

New York State Department of Health

2019 Nursing Home Quality Initiative Methodology

Revised May 2019

The 2019 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 2019 NHQI score is worth a maximum 100 points.

Quality Component (70 points)

Quality measures are calculated from MDS 3.0 data (2018 calendar year), the NYS employee flu vaccination data, the CMS' Payroll Based Journal Public Use Files (PBJ PUFs) and the Nursing home compare data for the measurement year.

- The allotted 70 points for quality are distributed evenly for all quality measures. The 2019 NHQI includes 14 quality measures with each measure being worth a maximum of 5 points.
- Four quarters of 2018 MDS 3.0 data are used.
- The quintiles and results are based on the same measurement year. 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 | | | | | | |
|--------------------|-----------|---|---|---|---|---|
| Year 2 Performance | Quintiles | 1 | 2 | 3 | 4 | 5 |
| | 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 = 2018 (2017 measurement year)

Year 2 = 2019 (2018 measurement year)

For example, if 2018 NHQI performance (Year 1) is in the third quintile, and 2019 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.

Table 1. Quality Component Measures

| Number | Measure | Measure Steward | Data Source and Measurement Period | Scoring Method | Notes | Eligible for Improvement in 2019 NHQI |
|--------|---|-----------------|--|----------------|---|---------------------------------------|
| 1 | Percent of contract/agency staff used | NYSDOH | The CMS' quarterly Payroll Based Journal Public Use Files for calendar year 2018 (PBJ Daily Nurse Staffing CY 2018 Q1, Q2, Q3, Q4) | 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 | NYSDOH | Staffing file downloaded from the CMS' Nursing home compare data archive for calendar year 2018. The staffing hours in the staffing file are reported through PBJ. | Quintile | | No (data source change) |
| 3 | Percent of employees vaccinated for influenza | NYSDOH | Employee vaccination data submitted to the Bureau of Immunization through HERDS for the 2018-2019 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 |
| 4 | Percent of long stay high risk residents with pressure ulcers | CMS | MDS 3.0, 2018 calendar year | Quintile | Risk adjusted by the NYSDOH | Yes |
| 5 | Percent of long stay residents who received the pneumococcal vaccine* | CMS | MDS 3.0, 2018 calendar year | Quintile | | Yes |
| 6 | Percent of long stay residents who received the seasonal influenza vaccine* | CMS | MDS 3.0, October 1, 2017 -June 30, 2018 | Quintile | | Yes |
| 7 | Percent of long stay residents experiencing one or more falls with major injury | CMS | MDS 3.0, 2018 calendar year | Quintile | | Yes |
| 8 | Percent of long stay residents who have depressive symptoms | CMS | MDS 3.0, 2018 calendar year | Quintile | | Yes |

*a higher rate is better

Table 1. Quality Component Measures (continued)

| Number | Measure | Measure Steward | Data Source and Measurement Period | Scoring Method | Notes | Eligible for Improvement in 2019 NHQI |
|--------|--|-----------------|------------------------------------|----------------|-----------------------------|---------------------------------------|
| 9 | Percent of long stay low risk residents who lose control of their bowel or bladder | CMS | MDS 3.0, 2018 calendar year | Quintile | | Yes |
| 10 | Percent of long stay residents who lose too much weight | CMS | MDS 3.0, 2018 calendar year | Quintile | Risk adjusted by the NYSDOH | Yes |
| 11 | Percent of long stay residents with dementia who received an antipsychotic medication | PQA | MDS 3.0, 2018 calendar year | Quintile | | Yes |
| 12 | Percent of long stay residents who self-report moderate to severe pain | CMS | MDS 3.0, 2018 calendar year | Quintile | Risk adjusted by the NYSDOH | Yes |
| 13 | Percent of long stay residents whose need for help with daily activities has increased | CMS | MDS 3.0, 2018 calendar year | Quintile | | Yes |
| 14 | Percent of long stay residents with a urinary tract infection | CMS | MDS 3.0, 2018 calendar year | Quintile | | Yes |

*a higher rate is better

Compliance Component (20 points)

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

- CMS Five-Star Quality Rating for Health Inspections (regionally adjusted)
 - The **health inspection survey scores** from CMS will be downloaded in April 2019. These scores 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 NYSDOH Bureau of Immunization for the 2018-2019 influenza season by the deadline of May 1, 2019 is worth five points.
 - Submission of certified and complete 2018 nursing home cost reports to the NYSDOH by the deadlines as specified by the Bureau of Long Term Care Reimbursement, Division of Finance and Rate Setting, is worth five points.

Table 2. Compliance Component Measures

| 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, pending additional analyses per CMS changes | 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 | NYSDOH | Employee influenza vaccination data submitted to the Bureau of Immunization through HERDS for the 2018-2019 influenza season | Five points for submission by the deadline |
| 3 | Timely submission of certified and complete nursing home cost reports | NYSDOH | Nursing home cost report, 2018 calendar year for calendar filers and 2018 fiscal year for fiscal filers | Five points for timely, certified and complete submission of the 2018 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.

Table 3. Efficiency Component Measures

| Number | Measure | Measure Steward | Data Source and Measurement Period | Scoring Method |
|--------|--|-----------------|--|--|
| 1 | Potentially Avoidable Hospitalizations | NYSDOH | MDS 3.0 and SPARCS, 2018 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.

Table 4. Calculating the overall score without and with small sample size

| | 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 (2018) and June 30 of the reporting year (2019).
- 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 (2019) 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 2018 or 2019, prior to the final calculation of the 2019 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 2019 NHQI

- May 1, 2019 – 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 2019 – NYSDOH will release preliminary results on the Health Commerce System for feedback
- January 2020 – NYSDOH will release the final results of the 2019 NHQI on the Health Commerce System, the Department's website, and Health Data NY

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 2019 NHQI can be found in the MDS 3.0 Quality Measures User's Manual, Version 11, at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

Measure specifications for the Pharmacy Quality Alliance's percent of long stay residents with dementia who received an antipsychotic medication measure can be found at http://www.qualityforum.org/Measures_Reports_Tools.aspx.