



## Department of Health

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January 10, 2018

Dear Nursing Home Administrator:

The results of the 2017 New York State Nursing Home Quality Initiative (NHQI) have been finalized and we are pleased to share with you your facility's performance.

The 2017 methodology contains one change from the previous year. A new measurement period for the Percent of Long Stay Residents Who Received the Influenza Vaccine was introduced with CMS' release of the MDS 3.0 Quality Measures User's Manual version 9.0, effective October 1, 2015. The measurement period is October 1 of the prior year through June 30 of the target year, and it captures the influenza vaccination status for a resident who was in the facility during any part of the most recent influenza season. Following these CMS specifications, the 2017 NHQI measurement period for the long stay resident influenza vaccination measure is October 1, 2015 through June 30, 2016.

This letter is accompanied by the methodology for the 2017 NHQI and instructions for interpreting your facility's 2017 NHQI results.

Your facility's report is posted to the Health Commerce System (HCS). To access this report, follow the instructions below.

1. Access the HCS at <https://commerce.health.state.ny.us>
2. At the security screen, enter your HCS ID and password
3. At the HCS Welcome Page, select "NH Rate Sheets 4/2009-Forward" under the heading "My Applications".
  - If "NH Rate Sheets 4/2009-Forward" is not listed under the heading "My Applications", click on "My Content" > "All Applications"
  - Click the letter "N" in the "Browse by" section at the top of the screen
  - Click "Nursing Home Rate Sheets 4/1/2009 and Forward"
4. At the Nursing Home Rates screen, select "2017 Nursing Home Quality Initiative Final Results" from the drop-down list under "Nursing Home Rates Selection List"
5. Identify your facility in the drop-down list under "Nursing Home Selection List", then select "SHOW REPORTS"

If there are any questions about the 2017 NHQI, please email us at [nhqp@health.ny.gov](mailto:nhqp@health.ny.gov). The Department will post this data on its Health Data NY website, and we will inform you when the file is publically available.

Sincerely,



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Enclosure

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# New York State Department of Health 2017 Nursing Home Quality Initiative Methodology

Updated March 2017

The 2017 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 2017 NHQI score is worth a maximum 100 points.

## **Quality Component (70 points)**

Quality measures are calculated from MDS 3.0 data (2016 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 2017 NHQI includes 14 quality measures with each measure being worth a maximum of 5 points.
- Four quarters of 2016 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 = 2016 (2015 measurement year)

Year 2 = 2017 (2016 measurement year)

For example, if 2016 NHQI performance (Year 1) is in the third quintile, and 2017 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**

- Percent of long stay residents who received the influenza vaccination
  - A new measurement period for this measure was introduced with CMS' release of the MDS 3.0 Quality Measures User's Manual version 9.0, effective for data beginning October 1, 2015. The measurement period is October 1 of the prior year through June

30 of the target year, and it captures the influenza vaccination status for a resident who was in the facility during any part of the most recent influenza season. Following the CMS specifications, the measurement period for this measure in the 2017 NHQI is October 1, 2015 through June 30, 2016.

### Quality Measures (70 points)

The 14 quality measures for the 2017 NHQI are shown in the table below.

Number	Measure	Measure Steward	Data Source and Measurement Period	Scoring Method	Notes	Eligible for Improvement in 2017 NHQI
1	Percent of contract/agency staff used	NYS DOH	Nursing home cost report, 2016 calendar year for calendar filers and 2016 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, 2016 calendar year for calendar filers and 2016 fiscal year for fiscal filers, and MDS 3.0, 2016 calendar year	Quintile	Replaces CMS Five-Star Quality Rating for Staffing	Yes
3	Percent of employees vaccinated for influenza	NYS DOH	Employee vaccination data submitted to the Bureau of Immunization through HERDS for the 2016-2017 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
<b>MDS 3.0 Quality Measures</b>						
4	Percent of long stay high risk residents with pressure ulcers	CMS	MDS 3.0, 2016 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, 2016 calendar year	Quintile		Yes
6	Percent of long stay residents who received the seasonal influenza vaccine*	CMS	MDS 3.0, October 1, 2015 - June 30, 2016	Quintile		Yes
7	Percent of long stay residents experiencing one or more falls with major injury	CMS	MDS 3.0, 2016 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 2017 NHQI
8	Percent of long stay residents who have depressive symptoms	CMS	MDS 3.0, 2016 calendar year	Quintile		Yes
9	Percent of long stay low risk residents who lose control of their bowel or bladder	CMS	MDS 3.0, 2016 calendar year	Quintile		Yes
10	Percent of long stay residents who lose too much weight	CMS	MDS 3.0, 2016 calendar year	Quintile	Risk adjusted by the NYS DOH	Yes
11	Percent of long stay residents with dementia who received an antipsychotic medication	PQA	MDS 3.0, 2016 calendar year	Quintile		Yes
12	Percent of long stay residents who self-report moderate to severe pain	CMS	MDS 3.0, 2016 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, 2016 calendar year	Quintile		Yes
14	Percent of long stay residents with a urinary tract infection	CMS	MDS 3.0, 2016 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 2016-2017 influenza season by the deadline of May 1, 2017 is worth five points.
  - Submission of certified and complete 2016 nursing home cost reports to the NYS DOH by the deadlines as specified by the Bureau of Long Term Care Reimbursement, Division of Finance and Rate Setting, is worth five points.

The three compliance measures for the 2017 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, 2017	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 2016-2017 influenza season	<b>Five</b> points for submission by the deadline
3	Timely submission of certified and complete nursing home cost reports	NYS DOH	Nursing home cost report, 2016 calendar year for calendar filers and 2016 fiscal year for fiscal filers	<b>Five</b> points for timely, certified and complete submission of the 2016 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, 2016 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 (2016) and June 30 of the reporting year (2017).
- 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 (2017) 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 2016 or 2017, prior to the final calculation of the 2017 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, 2017 – Employee influenza vaccination data due
- Nursing home certified and complete cost reports due for calendar and fiscal year filers by deadlines specified by the Bureau of Long Term Care Reimbursement, Division of Finance and Rate Setting
- December 2017 – NYS DOH will release preliminary results on the Health Commerce System for feedback
- January 2018 – NYS DOH will release the final results of the 2017 NHQI on the Health Commerce System and on Health Data NY
- Early 2018 – NYS DOH will release the methodology for the 2018 NHQI

For more information about the NHQI methodology, please contact the Office of Quality and Patient Safety at [NHQP@health.ny.gov](mailto:NHQP@health.ny.gov).

Measure specifications for the CMS Quality Measures used in the 2017 NHQI can be found in the MDS 3.0 Quality Measures User's Manual, Version 9.0, at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V90.pdf>

**New York State Department of Health**  
**2017 Nursing Home Quality Initiative**  
**Interpreting the Facility's Report**

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The facility-level report is comprised of five areas: [1] quality component, [2] compliance component, [3] efficiency component, [4] scoring, and [5] determination of ineligibility.

**1. Quality Component (70 points)**

The quality component contains 14 quality measures worth a combined maximum of 70 points. Each measure is weighted equally. The quality component consists of the MDS 3.0 quality measures (using all four quarters of 2016), the staffing measures (using the rate of staff hours per day and the percent of contract/agency staff used from 2016 nursing home certified cost report data), and the NYS-specific employee flu immunization measure (using immunization data from the 2016-2017 influenza season).

MDS 3.0 quality measures

- The 'Value' column shows the rates of each MDS 3.0 quality measure. A value of 'SS' (small sample) indicates that the denominator for the measure was less than 30 and thus the sample was too small to create a meaningful rate. This did not result in a loss of points. In cases of a small sample size, the maximum points that the facility could obtain were reduced from the base and its final score divided by the maximum points available.
  - For example, if a facility has a small sample size on two of its quality measures (each worth five 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 'Quintile' column shows the quintile for which the facility qualified based on the distribution of values from all facilities in the Nursing Home Quality Initiative (NHQI). Quintile one is the top quintile, while five is the bottom.
  - Two quality measures were not separated into quintiles and will show 'NA' (not applicable) for their quintile assignment: *Percent of contract/agency staff used*, and *Percent of employees vaccinated for influenza*. These quality measures are assigned all or no points based on threshold values.
    - For the employee influenza vaccination measure, a rate of 85% or higher resulted in five points awarded, while a rate below 85% resulted in zero points. If the measure had too small of a sample size and the value indicates 'SS', the quintile will indicate 'NA'.
    - For the percent of contract/agency staff used measure, a rate of 10% or higher resulted in zero points, while a rate of less than 10% resulted in five points awarded.
- The 'Points' column shows the number of points awarded to the facility based on its performance in the measure.

Staffing measures

- Rate of staff hours per day
  - The 'Value' column shows the rate of staff hours per day, as calculated from the MDS 3.0 and nursing home certified cost report data.
    - A value of 'DNS' (did not submit) indicates that the facility did not submit cost report data by its designated deadline, or the facility submitted inaccurate data. In this case, the facility received zero points and the base was not reduced.

- A value of 'NA' indicates that the facility was not required to submit the level of data needed to calculate a rate because the facility was designated as a Part 1 filer. In this case, the facility was not penalized and the base was reduced.
  - The 'Quintile' column shows the quintile for which the facility qualified based on the distribution of values from all facilities in the NHQI. Quintile one is the top quintile, while five is the bottom.
  - The 'Points' column shows the number of points awarded to the facility based on its performance in the measure.
- Percent of contract/agency staff used
  - The 'Value' column shows the percent of contract/agency staff used by the facility in 2016. This value was calculated using the 2016 nursing home cost report data.
    - A value of 'DNS' (did not submit) indicates that the facility did not submit cost report data by its designated deadline, or the facility submitted inaccurate data. In this case, the facility received zero points and the base was not reduced.
    - A value of 'NA' indicates that the facility was not required to submit the level of data needed to calculate a rate because the facility was designated as a Part 1 filer. In this case, the facility was not penalized and the base was reduced.
  - This measure does not require a quintile ranking and will indicate 'NA'.
  - The 'Points' column shows the number of points awarded. Five points were awarded for a percent of contract/agency staff used of less than 10%. Zero points were awarded for 10% or higher.

Percent of employees vaccinated for influenza

- The 'Value' column shows the percent of nursing facility staff who received the influenza vaccine during the 2016-2017 influenza season. A value of 'DNS' indicates that the facility did not submit employee influenza immunization data by the designated deadline. In this case, the facility received zero points and the base was not reduced.
- This measure does not require a quintile ranking and will indicate 'NA'.
- The 'Points' column shows the number of points awarded. Five points were awarded if the rate was 85% or higher. Zero points were awarded if the rate was less than 85%.

**2. Compliance Component (20 points)**

The compliance component contains three measures worth a combined maximum of 20 points. The NYS regionally adjusted five-star health inspection rating as of April 1, 2017 is worth ten points and is adjusted for regional variation by NYS. The timely submission of 2016 nursing home certified cost reports and timely submission of 2016 employee influenza immunization data for the 2016-2017 influenza season are each worth five points.

NYS regionally-adjusted five-star quality rating for health inspections

- The 'Value' column shows the number of stars awarded by the five-star rating. A value of 'NA' indicates that health inspection score data from CMS was not available, or the facility was too new to rate. In this case, the facility was not penalized and the base was reduced.
- This measure does not require a quintile ranking and will indicate 'NA'.
- The 'Points' column shows the number of points awarded to the facility based on its five-star rating.
- 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 are awarded for four stars, four points for three stars, two point for two stars, and zero points for one star.

Timely submission of nursing home certified cost reports  
Timely submission of employee influenza immunization data

- The 'Value' column indicates whether or not the facility submitted the data by the designated deadline.
- These measures do not require quintile rankings and will indicate 'NA'.
- The 'Points' column shows the number of points awarded to the facility.
- Timely submission of nursing home certified cost reports
  - July 15, 2017 deadline for calendar year filers, and October 31, 2017 deadline for fiscal year filers
  - Five points are awarded if the value is 'Yes', and zero points if the value is 'No'.
- Timely submission of employee influenza immunization data
  - May 1, 2017 deadline for all facilities
  - Five points are awarded if the value is 'Yes', and zero points if the value is 'No'.

**3. Efficiency Component (10 points)**

The efficiency component includes the potentially avoidable hospitalizations measure. This measure is based on all four quarters of 2016, and is worth 10 points. It indicates the number of potentially avoidable hospitalizations per 10,000 long stay days.

- The 'Value' column shows the number of potentially avoidable hospitalizations per 10,000 long stay days.
- The 'Quintile' column shows the quintile for which the facility qualified based on the distribution of values from all facilities in the NHQI.
- The 'Points' column shows the number of points awarded to the facility based on its quintile.
- 10 points are awarded for obtaining the first quintile, eight points for the second quintile, six points for the third quintile, two points for the fourth quintile, and zero points for the fifth quintile.

**4. Scoring**

The scoring component contains the overall score and the quintile ranking.

*Overall score*

- The 'Points' column shows the sum of the points earned for each measure, divided by the total base of points for the facility, multiplied by 100. This method is shown in the examples below.

	Facility A No small sample size (no reduction of base points)	Facility B Small sample size on two quality measures, each worth 5 points (10- point reduction of base points)
<b>Sum of points</b>	80	80
<b>Base points</b>	100	90
<b>Score (points/maximum)</b>	.80	.89
<b>Score x 100</b>	80%	89%

*Quintile ranking*

- The 'Quintile' column shows the quintile for which the facility qualified based on the distribution of scores from all facilities in the NHQI. The first quintile is the top rank, while the fifth quintile is the bottom.

## **5. Determination of Ineligibility**

The determination of ineligibility section indicates that a facility had a level J, K, or L deficiency between July 1 of the measurement year (2016) and June 30 of the reporting year (2017), making it ineligible for potential payment. The overall score and quintile ranking are displayed for these facilities to show where they would have placed in the rankings had they had not received a level J, K, or L deficiency.