

New York State Department of Health Nursing Home Quality Initiative 2014 Methodology

Updated January 2015

The 2014 Nursing Home Quality Initiative (NHQI) is comprised of three areas: **[1]** quality measures, **[2]** compliance, and **[3]** potentially avoidable hospitalizations.

Quality Measures and Scoring (70 points)

Quality measures are calculated from MDS 3.0 data, the NYS employee flu vaccination data, nursing home cost report data for the percent of contract/agency staff used, and the CMS five-star quality rating for staffing.

- The **2014 NHQI is based on all four quarters of 2013 MDS 3.0 data**, and includes 14 quality measures, with each measure being worth a maximum of 5 points. The allotted 70 points for quality are distributed evenly for the 14 quality measures.
- 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.
- Improvement points will not apply to quality measures that are based on threshold values. Threshold value-based measures will receive either five or zero points based on the threshold value.
- For quality measures that are based on the quintile distribution, nursing homes will be rewarded for achieving high performance as well as improvement from previous years' performance. 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				
		1	2	3	4	5
Year 2 Performance	Quintiles					
	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=2013 Year 2=2014

For example, if 2013 NHQI performance (Year 1) is in the third quintile, and 2014 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.

The 14 quality measures for the 2014 NHQI are shown in the table below.

Number	Staffing Measures	Notes	Points Method
1	Percent of contract/agency staff used	Maximum points are awarded if the rate is less than 10%, and zero points if the rate is 10% or greater.	Threshold
2	CMS five-star quality rating for staffing	As of April 1, 2014	Five points are awarded for five stars, three points for four stars, one point for three stars, and zero points for two stars or one star.
	NYS-Specific Measure	Notes	Points Method
3	Percent of employees vaccinated for the flu - annually reported to the Bureau of Immunization*	Measure will be calculated using only data from the May 1, 2014 data submission; maximum points are awarded if the rate is 85% or greater, and zero points if the rate is less than 85%	Threshold
	MDS 3.0 Quality Measures	Notes	Points Method
4	Percent of long stay high risk residents with pressure ulcers	Risk adjusted by the New York State Department of Health (NYS DOH)	Quintile
5	Percent of long stay residents who received the pneumococcal vaccine*	Maximum points are awarded if the rate is 85% or greater, and zero points if the rate is less than 85%	Threshold
6	Percent of long stay residents who received the seasonal influenza vaccine*		Quintile
7	Percent of long stay residents experiencing one or more falls with major injury		Quintile
8	Percent of long stay residents who have depressive symptoms		Quintile
9	Percent of long stay low risk residents who lose control of their bowel or bladder		Quintile
10	Percent of long stay residents who lose too much weight	Risk adjusted by the NYS DOH	Quintile
11	Percent of long stay residents who received an antipsychotic medication.	In addition to the exclusions put forth by CMS, NYS excludes the diagnosis of bipolar disorder/manic depression	Quintile
12	Percent of long stay residents who self-report moderate to severe pain	Risk adjusted by the NYS DOH	Quintile

13	Percent of long stay residents whose need for help with daily activities has increased		Quintile
14	Percent of long stay residents with a urinary tract infection		Quintile

*a higher rate is better

The following covariates are adjusted for in each of the three risk-adjusted quality measures:

1. Percent of long stay high risk residents with pressure ulcers
 - Age
 - Always incontinent (bowel only)
 - Anemia
 - Body mass index
 - Cancer
 - Deep vein thrombosis
 - Diabetes
 - Healed pressure ulcer since the prior assessment
 - Heart failure and pulmonary edema
 - Prognosis of less than six months of life expected
 - Quadriplegia and paraplegia
 - Renal failure
 - Sex

2. Percent of long stay residents who lose too much weight
 - Age
 - Cancer
 - Hospice
 - Prognosis of less than six months of life expected
 - Renal failure

3. Percent of long stay residents who self-report moderate to severe pain
 - Cognitive skills for daily decision-making on prior assessment

Compliance (20 points)

The compliance component consists of three areas: NYS five-star quality rating for health inspections, adjusted for regional variation, timely submission of nursing home certified cost reports, and timely submission of employee flu immunization data.

The three compliance measures for the 2014 NHQI are shown in the table below.

Category	Measure Description	Timeframe	Points	Notes
NYS Regionally-Adjusted Five-Star Quality Rating for Health Inspections	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	Health Inspection Scores as of April 1, 2014	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	Adjusted for regional variation by the NYS DOH*

	<p>weighted by scope and severity. This measure also takes into account the number of revisits required to ensure that deficiencies identified during the health inspection survey have been corrected.</p> <p>NY extracts the health inspection survey scores reported by CMS as of April 1, 2014. The scores are then adjusted for regional variation within the state.</p>		<p>obtaining three stars, two points for obtaining two stars, and zero points for one star.</p>	
Timely submission of employee flu immunization data	<p>Failure to submit timely data to the NYS DOH Bureau of Immunization on Employee health worker annual flu immunization by the two deadlines of November 15, 2013, and May 1, 2014.</p>	<p>Nursing Home Employee Flu Immunization data for the 2013/2014 influenza season</p>	<p>Two and a half points for each timely submission of immunization data (2.5 points for the November 15, 2013 deadline, and 2.5 points for the May 1, 2014 deadline. A nursing home may receive points for meeting either one or both deadlines).</p>	
Timely submission of complete nursing home certified cost reports	<p>Failure to file timely, certified, and complete Nursing Home cost reports for 2013 to the NYS DOH by the deadlines of August 15, 2014 for calendar year filers, and September 30, 2014 for fiscal year filers.</p>	<p>2013 Nursing Home cost reports</p>	<p>Five points for timely, certified and complete submission of the 2013 cost report.</p>	

*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. Within each region, 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.**

Potentially Avoidable Hospitalizations (10 points)

- NYS DOH has developed a potentially preventable hospitalization quality indicator that is based upon the Nursing Home Value Based Purchasing (NHVBP) demonstration.
- MDS 3.0 data are utilized.
- Only long stay nursing home episodes (101 days or more) are used.
- Long stay nursing home episodes are constructed based on assessments from January 1, 2013 through December 31, 2013. Hospitalizations from the nursing home are identified and the hospital discharge record is found in SPARCS. SPARCS (Statewide Planning and Research Cooperative System) is an all-payer hospital inpatient database in New York State.

The hospitalization is identified as potentially avoidable based on the **primary** diagnosis on the hospital discharge record. Rates are calculated for each nursing home by dividing the total number of potentially avoidable hospitalizations by the total number of long stay episode days in that nursing home (lower rates are better). Rates are risk adjusted.

Category	Measure Description	Timeframe	Points
Potentially Avoidable Hospitalizations	The number of potentially avoidable hospitalizations per 10,000 long stay episode days	January 1, 2013 – December 31, 2013	10 points are awarded for obtaining the first quintile, 8 points for obtaining the second quintile, 6 points for the third quintile, 2 points for the fourth quintile, and zero points for the fifth quintile

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, or the base 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 (no reduction in base points)	Facility B Small sample size on two quality measures, each worth 5 points (10-point reduction in base points)
Sum of points	80	80
Base points	100	90
Score (points/maximum)	.80	.89
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 (2013) and June 30 of the reporting year (2014).**

- 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 (2014) 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 2013 or 2014, prior to the final calculation of the 2014 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 2014 NHQI

- November 15, 2013 and May 1, 2014 – Employee Flu Immunization Data due
- August 15, 2014 – Nursing Home Certified Cost Reports due for calendar year filers
- September 30, 2014 - Nursing Home Certified Cost Reports due for fiscal year filers
- November 2014 – NYS DOH will release preliminary results on the Health Commerce System for feedback
- February 2015 – NYS DOH will release the final results of the 2014 NHQI on the Health Commerce System and on Health Data NY

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