

2016 Nursing Home Quality Initiative Measure Descriptions

Below is a description of the measures included in the 2016 NHQI file for each component of the NHQI.

Quality Component (70 points)

The quality component contains 14 quality measures. Facilities are awarded points based on their performance in each measure using different methods. Some measures are based on meeting threshold values, while quintiles are calculated for other measures. The threshold values for such qualifying measures are described in Table 2. Measures that follow the quintile method are awarded points based on the following structure:

- First quintile = 5 points
- Second quintile = 3 points
- Third quintile = 1 point
- Fourth and fifth quintiles = 0 points

Three quality measures are risk adjusted. The covariates for each risk adjusted model are shown below.

Measure ID 4

Percent of long stay high risk residents with pressure ulcers

Gender
Age
Bowel incontinence (always)
Diabetes
Healed pressure ulcer
BMI
Prognosis of less than six months of life expected
Quadriplegia/paraplegia
Anemia
End stage renal disease

Measure ID 10

Percent of long stay residents who lose too much weight

Age
End stage renal disease
Cancer
Prognosis of less than six months of life expected
Hospice

Measure ID 12

Percent of long stay residents who self-report moderate to severe pain

Cognitive skills for daily decision-making on prior assessment

If data is not available or the sample size is too small for a measure, the total base of points is reduced. For example, if a facility has two measures in the Quality Component for which the data is unavailable or the sample size too small, the two measures are suppressed and the total base reduced by 10 points (five points for each quality measure). Table 1 illustrates this method.

Table 1: Handling Small Sample Size and Unavailable Data

	Facility A No small sample size (no reduction in base points)	Facility B Small sample size on two quality measures, each worth five points (10 point reduction in base points)
Sum of points	80	80
Base points	100	90
Total score (sum of points divided by base points)	.80	.89
Total score x 100	80%	89%

If a measure is unavailable because the facility did not submit the necessary data, the facility loses points for that measure, and the total base of points is **not** reduced.

For the measures that utilize MDS 3.0 data, the CMS measure specifications can be found at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIQualityMeasures.html>.

Table 2: Quality Measures

Measure	Measure ID	Measure Steward	Data Source	Point Method	Notes
Percent of contract/agency staff used	1	NYS DOH	2015 nursing home certified cost reports	Threshold; maximum points are awarded if the rate is less than 10%, and zero points if the rate is 10% or greater	The proportion of annual contract staff hours worked over the sum of annual full-time and contract staff hours worked.
Rate of staff hours per day	2.2	NYS DOH	2015 nursing home certified cost reports and 2015 MDS 3.0 data	Quintiles	New in 2016 NHQI; replaces the CMS Five-Star Quality Rating for Staffing
Percent of employees vaccinated for influenza	3	NYS DOH	Healthcare Personnel Influenza Vaccination Report for the 2015-2016 influenza season	Quintiles	Rates were calculated from the May 1, 2016 submission
Percent of long stay high risk residents with pressure ulcers	4	CMS	2015 MDS 3.0 data	Quintiles	Risk adjusted by the NYS DOH
Percent of long stay low risk residents who lose control of their bowel or bladder	5	CMS	2015 MDS 3.0 data	Quintiles	

Measure	Measure ID		Data Source	Point Method	Notes
Percent of long stay residents who received the pneumococcal vaccine	6.2	CMS	2015 MDS 3.0 data	Quintiles	
Percent of long stay residents who received the seasonal influenza vaccine	7.2	CMS	2015 MDS 3.0 data	Quintiles	
Percent of long stay residents experiencing one or more falls with major injury	8	CMS	2015 MDS 3.0 data	Quintiles	
Percent of long stay residents who have depressive symptoms	9	CMS	2015 MDS 3.0 data	Quintiles	
Percent of long stay residents who lose too much weight	10	CMS	2015 MDS 3.0 data	Quintiles	Risk adjusted by the NYS DOH
Antipsychotic use in persons with dementia	11.2	Pharmacy Quality Alliance (PQA)	2015 MDS 3.0 data	Quintiles	
Percent of long stay residents who self-report moderate to severe pain	12	CMS	2015 MDS 3.0 data	Quintiles	Risk adjusted following CMS specifications
Percent of long stay residents whose need for help with daily activities has increased	13	CMS	2015 MDS 3.0 data	Quintiles	
Percent of long stay residents with a urinary tract infection	14	CMS	2015 MDS 3.0 data	Quintiles	

Compliance Component (20 points)

The compliance component contains three measures shown in Table 3. The NYS regionally adjusted five-star quality rating for health inspections is worth 10 points, while the two timely submission measures are each worth five points.

Table 3: Compliance Measures

Measure	Measure ID	Data Source	Point Method	Notes
NYS regionally adjusted five-star quality rating for health inspections*	15	CMS health inspection survey scores	5 stars = 10 points 4 stars = 7 points 3 stars = 4 points 2 stars = 2 points 1 star = 0 points	CMS health inspection survey scores as of April 1, 2016 See note*
Timely submission of employee flu immunization data	16	Healthcare Personnel Influenza Vaccination Report for the 2015-2016 influenza season, reported to the Bureau of Immunization by May 1, 2016	5 points for timely submission; 0 points if not timely	
Timely submission of complete nursing home certified cost reports	17	2015 nursing home certified cost reports, reported to the Division of Finance and Rate Setting by the respective due dates for calendar year and fiscal year filers	5 points for timely, certified, and complete submission; 0 points if not timely, certified, or complete	

* The numeric health inspection survey scores from CMS are used to calculate cut points for each region in the state. Regions include the Metropolitan Area, Western New York, Capital District, and Central New York. Within each region, the top 10% of nursing homes receive five stars, the middle 70% receive four, three, or two stars, and the bottom 20% receive one star. Each nursing home is awarded a Five-Star Quality Rating based on the cut points calculated from the health inspection survey scores **within its region**.

Efficiency Component (10 points)

The efficiency component contains one measure for potentially avoidable hospitalizations (PAH), worth 10 points. The potentially avoidable diagnoses are those used in the CMS Nursing Home Value Based Purchasing Demonstration (<http://innovation.cms.gov/initiatives/Nursing-Home-Value-Based-Purchasing/>). The PAH measure is risk adjusted using the covariates shown below.

- Gender
- Age
- Activities of daily living: bathing
- Activities of daily living: locomotion
- Alzheimer's disease, Non-Alzheimer's dementia

Arthritis, degenerative joint disease, osteoarthritis, rheumatoid arthritis
 Asthma, chronic obstructive pulmonary disease, chronic lung disease
 Atrial fibrillation and other dysrhythmias
 Cancer
 Cognitive skills for daily decision making
 Coronary artery disease
 Depression
 Diabetes
 Falls with minor or major injury
 Feeding tube
 Gastroesophageal reflux disease, esophageal, gastric, and peptic ulcers
 Indwelling catheter
 Paralysis
 Parenteral nutrition
 Peripheral vascular disease
 Pressure ulcer (stages 2-4)
 Renal insufficiency, renal failure, end-stage renal disease
 Shortness of breath

Table 4: Efficiency Measure

Measure	Measure ID	Data Source	Point Method	Notes
Potentially avoidable hospitalizations (PAH)	18	2015 MDS 3.0 and 2015 SPARCS data	Quintiles Quintile 1 = 10 points Quintile 2 = 8 points Quintile 3 = 6 points Quintile 4 = 2 points Quintile 5 = 0 points	Risk adjusted by the NYS DOH

Overall Score and Quintile

The overall score (Measure ID 19) is the sum of points awarded in each component. Nursing homes are ranked into overall quintiles (Measure ID 20) based on their overall scores.

Ineligibility Criteria

If health inspection survey deficiency data shows a level J, K, or L deficiency between July 1 of the measurement year (2015) and June 30 of the reporting year (2016), this is indicated in the NHQI data set (Measure ID 21). J, K, and L deficiencies indicate a Level 4 immediate jeopardy, which is the highest level of severity for deficiencies on a health inspection. Immediate jeopardy indicates that the deficiency resulted in noncompliance and immediate action was necessary, and the event caused or was likely to cause serious injury, harm, impairment or death to the resident(s). Because of the severity of these deficiencies, they are incorporated into the NHQI and these nursing homes are considered ineligible to be ranked into overall quintile. The overall score and quintile will be displayed for each of these ineligible nursing homes as a reference. This is to show the data user where the nursing home would have placed in the rankings if it had not received a level J, K, or L deficiency.