Using the Five-Star Quality Measure to Mask Bad Care

For most consumers, choosing a nursing home can be a harrowing and overwhelming experience. The most common tool used by prospective nursing home residents and their families is Medicare's Care Compare website. The website allows people to look at nursing homes past performance in a variety of areas. One of the key components of Care Compare is the five-star rating system. The Centers for Medicare & Medicaid Services (CMS) assigns star ratings to three separate domains – health inspections, staffing, and quality measures – and then calculates an overall rating. Facilities receive one to five stars on each domain and on the overall rating, with one being the lowest and five, the highest. Many consumers rely on these ratings to make important decisions about their care.

How Ratings are Calculated

The overall rating of a nursing home is calculated based on a formula using the home's rating in health inspections, staffing, and the quality measure (QM) rating. These measures are briefly explained below, but for in depth information, CMS provides a User's Guide.

Health Inspection Rating

Each nursing home must undergo a yearly health inspection, sometimes more frequently if the home is performing poorly. Health inspections are conducted by the state survey agency (usually the state department of health). Facilities also undergo infection control inspections and inspections of facility reported events, such as resident abuse or harm. Additionally, state surveyors must investigate complaints filed against a nursing home. The health inspection rating is based on the current health inspection, the last two prior inspections, and three years of complaints, infection control inspections and inspections related to facility reported events. Facilities with frequent violations, severe violations, or repeated violations, will have lower health inspection ratings. All health inspections are unannounced, although the timing of yearly health inspections is often predictable.

Staff Rating

Staff ratings are based on the number of hours of nursing care that residents receive per day. CMS looks at the number of Registered Nurse hours of care per resident day, and also total nurse staffing hours per resident day, which include Registered Nurses, Licensed Practical Nurses, and Certified Nurse Aides. CMS receives this data from the Payroll Based Journal (PBJ). The PBJ is payroll data reported by nursing homes to CMS each quarter. CMS then adjusts the hours based on the needs of the residents and assigns a staff rating from 1 to 5 stars.

Quality Measure Rating

CMS has created a set of quality measures that looks at facility reported data on resident function and health status indicators from the Minimum Data Set (MDS) and also Medicare claims data. The MDS is resident assessment information that is self-reported to CMS quarterly by facilities and includes a large number of measures based on the conditions and outcomes of a facility's residents. These measures include medications, weight loss, pressure

ulcers, and others. Medicare claims data looks at measures such as re-hospitalization of residents and whether residents return to a nursing home or a hospital after discharge. Importantly, the accuracy of MDS data depends on how accurate and honest nursing homes are in reporting information on their residents. The QM rating assigns separate scores for short-stay and long-stay residents[1] as well as an overall rating.

The Problem with the Quality Measure Rating

Unlike the health inspection rating, and to some extent the staff rating, the QM rating relies heavily on self-reported data by nursing homes. Health inspections are based on the results of third parties (state surveyors) conducting inspections. The staff rating is based on payroll information, which may be audited.

For years, advocates for nursing home residents have noted how the QM rating is invariably higher for nursing homes than their health inspection and staff ratings. Advocates have attributed this factor to inaccuracies in the MDS data or underreporting of adverse events in the MDS.

For instance, the chart below shows the average rating of nursing homes in the United States in each category.

Average Ratings for Nursing Homes in the United States (2022)

	Health Inspections	Staffing	QM
Average Rating	2.81	2.86	3.74

The average QM rating for nursing homes in the United States is nearly 1 star higher than both the health inspection and staff rating.

High QM ratings may also affect the overall star rating of nursing homes. A 5 Star QM rating, for example, can increase a facility's overall rating by 1 star. Accordingly, facilities are incentivized to increase their QM rating, in order to make up for poor health inspection and staff ratings.

Facilities that have poor survey results or low staffing, or both, often claim that their "quality of care" is scored highly. These statements are misleading. QMs measure resident assessment data, not quality of care. For instance, the chart below shows the average overall rating, health inspection rating, and staffing rating for all nursing homes with 5-Star QM measure ratings in the United States. Despite having 5-star ratings in the QM measure the average staff rating is 3.06 stars and the average health inspection rating is 3.05.

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[1] Short-stay residents are defined as residents residing in facilities for less than 100 days, while long-stay residents have resided in a facility for 100 days.

Importantly, you can see how the QM rating is used to increase the overall rating.

Average Ratings for Nursing Homes with 5-Star Quality Measure Ratings

	Overall Rating	Health Inspection Rating	Staffing Rating
Average Rating	3.97	3.05	3.06

QM ratings are increasing overall scores and minimize the more reliable and objective categories of health inspections and staffing levels. Importantly, these discrepancies confound consumers. How can a consumer understand how a home can have such a high QM rating while at the same time such a low rating in health inspections and staffing? It is unlikely that facilities are providing high quality care while performing so poorly on health inspections and staff ratings. The use of the QM rating in calculating the overall facility rating undermines the more objective ratings. To illustrate this problem, we have provided some examples at the end of this paper.

36% of facilities with 5-Star QM Rating have a 1- or 2-Star rating in staffing.

36% of facilities with 5 Star QM rating have a 1-or 2-star rating in health inspections.

CMS Should Discontinue the Use of the QM Rating in the 5 Star System Until It Incorporates Verifiable Data Rather than Self-Reported Data

The data show that the use of the QM rating is distorting ratings in CMS' 5-star rating system. It is misleading and confusing to consumers. CMS should discontinue the use of the QM rating as a factor in determining star rating for nursing homes, until it incorporates measures that can be independently audited and verified. Additionally, the measure should be renamed to better reflect that this data encompasses resident assessments and outcomes. Frequently, poorly performing nursing homes with low health inspection and staff rating will cite only a 5-star QM measure as evidence of being a top-performing facility. The term "quality" leads consumers to believe that poor performing homes in all other measures are still providing high-quality care.

Examples

To illustrate how the QM can distort how conditions are in a nursing home, we used CMS' Care Compare to randomly select facilities across 4 different states. Each of these facilities have a 5-star QM rating, despite having 1 or 2 stars in health inspections and staffing and reports of severe abuse and mistreatment of residents.

Aventura at Creekside (Carbondale, PA)

- Quality measures: 5 stars | Health inspections: 1 star | Staffing: 2 stars
- 16 deficiency citations from 02/2019 to 02/2020

- One of the inspection reports details a case where a male resident sexually abused a cognitively impaired female resident. The employee who witnessed it happening did not attempt to verbally intervene, redirect, or summon other staff while remaining with the residents or separate the residents at that time.

Bandera Nursing & Rehabilitation (Bandera, TX)

- Quality measures: 5 stars | Health inspections: 1 star | Staffing: 1 star
- 13 deficiency citations from 2/2021 - 02/2022 (cited for abuse)
- A May 2021 report found that 12 of 15 residents were physically and verbally abused by staff. Among other allegations, CNAs were reported to yell at residents, pull their hair, turn off call lights without providing assistance, shaking residents, and even told one resident to "cut off her leg if it was causing her so much pain."

Regency at Livonia (Livonia, MI)

- Quality measures: 5 stars | Health inspections: 2 stars | Staffing: 2 stars
- 19 deficiency citations from 02/2020 to 02/2021 (cited for abuse)
- Residents continually abused one another while the facility failed to provide any supervision or separation. One resident used racial slurs against another and kicked them in the leg, causing a cut. Another punched a fellow resident in the mouth by the nurse's station. The victimized residents reported "physical injury" and "self-isolation and psychosocial harm with feelings of being terrorized." In another case, a resident with a "known history of exit seeking behavior" escaped through alarmed front doors, which staff did not respond to, and was eventually found stuck in a pothole in the facility driveway, near a busy road.

The Orchards at Harper Woods (Harper Woods, MI)

- Quality measures: 5 stars | Health inspections: 1 star | Staffing: 1 star
- 25 deficiency citations from 02/2020 to 02/2021 (cited for abuse)
- The facility neglected residents, resulting in "actual unmet care needs, worsening of a pressure ulcer, skin breakdown, burning pain, resident frustration, feelings of despair, humiliation and loss of dignity." One resident was hospitalized for three weeks with fluid overload after staff failed to attend to their respiratory difficulties. Another resident reported being left soiled for an extended period of time, with staff not responding to call lights in a timely manner.

Bay Crest Care Center (Torrance, CA)

- Quality measures: 5 stars | Health inspections: 1 star | Staffing: 2 stars
- 28 deficiency citations from 02/2020 to 02/2021
- On two different inspections a full year apart, the same resident was observed to be left uncleaned by CNAs. During the first inspection, the resident had "long fingernails on both hands, that was filled with dark brown substance... facial hair, dry and crack lips"; during the second, a CNA merely applied lotion to the resident's unwashed legs instead of properly cleaning them. Another resident was receiving antidepressant medications, despite having neither adequate indication for its use nor the valid informed consent obtained by the physician from the resident or their legal representation. The resident was administered these pills at bedtime, while they were

"yelling and screaming," despite psychiatric evaluations showing that they were "cooperative, calm" and "had no indication of depressive moods or behavior."