



National Nursing Home Quality Care Collaborative (NNHQCC)

The NNHQCC Quality Measure Composite Score

As the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO), Health Services Advisory Group (HSAG) is funded by the Centers for Medicare & Medicaid Services (CMS) to spearhead the NNHQCC in Arizona, California, Florida, and Ohio. The NNHQCC is a five-year project that runs through July 31, 2019. The NNHQCC framework focuses on supporting the adoption of Quality Assurance & Performance Improvement through collaborative learning and action networks (e.g., face-to-face meetings, online trainings, conference calls, and webinars). This is a rewarding opportunity for participants to learn from and share with other nursing homes in an “all-teach, all-learn” environment regarding their person-centered care processes. Participants will also have the opportunity to collaborate with partners and consumers in the healthcare continuum to efficiently share successful practices and leverage collective knowledge to improve resident quality of life and care.

Measuring Collaborative Success

Participating nursing homes, focusing on processes that improve their system, measure on individual tests of change. They will look at their Plan-Do-Study-Act (PDSA) improvement cycle results, their clinical outcome measures, and their composite score.

The NNHQCC Quality Measure Composite Score

The composite score is composed of 13 long-stay quality measures that represent larger systems within the long-term care setting:

1. Percent of residents with one or more falls with major injury
2. Percent of residents with a urinary tract infection
3. Percent of residents who self-report moderate to severe pain
4. Percent of high-risk residents with pressure ulcer
5. Percent of low-risk residents with loss of bowels or bladder
6. Percent of residents with catheter inserted or left in bladder
7. Percent of residents physically restrained
8. Percent of residents whose need for help with activities of daily living has increased
9. Percent of residents who lose too much weight
10. Percent of residents who have depressive symptoms
11. Percent of residents who received antipsychotic medications
12. Percent of residents assessed and appropriately given flu vaccine*
13. Percent of residents assessed and appropriately given Pneumococcal vaccine*

*The direction of the two vaccination measures should be reversed because they are directionally opposite of the other measures. This is done by subtracting the numerator from the denominator to obtain a “new” numerator. By keeping all measure directions consistent, the composite score can be interpreted as: the lower, the better.

The composite score is calculated by summing the 13 measure numerators to obtain the composite numerator, summing the 13 measure denominators to obtain the composite denominator, then dividing the composite numerator by the composite denominator and multiplying by 100. This method of calculation is based on the “opportunity model” concept.**



Instructions for Calculating Your Composite Score

Should you choose to calculate your own composite score for quality-improvement purposes, it is important to know that the flu and pneumococcal measures are not available through the Quality Improvement and Evaluation Service (QIES) CASPER data system. Therefore the instructions below include the steps to calculate a modified composite score for tracking purposes. To calculate your composite measure, excluding the immunization measures for monitoring purposes only, do the following:

- Step 1. Run your facility quality measures reports in CASPER for a six-month time period, for example, from July 1 through December 31, 2015.
- Step 2. Sum the numerators for measures 1–11 above. This will be your composite numerator. For example, numerator = 76
- Step 3. Sum the denominators for measures 1–11 above. This will be your composite denominator. For example, denominator = 918
- Step 4. Divide the composite numerator by the composite denominator. For example, numerator/denominator = $76/918 = 0.08$
- Step 5. Multiply by 100. For example, $0.08 \times 100 = 8.0$

****This measure is intended for the sole purpose of measuring progress in the NNHQCC. It is not intended to replace any existing CMS measures or scores such as the Five Star Rating System. These measures were chosen for the composite because timely data are available for measuring progress in this fast-paced collaborative. QIOs have access to the quality-measure data necessary to calculate composite scores for nursing homes participating in the collaborative in their state.**