



## **CMS' Five-Star Nursing Home Quality Rating System**

### **Why a Five-Star Rating System?**

The Centers for Medicare and Medicaid Services (CMS) introduced their new nursing home rating program, located at CMS's "Nursing Home Compare" website <http://www.medicare.gov>, in December 2008. The intent of the Five-Star rating system is to provide helpful information on nursing home quality for residents and their families.

Nursing Homes receive an overall rating from one star to five stars:

- \*\*\*\*\* Much Above Average
- \*\*\*\* Above Average
- \*\*\* Average
- \*\* Below Average
- \* Much Below Average

Ratings from three domains determine the overall rating: Health Inspections (surveys), Staffing, Quality Measures

#### **Key Points:**

Providers can preview of their monthly ratings before being posted to NH Compare. The reports can be found in the CASPER Reporting system.

The Five-Star Helpline will begin quarterly operation in July 2009. Providers with questions about their ratings can call 800-839-9290

At any time questions and comments about the Five-Star ratings can be sent to [BetterCare@cms.hhs.gov](mailto:BetterCare@cms.hhs.gov)

Also, keep your state associations aware of issues you've encountered.

## **Understanding the Components of the Five-Star Rating System**

### **Health Inspections Score:**

Score is calculated based on points assigned to deficiencies from the three most recent standard surveys plus three years of complaint surveys. Points from the most recent survey are weighted more heavily than earlier surveys and additional points are assigned to repeat revisits.

Annual surveys weighting factors:

Most recent survey=  $\frac{1}{2}$

Prior survey period 1=  $\frac{1}{3}$

Prior survey period 2=  $\frac{1}{6}$

Complaint surveys weighting factors:

- Most recent 12 months = 1/2
- 13-24 months ago= 1/3
- 25-36 months ago= 1/6

Weights for repeat visits are assigned as follows:

- First revisit 0 points
- Second revisit 50% of health inspection score
- Third revisit 70% of health inspection score
- Fourth revisit 85% of health inspection score

The health inspection rating for a given facility remains the same unless new health inspection data such as a new survey, new complaint information or revisits, become available. Thus, a facility's rating will not change from month to month without new survey information from a facility.

A lower survey score corresponds to better performance. Higher points are assigned to deficiencies of greater scope & severity and for those that are considered substandard quality of care (figures in parentheses in Table)

Health Inspection Scoring

Severity	Isolated	Pattern	Widespread
Immediate jeopardy to resident health or safety	J 50 pts (75 pts)	K 100 pts (125 pts)	L 150 pts (175 pts)
Actual harm that is not immediate jeopardy	G 20 pts	H 35 pts (40 pts)	I 45 pts (50 pts)
No actual harm with potential for more than minimal harm that is not immediate jeopardy	D 4 pts	E 8 pts	F 16 pts (20 pts)
No actual harm with potential for minimal harm	A 0 pts	B 0 pts	C 0 pts

**In Each State**

The facility's health inspection score is compared to other facility scores across the state in which the facility operates. The health inspection rating is determined by how a facility ranks among the facilities in the same state.

Facilities in the top 10 percent for survey performance receive a five-star rating

The middle 70 percent of facilities receive a rating of two, three, or four stars (each category with equal number or 23.33 percent)

The bottom 20 percent receive a one star rating.

## Key Points

The survey domain is critical as it forms the baseline for the overall star rating and the final score comes from adding or subtracting stars from this baseline with the Staffing and Quality Measure scores

Inconsistencies in the survey process from state to state are well documented. The survey process is affected by variation in skill sets of surveyors, supervision and survey processes including varying state licensure requirements and Medicaid policies.

In order to control for survey variance across the nation, nursing home survey ratings are compared to other homes within the same State and not to the Nation though interstate variation is seen across survey teams.

Remember due to the “forced distribution” method as explained above, without experiencing any change in standard or complaint survey performance a facility’s star rating could change when compared to the current performance of peers in the state

## Take Action

Ensure you are survey ready every day and operational systems and processes are continually reviewed

Re-examine your facility process for addressing incidents, grievances and complaints. Ensure it is a pro-active process that captures all concerns from residents, families and staff and monitors and tracks for patterns and trends.

## Staffing Score:

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

Total Nursing hours per resident day (HPRD)=RN + LPN + nurse aide hours and  
RN HPRD

**Hours are taken from the CMS-671 at time of standard survey**

RN hours include registered nurses, RN director of nursing and nurses with administrative duties

LPN hours include licensed practical/licensed vocational nurses

Nurse aide hours includes certified nurse aides, aides in training and medication aides/technicians

Full-time, part-time staff and agency/contract staff are included

Private duty nursing, hospice staff and feeding assistants are not included

## Case-Mix adjustment

The measures are adjusted for case-mix differences based on the Resource Utilization Group (RUG-III) case-mix system.

Case-mix adjusted measures of HPRD are calculated for each facility using this formula: Hours adjusted= (Hours reported/Hours expected) X Hours national average

The national averages will be held constant for an initial two-year period.

## Scoring rules

The two staffing measures are given equal weight and each is given a 1 to 5 star rating

## Rating Methodology

Facility rating for overall staffing is based on the combination of RN and total nurse staffing. CMS's Staffing Study provided the RN and total nursing ratios used for the thresholds below which quality problems are at higher risk. These thresholds are used in the rating methodology shown in the table below. A five-star rating must meet both RN and total nursing thresholds from the CMS Staffing Study.

<b>Table 4 Staffing Points</b>					
<b>RN Rating and Hours</b>	<b>Total Staffing Rating and Hours (RN, LPN and Aid)</b>				
	1	2	3	4	5
	<25th percentile	>= 25th percentile, < median	>= median, <75th percentile	>= 75th percentile, < 4.08	>= 4.08
1 <25th percentile	★	★	★★	★★	★★★
2 >=25th percentile, < median	★	★★	★★★	★★★★	★★★★★
3 >=median, <75th percentile, <	★★	★★★	★★★★	★★★★★	★★★★★
4 >= 75th percentile, < 0.55	★★	★★★	★★★★	★★★★★	★★★★★
5 >= 0.55	★★★	★★★★	★★★★★	★★★★★	★★★★★

## Key Points

Resident census from the CMS -672 together with staffing hours from CMS-671 are used to determine hours per resident day (HPRD)

Despite wide variations of required nurse staffing, your staffing is compared to the nation and not your state. Both RN and Total staffing hours must be at or higher than the median to receive an overall staffing rating of four or five stars

A case-mix index based on CMS's Staff Time and Resource Intensity Verification (STRIVE) study, will be used in the staffing methodology once the study is completed

Facilities with unreliable staffing hours and meet certain exclusion criteria do not receive a staffing rating

## Take Action

Ensure your facility strictly follows the directions for the CMS-671 to prevent erroneous data or out of range and improbable numbers

Remember the category of *Nurses with Administrative Duties* can include LPN or LVNs with administrative roles. If counted in this category they are not counted in the *Licensed Practical/Vocational Nurses category*.

Examine the duties of nurse practitioners and clinical nurse specialists you have on staff. If they perform nursing duties or administrative nursing tasks their hours may fit either the Nurse with Administrative Duties or the RN category.

Nurse practitioners or clinical nurse specialists who perform physician delegated services are not counted in nursing hours.

## Quality Measure Score:

Ten (10) of the current quality measure on CMS's Nursing Home Compare are used to rate quality and address a broad range of functioning and health status:

### Chronic Care Measures

- ADL decline
- Mobility decline
- High-Risk Pressure Sores
- Catheter use
- Physical Restraints
- Urinary Tract Infection (UTIs)
- Pain

### Post-Acute Care Measures

- Pressure Sores
- Pain
- Delirium

**Ratings are calculated using the three most recent quarters for which data are available.**

### Rating Methodology

- For each measure, points are assigned based on the facility ranking.
- The two measures; ADL decline and Mobility decline are weighted 1.6667 times as high as the other measures and cut points for these measures are updated each quarter based on the State-specific distribution
- Cut points for the remaining measures remain fixed at the baseline national values for a period of two years.
- Points are summed across all QMs to create a total score. Possible total score is between 0-136 points with higher points given for better QM performance.
- This domain allows for imputing missing data for one or more of the QMs. Imputed values are based on the Statewide average for the measure and depend rule set for the pattern of missing data

## Key Points

With the inputting rules, facilities fall into one of the following categories:

- They have points for all of the QMs
- They have points only for the 7 long-stay QMs
- They have points only for the 3 short-stay QMs
- No values are imputed\* or QM rating provided for nursing homes with data on fewer than 4 long-stay QMs and fewer than 2 short-stay QMs.

## Take Action

Review the tools and systems your facility uses to ensure accuracy of your MDSs.

Inaccurate coding on items related to the QMs can lead to over or under triggering of measures.

## Overall Nursing Home Rating

**The facility's overall score or Composite Measure is determined as follows:**

Step 1: Start with 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 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.

## Key Points

One star ratings in any of the domains severely impacts the overall rating.

- One star ratings in staffing and quality each lower the baseline health inspection rate and overall rate
- Beginning with the baseline of one star rating in health inspections limits the addition of stars regardless of high ratings in staffing and quality

## **Know the Implication of Five-Star Quality Ratings and Be Prepared!**

Start with accurate data!

Ensure the data taken from the CMS-671 is accurate

- Educate key staff on specific steps for completing the form
- Audit the process for accuracy

What is your facility's system for ensuring accuracy of the MDS and Quality Measures

- For residents who trigger a QM, recheck coding
- Identify processes that impact accurate coding
- Redesign processes and re-educate facility staff as needed

Who else is looking at your Quality Ratings?

- Hospital discharge planners may be evaluating your Quality Ratings and providing information to prospective residents/ families
- Insurers and financial institutions now have a user-friendly way to examine your facilities performance within multiple dimensions that can help them to determine risk and quality levels
- Managed Care entities can also review the Five-Star findings and use them in setting contractual quality and performance expectations

For detailed information go to CMS's Five-Star web site:

[http://www.cms.hhs.gov/Certificationandcompliance/13\\_FSQRS.asp](http://www.cms.hhs.gov/Certificationandcompliance/13_FSQRS.asp)

For CMS's Staffing Study go to:

[http://www.allhealth.org/briefingmaterials/Abt-NurseStaffingRatios\(12-01\)-999.pdf](http://www.allhealth.org/briefingmaterials/Abt-NurseStaffingRatios(12-01)-999.pdf).

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