow:

Step 1 – Calculate the proportion of cases in each response category for the first question:

P11 = Proportion of respondents who answered “yes”

P12 = Proportion of respondents who answered “no”

Follow the same steps for the second question:

P21 = Proportion of respondents who answered “yes”

P22 = Proportion of respondents who answered “no”

Follow the same steps for the third question:

P31 = Proportion of respondents who answered “yes”

P32 = Proportion of respondents who answered “no”

Step 2 – Combine responses from the questions to form the composite

Calculate the average proportion responding to each category across the questions in the composite. For example, in the “Meeting Basic Needs – Help with Eating, Drinking and Toileting” composite (three questions), calculations would be as follows:

PC1 = Composite proportion who said “yes” =  $(P11 + P21 + P31) / 3$

PC2 = Composite proportion who said “no” =  $(P12 + P22 + P32) / 3$

- Nurses and Aides’ Kindness and Respect towards Resident

This composite is produced by combining responses to five questions:

- Q12: “In the last 6 months, how often did you see the nurses and aides treat your family member with courtesy and respect?”

- Q13: “In the last 6 months, how often did you see the nurses and aides treat your family member with kindness?”

- Q14: “In the last 6 months, how often did you feel that the nurses and aides really cared about your family member?”

- Q15: “In the last 6 months, did you ever see any nurses or aides be rude to your family member or any other resident?”

\*(Yes/no)

- Q24: “In the last 6 months, how often did the nurses and aides handle the situation in a way that you felt was appropriate?”

Respondents can answer “never,” “sometimes,” “usually,” or “always” to each item except for Q15 where the response scale is Yes/No. The steps to calculate a nursing home’s composite score for this domain are the following:

Step 1 – Calculate the proportion of cases in each response category for the first question (Q12):

P11 = Proportion of respondents who answered “never”

P12 = Proportion of respondents who answered “sometimes”

P13 = Proportion of respondents who answered “usually”

P14 = Proportion of respondents who answered “always”

Follow the same steps for the second (Q13), third (Q14), and fifth (Q26) questions:

For the fourth question (Q15) calculate the proportion of cases in each response category: note: “No” represents better quality

P41= Proportion of respondents who answered “yes”

P42= Proportion of respondents who answered “no”

Step 2 – Combine responses from the questions to form the composite

Calculate the average proportion responding to each category across the questions in the composite. For example, in the “Nurses and Aides’ Kindness and Respect Towards Resident” composite (five questions), calculations would be as follows:

PC1 = Composite proportion who said “never” or “yes” =  $(P11 + P21 + P31 + P41 + P51) / 5$  note: “yes” represents worse quality

PC2 = Composite proportion who said “sometimes” =  $(P12 + P22 + P32 + P52) / 5$

PC3 = Composite proportion who said “usually” =  $(P13 + P23 + P33 + P53) / 5$

PC4 = Composite proportion who said “always” or “no” =  $(P14 + P24 + P34 + P44 + P54) / 5$  note: “No” represents better quality



Survey sponsors may choose an alternative to combine proportions of respondents who said “never” or “sometimes” or “yes” and compare with combined proportions of respondents who said “always” or “usually” or “no”.

- How Well the Nursing Home Provides Information and Encourages Family Involvement

This composite is produced by combining responses to six questions:

- Q26: “In the last 6 months, how often did you get this information as soon as you wanted?”
- Q27: “In the last 6 months, how often did the nurses and aides explain things in a way that was easy for you to understand?”
- Q28: “In the last 6 months, did the nurses and aides ever try to discourage you from asking questions about your family member?” note: “No” represents better quality
- Q35: “In the last 6 months, did you ever stop yourself from talking to any nursing home staff about your concerns because you thought they would take it out on your family member?” note: “No” represents better quality
- Q37: “In the last 6 months, how often were you involved as much as you wanted to be in the decisions about your family member’s care?”
- Q42: “In the last 6 months, how often did you get all the information you wanted from the nursing home about payments or expenses?”

Respondents to four of the above questions can answer “never,” “sometimes,” “usually,” or “always” to each. Respondents can answer “yes” or “no” to two of the above questions (Q31 and Q43), where “no” indicates better quality. The steps to calculate a nursing home’s composite score for this domain are similar to calculations for Composite 2: “Nurses and Aides’ Kindness and Respect Towards Resident”, except that in Step 2, each composite proportion category would be divided by six (the total number of items).

- Nursing Home Staffing, Care of Belongings, and Cleanliness

This composite is produced by combining responses to seven questions:

- Q11: “In the last 6 months, how often were you able to find a nurse or aide when you wanted one?”
- Q22: “In the last 6 months, how often did your family member look and smell clean?”
- Q29: “In the last 6 months, how often did your family member’s room look and smell clean?”
- Q30: “In the last 6 months, how often did the public areas of the nursing home look and smell clean?”
- Q37: “Personal medical belongings are things like hearing aids, glasses, and dentures. In the last 6 months, how often were your family member’s personal medical belongings damaged or lost?” note: “Never” represents better quality
- Q39: “In the last 6 months, when your family member used the laundry service, how often were clothes damaged or lost?” note: “Never” represents better quality
- Q51: “In the last 6 months, how often did you feel there were enough nurses and aides in this nursing home?”

Respondents to three of the above questions can answer “never,” “sometimes,” “usually,” or “always” to each. Respondents to two of the above questions (Q37 and Q39) can answer “never”, “once”, or “two or more times” to each, where “Never” represents better quality. The steps to calculate a nursing home’s composite score for this domain are similar to calculations for Composite 2: “Nurses and Aides’ Kindness and Respect Towards Resident”, except that in Step 2, each composite proportion category would be divided by seven (the total number of items).

Risk adjustment algorithm is provided as attachment in Additional Information section at Ad.11

**S.19. Calculation Algorithm/Measure Logic Diagram URL or Attachment** *(You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*

**S.20. Sampling** *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*

IF a PRO-PM, identify whether (and how) proxy responses are allowed.

**Sampling Frame Elements:** An eligible sample member is the person listed by the nursing home as the responsible person for a resident who has resided at the nursing home for at least 30 consecutive days. Eligible sample members can include family, friends, guardians, people with medical power of attorney for the resident, and attorneys. This survey is designed for adults only (18 and

older). If a resident listed more than one responsible party, the respondent should be randomly selected. If the same responsible party is listed for more than one resident, the resident for whom the responsible party responds should be randomly selected. If there is more than one responsible party listed for a resident, randomly select one of them. The sampling frame should include: Name of responsible party, Address, Telephone number; Resident/patient name; date of birth, gender, whether the responsible party was the power of attorney; admission date; and whether the resident is in a dementia unit.

Drawing the Sample: Based on the CAHPS grantees' experiences with the field tests of this instrument, we recommend the following:

- For facilities with up to 150 eligible patients, use all patients (a census) from each facility.
- For facilities with more than 150 eligible patients, draw a systematic random sample of 150 patients from each facility. If you anticipate that poor contact information (addresses and telephone numbers) will decrease the number of questionnaires that reach the sampled individuals, you may need to start with a larger sample.

Data Collection Protocol: Recommended Protocol for Mail with Optional Telephone Followup: The following guidance builds upon the grantees' experiences fielding CAHPS and other surveys, as well as their specific experience with the field test of the Family Member Instrument. The CAHPS Team recommends using one of the following two protocols for data collection:

- Two (2) mailings of the survey with a reminder postcard/letter prior to the 2nd mailing followed by telephone contact for those family members who have not responded to the mailed surveys.

- Two (2) mailings of the survey with a reminder postcard/letter prior to the 2nd mailing without the telephone followup.

Once the vendor has initiated the data collection process, it is important to follow the protocol through to completion. Even if you achieve the minimum response rate of 50 percent, continue with the survey administration protocol to achieve the highest response rate possible.

In the field test of this instrument, the CAHPS Consortium tested elements of this survey administration protocol by mail with telephone followup. A response rate of 66 percent was achieved through a combination of the following:

- An initial mailing of the questionnaire with a cover letter and return postage-paid envelope : 42% response rate
- A second mailing of the questionnaire 2 weeks after the reminder: 14 %
- Computer-assisted telephone interviews (CATI) for non-respondents 2 weeks after the second mailing of the questionnaire: 10 %

Minimum sample size:

The number of subjects needed for each composite to reach a reliability of 0.70 (if the goal is public reporting for reliable comparison purposes) was calculated with the Spearman-Brown Prediction formula using the average number of respondents per nursing home. This number was then adjusted by the lowest proportion that are eligible for any question in the composites (so that reliability is achieved on all scales). Based on the pilot test of the family member survey, Q23 (waited too long for help with toileting) had the lowest proportion (25%) who were eligible to respond (based on the screener Q22). So the number needed to reach 0.70 reliability for the composite Meeting Basic Needs was  $(31/0.25)$  or 124. If necessary this data could be accumulated over time to achieve sufficient sample size. The other 3 composites require smaller sample numbers:

Composite 2: Nurses/Aides' Kindness/Respect Towards Resident:  $(6.3/.26)= 24.2$  minimum recommended

Composite 3: How Well the Nursing Home Provides Information and Encourages Family Involvement:  $(6.4/.32)= 20$  minimum recommended

Composite 4: Nursing Home Staffing, Care of Belongings and Cleanliness:  
 $(10.8/.765)= 14$  minimum recommended

If the goal is to use survey data only for quality improvement purposes, a smaller number of completes may be used.

**S.21. Survey/Patient-reported data** (If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)

If a PRO-PM, specify calculation of response rates to be reported with performance measure results.

**S.22. Missing data** (specify how missing data are handled, e.g., imputation, delete case.)

Required for Composites and PRO-PMs.

**S.23. Data Source** (Check *ONLY* the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.24.

[Instrument-Based Data](#), [Other](#)

**S.24. Data Source or Collection Instrument** (Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)

IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.

[CAHPS Nursing Home Survey: Family Member Instrument](#)

**S.25. Data Source or Collection Instrument** (available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

[URL](#)

**S.26. Level of Analysis** (Check *ONLY* the levels of analysis for which the measure is SPECIFIED AND TESTED)

[Facility](#)

**S.27. Care Setting** (Check *ONLY* the settings for which the measure is SPECIFIED AND TESTED)

[Post-Acute Care](#)

If other:

**S.28. COMPOSITE Performance Measure** - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

**2a. Reliability** – See attached Measure Testing Submission Form

**2b. Validity** – See attached Measure Testing Submission Form

[0693\\_MeasureTesting\\_MS5.0\\_Data.doc](#)

### 3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

#### 3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

##### 3a.1. Data Elements Generated as Byproduct of Care Processes.

[Survey](#)

If other:

#### 3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

**3b.1. To what extent are the specified data elements available electronically in defined fields?** (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields)

[No](#)

**3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.**

[this is a survey instrument so electronic capture is not considered](#)

**3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL.**

**Attachment:**

**3c. Data Collection Strategy**

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

**3c.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.**

**IF a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.**

Based on the field test results that achieved more than 50% response rate in the two rounds of family surveys, our survey administration guidelines permit the phone interview phone follow up to be an optional part of administration protocol.

Additional lessons learned about obtaining the sampling frame:

After we contacted each nursing home by phone, we emailed a document describing each of the data elements and how we would like the file laid out and provided options in terms of how to provide the data. We requested two types of data: critical data elements such as the responsible party, address, phone number, and start date of care. Additionally, we provided detailed instructions about how to maintain HIPAA compliance including the need for encryption. We also followed up with calls and/or emails to see if they had questions or comments.

Despite the fact that the nursing homes were provided with detailed instructions regarding data file construction and delivery, there were several challenges to obtaining the sampling frame data. These challenges included:

- Misunderstanding on the part of the nursing homes of HIPAA rules and regulations
- Lack of technical ability on the part of the nursing homes with regard to extracting the necessary data from their systems and providing it in a usable, electronic format.

When we interacted with the nursing home, the staff we typically were in contact with were not staff who managed the data regularly. Thus, in some cases, it wasn't until later that we found out that nursing homes were having difficulty understanding which data to include. For example, we needed to know the date care began in order to determine eligibility. In some cases, some recipients had more than one start date of care, and in other cases it was unclear to a nursing home what was meant by 'start' date.

Nursing homes faxed information, emailed information, fedexed hard copies, or sent CD-ROMs. In a few cases, they had a good understanding of HIPAA policies and how to provide protected health information data safely and securely. In the instructions provided to the nursing homes, we stated that the files must be encrypted and that they could not be emailed without encrypting them first because of HIPAA rules. Nevertheless, many nursing homes emailed files or did not encrypt them, even when they thought that they had or said that they did. One nursing home was unable even to burn a file onto a CD. Some had no idea that they needed to encrypt files or how to do so. Most of the sample files were sent in a hard copy format. We used optical character recognition software to read the information (with significant quality assurance review) and/or manually keyed information. In some cases, while the information was electronic, the data were not in any order or set fields, thus staff had to key in the data.

Many of the nursing homes had more than one responsible party, or one responsible party was responsible for more than one person at the nursing home. In a few cases, someone at the nursing home was the responsible party.

**Lessons Learned**

Below is a list of recommendations for future users:

**Use Data Use Agreements:** Give each nursing home 5 business days to fax a signed data use agreement. Call each nursing home 2 days before to confirm that you will get the data use agreement on the day you requested.

**Confirm the data:** At the same time you are obtaining the Data Use Agreements, ask them to provide an example of the data they will provide for the field test, but blacking out any personal health information or personally identifiable information. This will help you to understand whether the home is able to produce an electronic file or not and help the home prepare for developing a sample frame.

**Provide information about HIPAA:** Since HIPAA non-compliance was a common problem, and because both managers and IT staff need to understand HIPAA regulations, provide a short description of HIPAA including links (no more than one page). Provide links to downloading inexpensive encryption software that meets HIPAA requirements.

**Contact multiple nursing home representatives.** Rather than having one main nursing home contact, always ask to contact the main nursing home representative (typically an administrator, manager, or QI director) and the IT lead on the project starting from the

very beginning of the project. This is helpful for two reasons; we often found that the main staff was out of the office at critical points; secondly, the IT lead is the only person who will know how the data is laid out and will understand what challenges there are to download the data. Unfortunately, this method will not work in all cases as many nursing homes do not have any IT staff. Work with headquarters when working with chains. If you are working with an organization that is part of a chain, contact the headquarters. In many cases, the headquarter staff can facilitate the process immeasurably and even provide all of the data for each nursing home.

**3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).**

## 4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

### 4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

#### 4.1. Current and Planned Use

*NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.*

Planned	Current Use (for current use provide URL)
Public Reporting	

#### 4a.1. For each CURRENT use, checked above, provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

**4a.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons?** (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

**4a.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement.** (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

### 4b. Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

#### 4b.1. Progress on Improvement. (Not required for initial endorsement unless available.)

Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:

- Progress (trends in performance results, number and percentage of people receiving high-quality healthcare)
- Geographic area and number and percentage of accountable entities and patients included

**4b.2. If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.**

#### **4c. Unintended Consequences**

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

**4c.1. Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.**

There could be issues if the entity collecting the data does not follow the guidelines for survey administration (e.g., drawing the sample and assuring confidentiality). Unless the sponsor permits direct access to the resident records for random sampling, it is possible that the nursing home may select family members likely to give more favorable responses (or exclude those likely to give unfavorable responses) when selecting records for the sample. In addition, errors could be introduced if an entity adds non-Nursing Home CAHPS items before any of the core survey questions in the Nursing Home CAHPS Family Member Survey. The core survey items are all those questions prior to the "About You" section of the survey. AHRQ has a CAHPS User Group support contract that is available to provide technical assistance for entities wishing to implement this survey- this can help reduce errors.

### **5. Comparison to Related or 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.

#### **5. Relation to Other NQF-endorsed Measures**

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

**5.1a. List of related or competing measures (selected from NQF-endorsed measures)**

**5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.**

#### **5a. Harmonization**

The measure specifications are harmonized with related measures;

**OR**

The differences in specifications are justified

**5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):**

**Are the measure specifications completely harmonized?**

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



#### 5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

**OR**

Multiple measures are justified.

#### 5b.1. If this measure conceptually addresses 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.)**

### Appendix

**A.1 Supplemental materials may be provided in an appendix.** All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

**Attachment:**

### Contact Information

**Co.1 Measure Steward (Intellectual Property Owner):** [Agency for Healthcare Research and Quality](#)

**Co.2 Point of Contact:** [Pamela, Owens, Pam.Owens@ahrq.hhs.gov, 301-427-1412-](#)

**Co.3 Measure Developer if different from Measure Steward:** [Agency for Healthcare Research and Quality \(AHRQ/DHHS\)](#)

**Co.4 Point of Contact:** [Judith, Sangl, jsangl@ahrq.gov, 301-427-1308-](#)

### Additional Information

#### Ad.1 Workgroup/Expert Panel involved in measure development

**Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.**

AHRQ's primary way of obtaining stakeholder input was by establishing a Technical Expert Panel (TEP) composed of industry, regulators and quality improvement organizations, payers, long- term care researchers, and consumer advocates. In addition to the Centers for Medicare & Medicaid Services, the TEP included representatives from the following organizations: (1) AARP; (2) American Health Care Association; (3) American Association of Homes and Services ; (4) National Alliance for Caregivers/Gerontology Program of Towson University ; (5) Quality Partners of Rhode Island, the CMS QIOSC for nursing home care; (6) Veterans Administration; (7) National Citizen's Coalition for Nursing Home Reform; (8) Scripps Gerontology Center of Miami University; (9) Alzheimer's Association; (10) American Medical Directors Association; and (11) National Network of Career Nursing Assistants. This TEP met in-person in November 2005 and February 2008. Additionally, AHRQ consulted with various TEP members at additional times during the survey development. Members of the TEP offered different perspectives on the use and value of a questionnaire for family members and provided valuable feedback on the proposed items, analyses, and final instrument.

Issues raised by TEP: On the February 2008 conference call, TEP members raised several issues in their review of the Final Report and survey. One issue raised was that the survey instrument does not incorporate the full range of domains of interest to consumers or facilities (dining, activities, and the admissions process were given as examples). A related point was that the survey would be difficult to use for quality improvement because it is not comprehensive. The CAHPS team responded that it is not possible to create an instrument that would serve all purposes but that the proposed questions would be useful for identifying issues that require more detailed study at the facility level. It was pointed out that it is possible to add supplemental questions to a CAHPS survey at the end of the instrument, right before the demographic items. It was further noted that the instrument was intended for family members, not to be a proxy for the resident. This family member survey should complement but not substitute for a survey of residents. Some of the topic areas considered missing in the family survey are covered in the resident survey.

Consumer advocates affirmed the importance of staff availability and staff attitude as key survey items in the recommended composites. They noted that several items proposed for deletion (e.g., "staff treating resident roughly") were frequently mentioned by family members. However, the CAHPS team explained that the items were proposed for deletion because of their poor

psychometric performance. The advocates suggested that there be an explanation to family members about confidentiality because of fear of retaliation and an explanation about how the data will be used. Another suggestion was to include an open-ended question asking for additional comments on the care in the nursing home. A long term care expert recommended that the protocol materials explain how to do the case mix adjustment.

**Measure Developer/Steward Updates and Ongoing Maintenance**

**Ad.2** Year the measure was first released: 2008

**Ad.3** Month and Year of most recent revision:

**Ad.4** What is your frequency for review/update of this measure? AHRQ will work with NQF to update the measure as needed.

**Ad.5** When is the next scheduled review/update for this measure?

**Ad.6** Copyright statement: CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services. This CAHPS® questionnaire should be used without modification to the core set of questions.

Supplemental questions may be added after the core set of questions and before the demographic question section. Please consult Guidelines for Modifying and Naming CAHPS Surveys at [https://www.cahps.ahrq.gov/content/products/PROD\\_ModifySurveys.asp](https://www.cahps.ahrq.gov/content/products/PROD_ModifySurveys.asp)

**Ad.7** Disclaimers:

**Ad.8** Additional Information/Comments: