

New York State Department of Health 2016 Nursing Home Quality Initiative Methodology

Updated March 2016

The 2016 Nursing Home Quality Initiative (NHQI) is comprised of three components: **[1]** the Quality Component (quality measures), **[2]** the Compliance Component (compliance with reporting), **[3]** and the Efficiency Component (potentially avoidable hospitalizations). The 2016 NHQI score is worth a maximum 100 points.

Quality Component (70 points)

Quality measures are calculated from MDS 3.0 data (2015 calendar year), the NYS employee flu vaccination data, and nursing home cost report data for the percent of contract/agency staff used and the rate of staffing hours per day.

- The allotted 70 points for quality are distributed evenly for all quality measures. The 2016 NHQI includes 14 quality measures with each measure being worth a maximum of 5 points.
- Four quarters of 2015 MDS 3.0 data are used.
- The quintiles are based on the same measurement year of the results. Therefore only a certain number of nursing homes are able to achieve these quintiles for each measure. The results are not rounded until after determining the quintile for measures. For measures with very narrow ranges of performance, two facilities may be placed in different quintiles and receive different points, but after rounding, the facilities may have the same rate.
- For quality measures that are awarded points based on their quintile distribution, nursing homes will be rewarded for achieving high performance as well as improvement from previous years' performance. Note that improvement points will not apply to quality measures that are based on threshold values. See the Quality Point Grid for Attainment and Improvement below. Assuming each quality measure is worth 5 points, the distribution of points based on two years of performance is demonstrated in the grid.

Quality Point grid for Attainment and Improvement

		Year 1 Performance				
		Quintiles	1	2	3	4
Year 2 Performance	1 (best)	5	5	5	5	5
	2	3	3	4	4	4
	3	1	1	1	2	2
	4	0	0	0	0	1
	5	0	0	0	0	0

Year 1 = 2015 (2014 measurement year)

Year 2 = 2016 (2015 measurement year)

For example, if 2015 NHQI performance (Year 1) is in the third quintile, and 2016 NHQI performance (Year 2) is in the second quintile, the facility will receive 4 points for the measure. This is 3 points for attaining the second quintile and 1 point for improvement from the previous year's third quintile.

Changes to the Quality Component

- Rate of staffing hours per day
 - The CMS Five-Star Quality Rating for Staffing has been replaced with the Rate of Staffing Hours per Day. This is a NYS DOH measure that calculates a case-mix adjusted rate of staffing hours per day using nursing home cost report and MDS data. The hours

reported are taken from the hours worked field for RNs, LPNs, and Aides on the nursing home cost report. The hours expected are computed using the MDS RUG distribution of the nursing home residents and the CMS Time Staff Measurement Studies. The hours reported are divided by the hours expected and multiplied by the statewide average to create a case-mix-adjusted staffing rate. Like the previous CMS Five-Star Quality Rating for Staffing, this measure will be awarded points based on the quintile method.

Quality Measures (70 points)

The 14 quality measures for the 2016 NHQI are shown in the table below.

Number	Measure	Measure Steward	Data Source and Measurement Period	Scoring Method	Notes	Eligible for Improvement in 2016 NHQI
1	Percent of contract/agency staff used	NYS DOH	Nursing home cost report, 2015 calendar year for calendar filers and 2015 fiscal year for fiscal filers	Threshold	Maximum points are awarded if the rate is less than 10%, and zero points if the rate is 10% or greater.	No
2	Rate of Staffing Hours per Day	NYS DOH	Nursing home cost report, 2015 calendar year for calendar filers and 2015 fiscal year for fiscal filers, and MDS 3.0, 2015 calendar year	Quintile	Replaces CMS Five-Star Quality Rating for Staffing	No
3	Percent of employees vaccinated for influenza	NYS DOH	Employee vaccination data submitted to the Bureau of Immunization through HERDS for the 2015-2016 influenza season	Threshold	Maximum points are awarded if the rate is 85% or greater, and zero points if the rate is less than 85%	No
MDS 3.0 Quality Measures						
4	Percent of long stay high risk residents with pressure ulcers	CMS	MDS 3.0, 2015 calendar year	Quintile	Risk adjusted by the NYS DOH	Yes
5	Percent of long stay residents who received the pneumococcal vaccine*	CMS	MDS 3.0, 2015 calendar year	Quintile		Yes
6	Percent of long stay residents who received the seasonal influenza vaccine*	CMS	MDS 3.0, 2015 calendar year	Quintile		Yes
7	Percent of long stay residents experiencing one or more falls with major injury	CMS	MDS 3.0, 2015 calendar year	Quintile		Yes

*a higher rate is better

Number	Measure	Measure Steward	Data Source and Measurement Period	Scoring Method	Notes	Eligible for Improvement in 2015 NHQI
8	Percent of long stay residents who have depressive symptoms	CMS	MDS 3.0, 2015 calendar year	Quintile		Yes
9	Percent of long stay low risk residents who lose control of their bowel or bladder	CMS	MDS 3.0, 2015 calendar year	Quintile		Yes
10	Percent of long stay residents who lose too much weight	CMS	MDS 3.0, 2015 calendar year	Quintile	Risk adjusted by the NYS DOH	Yes
11	Antipsychotic use in persons with dementia	PQA	MDS 3.0, 2015 calendar year	Quintile		Yes
12	Percent of long stay residents who self-report moderate to severe pain	CMS	MDS 3.0, 2015 calendar year	Quintile	Risk adjusted by the NYS DOH	Yes
13	Percent of long stay residents whose need for help with daily activities has increased	CMS	MDS 3.0, 2015 calendar year	Quintile		Yes
14	Percent of long stay residents with a urinary tract infection	CMS	MDS 3.0, 2015 calendar year	Quintile		Yes

*a higher rate is better

Compliance Component (20 points)

The compliance component consists of three areas: CMS' five-star quality rating for health inspections, timely submission of nursing home certified cost reports, and timely submission of employee influenza immunization data.

- CMS Five-Star Quality Rating for Health Inspections (regionally adjusted)
 - CMS' facility ratings for the health inspections domain are based on the number, scope, and severity of the deficiencies identified during the three most recent annual inspection surveys, as well as substantiated findings from the most recent 36 months of complaint investigations. All deficiency findings are weighted by scope and severity. The CMS rating also takes into account the number of revisits required to ensure that deficiencies identified during the health inspection survey have been corrected.
 - The **health inspection survey scores** from CMS will be 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. Per CMS' methodology, the top 10% of nursing homes will receive five stars, the middle 70% will receive four, three, or two stars, and the bottom 20% will receive one star. Each nursing home will be awarded a Five-Star Quality Rating based on the cut points calculated from the health inspection survey scores within its region. **Ten** points are awarded for obtaining five stars or the top 10 percent (lowest 10 percent in terms of health inspection deficiency score). **Seven** points for obtaining four stars, **four** points for obtaining three stars, **two** points for obtaining two stars, and **zero** points for one star.

- Timely submission measures
 - Submission of employee influenza vaccination data to the NYS DOH Bureau of Immunization for the 2015-2016 influenza season by the deadline of May 1, 2016 is worth five points.
 - Submission of certified and complete 2015 nursing home cost reports to the NYS DOH by the deadlines of July 15, 2016 for calendar year filers, and October 31, 2016 for fiscal year filers, is worth five points.

The three compliance measures for the 2016 NHQI are shown in the table below.

Number	Measure	Measure Steward	Data Source and Measurement Period	Scoring Method
1	CMS Five-Star Quality Rating for Health Inspections (regionally adjusted)	CMS	CMS health inspection survey scores as of April 1, 2016	5 stars=10 points 4 stars=7 points 3 stars=4 points 2 stars=2 points 1 star=0 points
2	Timely submission of employee influenza vaccination data	NYS DOH	Employee influenza vaccination data submitted to the Bureau of Immunization through HERDS for the 2015-2016 influenza season	Five points for submission by the deadline
3	Timely submission of certified and complete nursing home cost reports	NYS DOH	Nursing home cost report, 2015 calendar year for calendar filers and 2015 fiscal year for fiscal filers	Five points for timely, certified and complete submission of the 2015 cost report

Efficiency Component (10 points)

- To align with the other CMS quality measures, the Potentially Avoidable Hospitalizations rate will be calculated for each quarter, then averaged to create an annual average.
- The PAH measure is risk adjusted.

Number	Measure	Measure Steward	Data Source and Measurement Period	Scoring Method
1	Potentially Avoidable Hospitalizations	CMS/NYS DOH	MDS 3.0 and SPARCS, 2015 calendar year	Quintile 1=10 points Quintile 2=8 points Quintile 3=6 points Quintile 4=2 points Quintile 5=0 points

Scoring

The facility’s overall score will be calculated by summing the points for each measure in the NHQI. In the event that a measure cannot be used due to small sample size or unavailable data, the maximum attainable points will be reduced for that facility. For example, if a facility has a small sample size on two of its quality measures (each 5 points), the maximum attainable points will be 90 rather than 100. The sum of its points will be divided by 90 to calculate its total score. The example below provides a mathematical illustration of this method.

	Facility A no small sample size	Facility B small sample size on two quality measures
Sum of points	80	80
Maximum points attainable	100	90
Score ratio (points/maximum)	.80	.89
Final score x 100	80	89

Ineligibility for NHQI Ranking

Due to the severity of letter J, K, and L health inspection deficiencies, receipt of a deficiency is incorporated into the NHQI. Nursing homes that receive one or more of these deficiencies are not eligible to be ranked into overall quintiles. 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).

- Deficiency data shows a J/K/L deficiency between July 1 of the measurement year (2015) and June 30 of the reporting year (2016).
- Deficiencies will be assessed on October 1 of the reporting year to allow a three-month window for potential Informal Dispute Resolutions (IDR) to process.
- Any **new** J/K/L deficiencies between July 1 and September 30 of the reporting year (2016) will **not** be included in the current NHQI; they will be included in the next NHQI cycle.

Nursing Home Exclusions from NHQI

The following types of facilities will be excluded from the NHQI and will not contribute to the pool or be eligible for payment:

- Non-Medicaid facilities
- Any facility designated by CMS as a Special Focus Facility at any time during 2015 or 2016, prior to the final calculation of the 2016 NHQI
- Specialty facilities
- Specialty units within a nursing home (i.e. AIDS, pediatric specialty, traumatic brain injury, ventilator dependent, behavioral intervention)
- Continuing Care Retirement Communities
- Transitional Care Units

Schedule for the 2016 NHQI

- May 1, 2016 – Employee influenza vaccination data due
- July 15, 2016 – Nursing home certified and complete cost reports due for calendar year filers
- October 31, 2016 - Nursing home certified and complete cost reports due for fiscal year filers
- December 2016 – NYS DOH will release preliminary results on the Health Commerce System for feedback
- January 2017 – NYS DOH will release the final results of the 2016 NHQI on the Health Commerce System and on Health Data NY
- Early 2017 – NYS DOH will release the methodology for the 2017 NHQI

For more information about the NHQI methodology, please contact the Office of Quality and Patient Safety at **NHQP@health.ny.gov**.

Measure specifications for the CMS Quality Measures used in the 2016 NHQI can be found in the MDS 3.0 Quality Measures User's Manual, Version 8.0, at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-User%E2%80%99s-Manual-V80.pdf>.