

# Fact Sheet: Nursing Home Compare Five-Star Quality Rating System

This Fact Sheet provides an overview of the rating methods used on the *Five-Star Nursing Home Quality Rating System*. Readers can find much more detail in the Technical Users' Guide on the CMS website at: <http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/FSQRS.html>

In December 2008, The Centers for Medicare & Medicaid Services (CMS) enhanced its *Nursing Home Compare* public reporting site to include a set of quality star ratings for each nursing home that participates in Medicare or Medicaid. The *Nursing Home Compare Five-Star Quality Rating System* provides residents and their families with an easy-to-understand summary of three dimensions of nursing home quality: health inspection results, staffing data, and quality measure data. The goal of the rating system is to help consumers make meaningful distinctions among high- and low-performing nursing homes. CMS also intends for the system to help nursing homes to identify areas for improvement. Please note that CMS intends that nursing home ratings to be used with other sources of information and cannot substitute for visiting the nursing home. The information that CMS presents on Nursing Home Compare, in fact, can provide consumers with helpful questions to ask during a visit to a nursing home.

## **What are the components of the Nursing Home Compare Five-Star Quality Rating System?**

The rating system features an Overall Quality Rating of one to five-stars based on facility performance on three types of performance measures, each of which has its own five-star rating:

- ***Health Inspections Rating: Measures based on outcomes from State health inspections:*** Nursing homes that participate in the Medicare or Medicaid programs have an unannounced, onsite comprehensive inspection, also called a survey, about once per year. CMS bases facility ratings for the health inspection domain on the number, scope, and severity of deficiencies identified during the three most recent annual standard inspections, as well as on substantiated findings from complaint investigations during the most recent 36 months.
- ***Staffing Rating: Measures based on nursing home staffing levels:*** CMS bases facility staffing ratings on two components: 1) Registered nurse (RN) hours per resident day; and 2) total staffing hours (RN+ licensed practical nurse (LPN) + nurse aide hours) per resident day. The staffing measures are case-mix adjusted for different levels of resident care needs across nursing homes
- ***Quality Measures Rating: Measures based on resident-level quality measures (QMs):*** Facility ratings for the quality measures are based on performance on 11 (8 long-stay and 3 short-stay) of the 18 QMs that CMS currently posts on the *Nursing Home Compare* web site. The QMs use data from the Minimum Data Set (MDS), which each nursing

home submits as part of a federally mandated process for clinical assessment of all residents in Medicare or Medicaid certified nursing homes.

- **Overall Rating:** The overall star rating is a composite of the three individual star rating dimensions. The core of the overall rating is the health inspection rating, which is adjusted up if the facility receives very high staffing or QM ratings, and is adjusted down for low staffing or QM ratings.

### **How are Star Ratings for the Nursing Home Compare Five-Star Quality Rating System determined?**

#### **1. Health Inspection Domain**

The health inspection rating is based on the three most recent standard surveys for each nursing home, results from any complaint investigations during the most recent three-year period, and any repeat revisits needed to verify that required corrections have brought the facility back into compliance. CMS calculates a weighted deficiency score based on points assigned to health deficiencies identified in each active provider's current health inspection survey and the two prior surveys (including revisits), as well as deficiency findings from the most recent three years of complaint investigations. More recent surveys are weighted more heavily than older surveys: the most recent period (cycle 1) is assigned a weighting factor of 1/2, the previous period (cycle 2) has a weighting factor of 1/3, and the second prior survey (cycle 3) has a weighting factor of 1/6. The weighted time period scores are then summed to create the survey score for each facility.

Facility ratings are determined using these criteria:

- The best 10 percent in each State receive a five-star rating.
- The middle 70 percent of facilities receive a rating of two, three, or four stars, with an equal number (approximately 23.33 percent) in each rating category.
- The worst 20 percent receive a one-star rating.

CMS' Five-Star health inspection ratings are based on the relative performance of facilities within a state. CMS chose to compare facilities to each other within State to help control for variation among states that results from different management practices, differences in state licensing laws, and differences in state Medicaid policies.

## 2. Staffing Domain

The staffing rating is based on two case-mix adjusted measures:

- Total nursing hours per resident day (RN + LPN + nurse aide hours)
- RN hours per resident day

Data for this domain are based on self-reported data from the nursing homes on the number of hours worked by their nursing staff and the number of residents in the facility. Note that the staffing measures include full-time and part-time employees employed directly by the facility as well as individuals working for an organization that supplies staff to the nursing home under contract. CMS identifies facilities with unreliable staffing data; neither staffing data nor a staffing rating are reported for these facilities (displaying “Data Not Available”) on the *Nursing Home Compare* website.

For each facility, the staffing star rating is assigned based on the combination of the individual RN and total staffing star ratings, with each receiving equal weight. To receive a five-star rating, facilities must achieve a five-star rating on both the RN and total staffing domains.

## 3. Quality Measures Domain

A set of quality measures (QMs) has been developed from MDS-based indicators to describe the quality of care provided in nursing homes. These measures address a broad range of functioning and health status in multiple care areas. The facility rating for the QM domain is based on performance on a subset of 11 (out of 18) of the QMs currently posted on *Nursing Home Compare*.

Ratings for the QM domain are calculated using the three most recent quarters for which data are available. This time period specification was selected to increase the number of assessments available for calculating the QM rating, increasing the stability of estimates and reducing the number of facilities that do not have enough data to report QM ratings.

Measures for long-stay residents are included in the score if the measure can be calculated for at least 30 resident assessments (summed across three quarters of data to enhance measurement stability). Measures for short-stay residents are included in the score only if data are available for at least 20 resident assessments.

For each measure (except one measure that has a minimum score of 25), 20 to 100 points are assigned based on facility performance. For most measures, facilities are grouped into quintiles based on the national distribution of the QM (except for one measure for which the state distribution is used). The quintiles are assigned 20 points for the poorest performing quintile, 100 points for the best performing quintile, and 40, 60 or 80 points for the second, third and fourth quintiles respectively.

For two measures with very low prevalence (i.e., more than 20% of nursing homes with a zero rate for the measure), a slightly different set of scoring rules is used—for these, facilities achieving the best possible score (i.e., a zero rate) are given 100 points while the remaining facilities are divided into two evenly sized groups. Note that the scoring rules for the two quality measures that were added to the rating system in February 2015 are slightly different—full details are available in the Technical Users Guide.

All of the 11 QMs are given equal weight. The points are summed across all QMs to create a total QM score for each facility. The total possible score ranges between 225 and 1100 points.

Once the total QM score is computed for each facility, the five-star QM rating is assigned, using a set of point thresholds. CMS set these thresholds so that the overall proportion of nursing homes is approximately 25 percent five-star, 20 percent for each of two-, three-, and four-star and 15 percent one-star in each rating category in February 2015. The cut points associated with these star ratings will be held constant for a period of at least one year, allowing the distribution of the QM rating to change over time.

#### **4. Overall Nursing Home Rating (Composite Rating)**

Based on the five-star rating for the health inspection domain, the staffing domain and the quality measure domain, the overall five-star rating is assigned in five steps as follows:

**Step 1:** Start with the health inspection five-star rating.

**Step 2:** Add one star to the Step 1 result if staffing rating is four or five-stars *and greater than* the health inspection rating; subtract one star if staffing is one star. The overall rating cannot be more than five-stars or less than one star.

**Step 3:** Add one star to the Step 2 result if the quality measure rating is five-stars; subtract one star if quality measure rating is one star. The overall rating cannot be more than five-stars or less than one star.

**Step 4:** If the health inspection rating is one star, then the overall quality rating cannot be upgraded by more than one star based on the staffing and quality measure ratings.

**Step 5:** If the nursing home is a Special Focus Facility (SFF) that has not graduated, the maximum overall quality rating is three stars.