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GRADUATE SCHOOL OF MANAGEMENT

**UC Davis MBA Consulting Center Report:
Horizon West Healthcare, Inc.
Five-Star Quality Rating System Analysis**

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Executive Summary

This report is the product of a partnership between the UC Davis Graduate School of Management and Horizon West Healthcare Inc. ("Horizon West"). Horizon West asked students working in the UC Davis MBA Consulting Center to conduct an objective analysis of the Center for Medicare and Medicaid's ("CMS") Five-Star Quality Rating system.

For 10 weeks, our consulting team analyzed all aspects of the rating system including its design, methodology, strengths, and shortcomings. Our mission was to evaluate the Five-Star Rating system as an accurate measure of nursing home quality, identify any flaws in system, and propose recommendations to rectify those problems. Our recommendations aim to increase the accuracy, reliability, and usability of the information presented to consumers. We have proposed modifications to CMS that we deem are realistic and can mostly be implemented in a relatively short time. We hope that these changes will assist consumers in making better-informed decisions when seeking nursing home care.

Our team obtained the information contained in this report from a variety of sources. Our analysis began with a thorough review of the CMS web site, CMS' Nursing Home Compare web site, and technical manuals accompanying the Five-Star information. We then conducted a review of the OSHPD data as well as data from research firms across the country to obtain relevant statistical information. With that information in hand, we approached various

industry individuals and advocacy groups for their input on the ranking system, their interpretations of our data, and to obtain additional relevant data. Finally, we gathered all of our collected information and conducted a comprehensive and impartial analysis of the Five-Star Rating system. We did not conduct any research or testing in preparation of this report.

Key Findings

We found that generally, the Five-Star Quality Rating system was a useful tool for consumers seeking information to choose the right nursing home. The Nursing Home Compare web site provides an easy platform for patients and their families to navigate and obtain information about local facilities. The site provides consumers access to important and otherwise unobtainable information, which serves to promote transparency within each nursing home and the industry. Further, the independent assessor survey results and self-reported clinical measure evaluations provide at least a minimal snapshot of a facility's quality.

However, that snapshot is flawed. The ratings provide consumers with information on a few select criteria that is manipulated in a complicated way such that consumers are vulnerable to misuse or mistakenly rely on key aspects of the presented data. Statistics are presented with methodological caveats that skew the data presented without clearly explaining how. In addition, the type of information presented and the way in which it is collected is imperfect.

Systematic Weaknesses:

No Patient Satisfaction Component:

Currently, no patient satisfaction data is collected or factored into the Five-Star Quality Rating system. Without the satisfaction component, consumers cannot get a clear picture of a nursing home because they have no information on the type of amenities, care, and other features offered. Further, Independent research firms have found little to no correlation between consumer satisfaction and the rating of the facilities.

Mandatory Bell Curve: The current system imposes a mandatory bell curve on all facilities within a state, separating them into the five star-based quintiles. By only allowing 10% of all facilities to attain a five star rating, the system is arbitrarily drawing inaccurate distinctions. Further problematic between states, as a one-star facility in one state could be 2 or 3-star facility in another. It does not give all homes equal chance to strive and misleads the consumer when using the Nursing Home Compare web site.

Individual Component Weaknesses

Health Inspections: The overarching issue with the health inspection component of the rating system is that it is not uniform. The survey currently used by the CMS is subjective, varies from state to state and even region to region, resulting in inconsistent reporting results. Further, the system does not distinguish between self-reported and external complaints. This non distinction disincentive facilities to report incidents and punishes the ones that take the lead and report questionable issues.

Additionally, the appeal process is long and inadequate. Once a facility receives a violation, whether warranted or not, that violation will negatively affect their five-star rating. The appeal process can take up to a year. This is particularly problematic given the increased number of violations and the subjectivity of the surveyors. Finally, the order to severity levels of deficiencies is unfitting. Facilities are penalized more for an "Immediate Jeopardy" violation versus one for "Actual Harm".

Staffing: The current staffing system uses an outdated mathematical model that does not take into account differences in types of facilities, but rather applies the same standard to all. In fact, a higher number of staff may not translate into better quality care. It is very difficult for consumers to understand the methodology used to decipher what exactly the test reflects. Furthermore, there is no current federal staffing standard and levels required by each state skew the data. Additionally, staffing is self-reported on an annual basis, with no checks to ensure the reporting is accurate. Finally, the test only measures the amount of nursing staff and does not reflect how many physicians, physical therapists, or other aids are in the facility treating patients.

Quality Measures: The quality measure rating is based on ten different physical and clinical measures for nursing home residents. The information is collected and recorded by the nursing home through MDS evaluations and seeks to measure how well nursing homes care for their residents' physical and clinical needs. The factors were developed in the 1980's to serve as

benchmarks or guidelines for nursing homes and were not intended to be the sole indicator of the quality of care provided by a nursing home.

Key Recommendations:

What follows is our recommendations in brief, all of which are discussed in detail further on in the report.

Systematic:

- Incorporate customer satisfaction into the rating system by removing one star from the three currently allocated to the health inspection rating. Measure customer satisfaction through a standardized survey taken periodically.
- Eliminate the mandatory bell curve and create a uniform set of criteria such that all facilities within a state can attain five stars.

Health Inspections:

- Implement the Quality Indicator Survey (QIS) at a national level.
- Differentiate between self-reported and external complaints in the rating and relay that information to consumers.
- Change the severity level between Actual Harm and Immediate Jeopardy
- Improve the appeal process such that facilities have due process to challenge unwarranted violations.

Staffing:

- Switch to standardized and automated reporting
- Include physicians and therapists
- Revision of case-mix adjustment criteria
- Clearly explain measurement to consumers
- Include customer satisfaction

Quality Measures:

- Assemble a qualified team of industry experts to identify which clinical factors measured in the MDS 3.0 are accurate indicators of facility quality and implement those factors as replacement QMs.
- Account for Discharge to Community and Functional Ability in the QMs
- Use QMs as indicators of performance
- Separate out clinical measures
- Differentiate between short term and long term stays
- Modify the risk adjustment of certain factors such as ADL Change, Mobility, Pain to more accurately distinguish between different types of patients.

Five-Star Rating System Overview

The Five-Star Quality Rating system is a framework developed by the CMS as a mechanism for the public to compare nursing home facilities across the country. CMS' stated goal of the system is to provide residents and their families with an understandable assessment of nursing home quality by making "meaningful distinctions" between high and low performing nursing homesⁱ.

CMS presents this information to the public through its Nursing Home Compare web siteⁱⁱ. Each nursing home receives a rating of between one and five stars. Nursing homes with five stars are considered by CMS to have much above average quality and nursing homes with one star are considered to have quality much below average.

Each overall rating consists of data from three sources: State-conducted health inspection surveys, self-reported staffing information, and self-reported "quality measures/indicators." Health inspection surveys are conducted by state agencies on a yearly basis and the rating contains information from the last 3 years of onsite inspections. The most recent survey findings are weighted more than the prior two years.

The staffing variable measures the amount of administrative staff, registered nurses, licensed nurses, and certified nursing assistants per patient during a given two-week period. Quality measures are based on

ten different physical and clinical measures for nursing home residents derived from MDS II data.

Each factor is given an individual rating, and those ratings are combined to create an overall facility rating. The scoring breakdown of an overall rating is as follows: of an available five stars, three of the stars are based on the health inspection segment of the analysis. The additional two stars correspond with staffing and quality measure information, respectively. If a facility receives four or five stars on the staffing component, an additional star is added to its overall rating. If it receives one star on the staffing component, it will lose a star from its overall rating. For quality measures, if the facility receives five stars, an additional star will be added to the rating; if they receive one star, they lose a star from the overall rating.

The system is designed to separate facilities into quintiles, imposing a mandatory curve on all facilities. Of all facilities within a state, 10% of them will fall into upper, five-star quintile, 70% within the two- to four-star quintiles, and another 20% in the lowest, one-star quintile.

Rolled out in December of 2008, the Five-Star Quality Rating system has faced harsh criticism from industry and government alike. The Attorneys General of 30 states called for the suspension of the Five-Star Quality Rating system in an August 2009 letter to the Department of Health and Human Services because the ratings could

be “misleading” and “create significant confusion for consumers.”ⁱⁱⁱ

Industry groups have pointed to the fact that the ratings are based on a flawed survey system, lack the inclusion of other important quality elements, and present inaccurate data. Even Kathleen Sebeilius, Secretary of Health and Human Services, recently acknowledged the inherent flaws in the system relating to the mandatory curving of the data^{iv}.

Despite the system’s flaws and calls for its revision or suspension, California will become one of the first states to recognize and incorporate the Five-Star Quality Rating for nursing facilities. Beginning January 1, 2011, a new law will require skilled nursing facilities to post overall facility rating information as determined by CMS's Five-Star Quality Rating. All long-term care facilities in California will need post the following information in an easily readable format in multiple locations throughout a facility:

- (1) the overall star rating given to the facility by CMS;
- (2) the text "out of five stars," directly beneath the stars; and
- (3) a specific text describing the Five-Star Quality Rating System that includes the address of the CMS web site where a detailed explanation of the posted rating may be obtained^v.

Given the increased importance of the Five-Star information in California, we strongly urge CMS to fulfill its mission of presenting

data fairly and accurately to be used by patients and their families to make critical health care decisions.

Benefits of the Five-Star Rating System

The Five-Star Rating system provides a straightforward assessment of nursing homes by comparing them on a simple ranking scale. Through the Nursing Home Compare web site, individuals are able to evaluate the performance and quality of every facility in the country, which allows them to make better informed decisions when choosing a nursing home. Consumers have readily access to key components of care; such as surveys results, staffing measures and quality measures.

Even though the rating system is flawed, most industry leaders agree that it is a valuable tool for the consumers^{vi}. In fact, according to Kerry Weems, CMS’ acting administrator, "More than three million Americans rely on services provided by a nursing home at some point during the year."^{vii}

Each dimension of the Five-Star Rating system also has its own strengths:

- *Health inspections*: Survey results provide a comprehensive assessment of the nursing home, including an assessment of the facility’s administration, environment, kitchen/food services, and resident rights and quality of life^{viii}. The surveys are based on evaluation by independent assessors and

the results provide the most comprehensive look at a facility's quality of care (about 180 different aspects of health care and resident rights are reviewed). Trained, multi-disciplinary professionals conduct onsite visits to observe care processes to residents and staff and review records of care.

- *Staffing domain:* The current staffing measurement considers both overall number of staff compared to residents and the number of trained nurses in each facility, as in most cases nurses are providing the care. The staffing measure also takes into account the degree of sickness of the residents in each nursing home and makes an adjustment for the staffing number based on this acuity level.

- *Quality Measures:* This assessment of select clinical measures provides an important in-depth look at how well each nursing home performs on ten important aspects of care. While not all-encompassing, the QMs provide a snapshot of a nursing homes' quality of care in certain aspects so that the patient has some idea of performance in certain critical factors of care.

Not only does the Five-Star Rating system help educate consumers, it also creates transparency within the health care facilities. Herb Kohl, U.S. Senate Special Committee on Aging Chairman stated that "the power of public opinion will motivate facility owners, managers, and staff to provide the best possible care and meet the kind of standards they would be proud to see posted online"^{xix}.

CMS also does a good job of advising consumers to use the Five-Star ratings together with other sources of information before making a decision. CMS stresses the need to visit nursing home facilities before making a final selection.

System-wide Weaknesses

Lack of Patient Feedback or Satisfaction Component

No component of the Five-Star Quality Rating system takes into account current or outgoing resident satisfaction. We define resident satisfaction in this report as a measure of how the services and care supplied by a nursing facility meet or surpass residents' expectations and requirements.

A satisfaction measurement is crucial because no quality measure evaluates intangible or unquantifiable factors. When selecting a nursing home, residents place tremendous value on assessing quality based on satisfaction among other consumers^x. Often factors such as staff attentiveness and consistency, facility condition, number of patients per room, and the quality of food and amenities are the most important factors that consumers look to when searching for the right nursing home.

In fact, findings from the research firm My InnerView suggests that care or concern of staff is the single most powerful predictor of both resident and family satisfaction^{xi}. Residents often evaluate a nursing facility on this dimension of quality based on their personal relationships with staff^{xii}. Under

the current rating system, consumers have no way of assessing this critical factor of care.

Additional findings by My InnerView are more illustrative of the need for a satisfaction measurement in the Five-Star rating. The research encompassed 33 focus groups and solicited the opinions of long-term care residents, short-term patients, caregivers, professionals and the public at large.

Participants were asked to discuss the factors that influenced their decision to select their current provider, as well as other factors by which they evaluate the quality of their current provider. The focus participants were presented with general types of information that could potentially be available through consumer education resources and web sites. These data sources included some from the Five-Star rating such as regulatory survey results and clinical indicators, as well as other factors such as workforce stability (turnover and retention), employee satisfaction and resident/family satisfaction.

Overwhelmingly, long-term residents reported that knowing how satisfied current residents and family members were would be the most important (75%) and that regulatory survey results would be the least important (3%). Clinical indicators scored second (11%) in order of importance, while employee satisfaction and workforce stability scored third (6% each). Results were similar for short-term patients,

although clinical indicators scored higher as an important factor (23%). See Figure 1.

INFORMATION THAT MATTERS MOST TO CONSUMERS

SOURCE: MYINNERVIEW

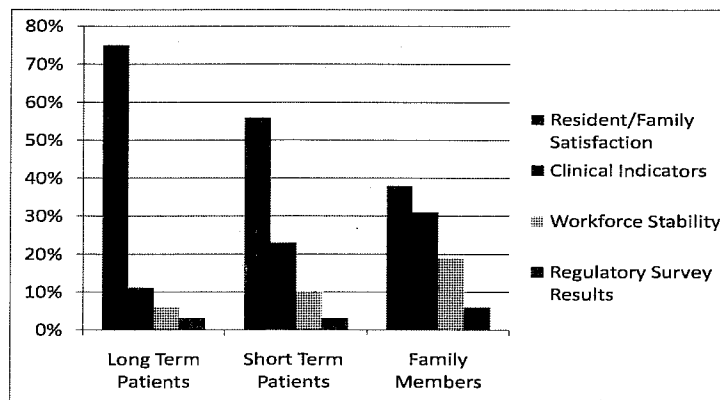


Figure 1

Under the current rating system, strengths in the areas of patient satisfaction or workforce stability share no correlation with a facility's success in the Five-Star Quality Rating.

A study conducted by the research firm Holleran Consulting illustrates this point. In its June 2009 study, Holleran reported that it was unable to statistically correlate CMS' Five-Star Quality Rating with the nursing home satisfaction ratings within its National Satisfaction Databases.

Specifically, Holleran compared the satisfaction ratings provided by nearly 12,000 residents and family members of not-for-profit nursing homes to the facility's Five-Star Rating. The results yielded no significant correlations and an inability to statistically differentiate across CMS categories^{xiii}.

Holleran did find some similarities between the one and two star ratings given by CMS,

but found that the CMS rating system failed to accurately capture any clear differences between a two and a three or a three and a four-star facility. The study also found a number of outliers as well where a facility garnered extremely high satisfaction ratings, but was rated a one or two-star by CMS^{xiv}.

The firm concluded that there was an obvious disconnect between the star rating and patient satisfaction. Holleran noted that stakeholder perceptions are an important measure of quality within an organization and that when consumer feedback is in stark contrast to ratings from an external rating agency, the legitimacy or the rating system is called into question^{xv}.

Bell Curve Deficiency

The Five-Star rating scheme uses a quota system to rank facilities. Nursing homes that rank in the top 10 percent receive a Five-Star rating, while facilities in the bottom 20 percent receive one-star ratings. The remaining 70 percent receive two, three, or four stars.

This pre-determined assignment of stars results in arbitrary rankings is in direct contrast to other consumer rating systems, such as those for restaurants and hotels, where the ratings obtained are based upon variables within the control of that particular establishment, rather than being dependent upon the ratings or changes that occur with other local and national establishments.

In the current system, a facility could be a five-star facility, do nothing differently, and the next year, get three stars because of the

arbitrary bell curve. To the same effect, nursing homes with serious deficiencies could still score high as long as their inspection records remain better than most other facilities, while in another state a nursing home with few problems could nevertheless receive a mediocre or poor rating.

Said one critic, "That's like telling a class of 100 students that 20 of them will automatically fail."^{xvi}

Critics say that the areas measured by the Five-Star system are critical areas; however, they should not be measured within a ranked system.

Health Inspection Weaknesses

CMS contracts with each state to conduct onsite inspections that determine whether nursing homes meet the minimum Medicare and Medicaid quality and performance standards^{xvii}. The surveys are conducted every 12 months on average, with no more than 15 months elapsing between surveys. Independent assessors perform a comprehensive examination by reviewing approximately 180 different aspects of health care and resident rights. The inspection team consists of trained inspectors, including at least one registered nurse^{xviii}.

Despite the fact that the health inspection provides a comprehensive assessment of the nursing home quality of care, some weaknesses exist.

Discrepancies among states

As affirmed by a CMS report dated January 2010^{xix}, one of the main issues related to the health inspection component is the variation between states. As observed in Exhibit 1, the average number of deficiencies reported nationwide in December 2009 was 6.8 with 9% of nursing homes in substantial compliance. The District of Columbia had the highest average of deficiencies at 16.3 while Rhode Island had the lowest average of 3. This wide range in averages illustrates the discrepancies in survey results.

Furthermore, not only are there differences in survey results among states, there are also variations among districts within a state. For example, as illustrated in Exhibit 2, California had an average number of deficiencies of 10.5 in March 2009. However, the Santa Ana district reported an average of 19.7, double the statewide average, while East Los Angeles reported an average of only 8.7.

These discrepancies derive from many factors, including:

- *Survey Management*: the variation in skill sets of surveyors, supervision of surveyors, and the survey processes leads to different results. Based on the number of years of experience, surveyors will have different skill sets. Some may be more meticulous than others, which may affect the results of a survey. Additionally, not all surveyors perform the inspection in the same manner, as there will always be some subjectivity

involved. Their personal and field experience will affect their perception.

- *State Licensure*: The states license nursing homes, but their licensure standards vary widely. Some have licensure standards identical to the federal certification while others have more stringent benchmarks. These differences affect the interaction between state enforcement and federal enforcement. For example, a few states conduct a great deal of complaint investigations based on state licensure, and issue citations based on state licensure rather than on the federal regulations^{xx}.

Consequently, the Five-Star Rating system does not accurately establish which nursing home is performing better when comparing facilities in different states. The health inspection results are only appropriate when evaluating nursing homes within the same state.

- *Medicaid Policy*: Medicaid pays for the largest proportion of long term care in nursing homes. State nursing home eligibility rules, payment, and other policies in the State-administered Medicaid program create differences in both quality of care and enforcement of that quality^{xxi}.

Dissimilarity of the Complaint Data

Complaint surveys are conducted on-site, due to complaints reported to the Department of Health Services by individuals, or incidents reported by the facility. They focus on specifics of the

complaint or incident, which may in turn result in citations issued to the facility. Only complaint surveys with citations are reflected on the health inspection report^{xxii}.

According Barbara Manard at American Association of Homes & Services for the Agings (AAHSA), complaint data is another weakness of the health inspections: There are two sets of complaint data: incidents that facilities are required to “self report” and complaints that originate from external sources (residents or families). A self-reported occurrence is usually one that the facility has recognized and taken action to correct, whereas external complaints may indicate that the facility has not recognized or taken action to resolve a problem or prevent its future occurrence.

The current CMS Nursing Home Compare web site does not make a distinction between the two sets of data. Self-reported incidents and external complaints are merged into a single data report. This data merging is misleading and presents a skewed picture to consumers about the number of complaints a facility has received^{xxiii}.

Severity Level of Deficiency

The health inspection score is based in part on the deficiencies identified during the survey process. Each deficiency is assigned a letter code (A through L) according to its scope and severity. Scope refers to the number of patient affected (isolated, pattern and widespread) and severity refers to the amount of potential or actual discomfort or

harm involved for residents. Level ‘A’ deficiencies are the least serious^{xxiv}. The highest level of severity consists of immediate jeopardy, which represent a situation where serious injury, harm or death to a resident has or may result.

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

Figure 2

As observed in the above deficiency table (Figure 2), an event where a person is actually harmed is less severe than immediate jeopardy. It would appear the order of these two categories is reversed. The deficiency in which a resident’s health is compromised should be more severe than the deficiency that has the imminent possibility of causing harm. According to Steve Flood, “when someone is actually harmed, there is an implication that the conditions that were present prior to the patient being harmed would meet the definition of immediate jeopardy. Harm follows jeopardy and not the other way around”.

Limitations of the appeal process

As of March 2010, only 8.1% of nursing facilities were citation-free per the American Health Care Association (“AHCA”) (Exhibit 3). When facilities are found to be out of compliance with federal guidelines and the deficiency is severe enough, they are imposed mandatory remedies based on the level of severity and scope. If a nursing home disagrees with the remedies imposed, it may file an administrative appeal to the Departmental Appeals Board (“DAB”), first to the Civil Remedies Division, and then to the Appellate Division. Review of DAB decisions is conducted by the federal courts^{xxv}.

The issue with the current appeals system is that a deficiency finding continues to count toward the facility’s health inspection rating even though it is on appeal. Because the appeal of a remedy and its underlying deficiency takes months, and sometimes years, to resolve, facilities that successfully appeal a remedy based upon a deficiency finding will incur a substantial injury to their reputation that will not be adequately repaired by correcting the rating months later.^{xxvi} Furthermore, the information regarding the appeals and the outcome of the appeal is not available on Nursing Home Compare web site.

Timely survey schedule

Currently, nursing facilities can only update their health inspection scores once a year. Some industry professionals believe the survey should be completed on a more

regular basis since operators are often able to correct deficiencies and improve regulatory compliance within several months of their initial inspection. This change would allow the score of the survey to accurately reflect the current condition of the facility. However, most industry experts agree that the government does not have the resources in terms of financial support and workforce to complete surveys more frequently. Therefore, this change may not be feasible.

Staffing Weaknesses

There are inherent flaws in the staffing measurement component of the Five-Star program, both from a methodological, quantitative, and qualitative standpoint.

No Current Federal Staffing Standard; State Standards Not Applied

There is currently no federal standard for optimal nursing home staffing levels that is applied throughout the industry. The only mandated requirement is that nursing homes have at least one RN for a minimum of eight consecutive hours per day for seven days a week, and also either an RN or LPN/LVN on duty 24 hours per day^{xxvii}.

Each state has its own individual requirements and minimum standards, but this is not taken into account in the current Five-Star model. Mandated (required) staffing hours vary from state to state, and the Five-Star program fails to represent this,

instead measuring them all on the same scale.

Flawed Methodology

The methodologies in which the staffing numbers are reported are also questionable. Currently, the Five-Star Rating system requires that each nursing home self-report its staffing numbers based on a two-week period prior to the survey time frame. Each nursing home facilitator (or their designee) must complete the CMS 672 form.

Given the margin for error in this case, CMS has identified a set of exclusion criteria intended to identify facilities with unreliable OSCAR staffing data and with outlier staffing levels^{xxviii}. CMS asserts it checks data for unusual reporting issues, and then asks states to follow up with nursing homes on these specific issues. However, there are no verification measures in place. Because of this deficiency, data can be skewed and may not represent a true picture of the staffing of a nursing home.

Staffing is only measured at one point during the year, which takes place two weeks prior to the assessments. The number of residents and number of staff are measured at this time. However, this measurement provides only a snapshot of a two-week period, neglecting the rest of the year. Nursing home residencies vary over the course of the year, and in the case that their two-week snapshot is not "typical", this is not taken into account.

Another flaw of this measure is that the skill and turnover of staff is not measured. Most businesses can agree that turnover is a large indicator of quality in an organization, and merely just reporting on the number of staff and not turnover or skill level neglects two key components to quality of staff.

Inconsistent Case-Mix Adjustments

The case-mix adjustment, while in theory is a good idea, is based on outdated data and standards that have not been adopted throughout the industry.

In the current system, CMS incorporates staffing data based on two case-mix adjusted measures that are given equal weight: 1) RN hours per resident day, and 2) Total staffing hours (RN+LPN+nurse aide hours) per resident day. The numbers are taken from OSCAR and are case-mix adjusted based on the Resource Utilization Group (RUG-III) case-mix system using the 53 group version of RUG-III. A one to five-star rating of a facility in staffing is based on a combination of the percentile-based method and staffing thresholds identified in the CMS staffing study.^{xxix}

Staffing numbers are "case-mix adjusted" by the CMS based on fixed data points in the CMS 1995 and 1997 Staff Time Measurement Studies (see Exhibit 5). The 1995-1997 Staff Time Measurement Studies, which are nearly 15 years old at this point, were conducted originally to come up with a method of payments based on a prospective basis.^{xxx} This model is now being used to rate the adequacy of staffing for nursing homes, when its original intent

was to determine resource consumption levels for payment.

The data also compares different facilities (hospital vs. free-standing) with different average lengths of stay, with one another. This is a case of not comparing apples to apples.

Only Measures Nursing Staff

Another issue within the staffing measure is the fact that the current measurement only includes nursing staff. The measure does not take into account physicians, or therapists (occupational, physical, speech, dietitian, etc) which, depending on the type of facility, may be present and in some cases even more prevalent than the nurses, seeing patients daily, around the clock. In addition, hospice staff and feeding assistants are also not included in this measurement. Reporting only nursing staff may not capture the full amount of care given within the nursing home.

Unclear Measurement, Inside or Outside the Industry

A final issue on the methodology for case-mix adjustments, and arguably the most important, is the fact that the process and measurements are convoluted and difficult to understand. While the technical user's guide to the Five-Star Rating system attempts to address the complete process for the case-mix adjustments for staffing, readers are still left without a full explanation of what goes into the star rating for this measurement.

Measuring Quality?

Overall, CMS measures this data based on the assumption that there is "a clear association between nurse staffing ratios and nursing home quality of care" and to identify which residents are at substantially higher risk of quality problems.^{xxxii} Studies have been conducted to investigate the correlation of higher staff numbers and higher quality of care, some determining specific ratios.^{xxxii} However, the government has yet to adopt and institute a national standard based on any studies.

Consistently, the question arises as if this measure measures what it is "supposed" to measure. The current measure shows the number of nursing staff at a given point in time and is adjusted based on historical reports in order determine what the level of staffing at a particular facility "should" be. However, one could question if this is the best way to measure quality of staff.

Quality Measures Weaknesses

The QMs have many shortcomings, most notably that they are not accurate indicators of actual quality. Further, they fail to consider resident and family satisfaction and do not adequately differentiate between varying patient acuity levels. In addition, the measure of certain quality indicators such as pain and mobility/physical restraint is flawed.

Improper Quality Measures

The QMs currently in place focus more on identifying compliance or violations of state and federal regulations than measuring 'quality'. They were originally developed to help facilities within the industry ensure they were providing adequate care. There is no indication that the measured information reflects the quality of a facility.

CMS itself acknowledges on its site that "the current quality measures have been chosen because they can be measured and don't require nursing homes to prepare additional reports. They are valid and reliable. However, they are not benchmarks, thresholds, guidelines, or standards of care." Those chosen measures represent only a few of the many aspects of care that may be important to a patient.

Further, the MDS Quality Measure/Indicator Report stated that the "QMs are not definitive measures of quality of care, but are "pointers" that indicate potential problem areas that need further review and investigation. These data, at a nursing home level, are used by State survey agencies to target survey and quality monitoring activities. The data are also shared with the facilities; each facility receives a report of its own data, as well as its statewide data. This report can be used by the facility as a tool to rate its performance compared to the state and to target areas of care for improvement." Again, a tool for performance is very different from a comprehensive review of quality.

Failure to Account for Patient Satisfaction

As discussed above in the systemic problems section, any quality measure rating must include patient satisfaction. While specific, measurable factors are useful, any accurate picture of quality must include feedback from people who receive that care.

Intangible factors must be taken into account to adequately quantify the quality of a facility. Aspects such as staff friendliness and attentiveness, frequent staff contact, clear patient understanding of treatments, and other factors that most patient and families would consider important can be as much as the specific, measurable aspects of care. Without the inclusion of the factors, the quality measures in place are misleading.

Failure to Normalize the Data

The existing covariates that adjust the QMs do not adequately account for varying patient's acuity levels in the nursing homes. All facilities are rated in one database that makes no distinction between the type of facility, its specialization, or its unique patient population.

The acuity levels of patients in a nursing home can greatly influence the outcome of the quality measures. For example, patients who are in their end-of-life stages are likely to incur higher occurrences of factors such as pain and pressure sores, thus negatively impacting the QM rating of facilities that cater to that population. Facilities that merely handle short term or rollover patients

are likely to excel in many QM factors not because of their high standard of care, but because their patients are not as vulnerable to factors such as pressure sores. The covariates in place are means to address these discrepancies but fail to do so.

Thus, facilities that specialize in subacute care will have less favorable ratings than facilities that handle less acute patients. This can be seen in the low Five-Star Quality Ratings of the subacute facilities in California. As of May 2010, of 53 total subacute California facilities, only three had five stars and nine had four stars. In contrast, 14 of the subacute facilities had one star and 12 had two stars.

The low performance of subacute facilities, especially in their QM rating, indicates that the system is inconsistently applied amongst varying facilities. This inconsistency discourages providers from accepting acute patients and suggests inaccuracy among the ratings.

Subjectivity and Accuracy in Measurement

Many of the QM measures place higher-acuity facilities at a distinct disadvantage. Some are subjective measurements, such as pain. Feelings of pain vary from person to person and cannot be a standardized measure. Further, factors such as an increasing need for help with daily activities, decreasing mobility, or time spent in a bed or chair, inherently disfavor those facilities that have an elderly patient population.

System-Wide Recommendations

Adding Customer Satisfaction Element

Given the importance of the satisfaction rating to consumers, the inherent problems in the survey results and the minimal value consumers place on those results, CMS should replace one of the three stars allocated to health inspections with a satisfaction-based star. Doing so will reduce the impact of the subjective survey process and create a more comprehensive assessment of a nursing home facility.

In addition, the Nursing Home Compare web site should report the detailed results of satisfaction surveys to allow consumers to find out what current residents feel about key aspects of care. These details would allow consumers to make a more informed choice based on key aspect of care that they value.

In practice, a satisfaction component would not be difficult to implement. Some states already use consumer and/or workforce satisfaction data to support value based reimbursement programs for nursing homes. Georgia, Oklahoma, Iowa, Kansas, Minnesota and Ohio all have implemented value-based purchasing for nursing home care. Each of these states uses consumer satisfaction as a performance metric.^{xxxiii}

This data provides greater transparency to consumers and other purchasers by putting

facility-specific satisfaction information in the public domain.^{xxxiv}

Eliminate or Adjust the Bell Curve

Critics suggest that if every facility in a particular state exceeds the criteria for five-star care, they should each receive a five-star rating, regardless of what other facilities receive.

We recommend eliminating the mandatory bell curve/forced distribution of the star ratings. If a facility meets all the standards and qualifications for five stars, it should receive the highest rating, regardless of what other facilities are receiving.

We suggest taking it a bit further and propose that if a facility exceeds the measures, it should receive five stars. If it merely meets the standards, it receives three stars. The others are adjusted accordingly. The point is, the adjustments would be made based on the facility itself and not based on the facility in relation to others. Further research would need to be done to determine the “range” or cut point for five, four, three, two and one stars.

Another alternative is to keep the bell curve, but adjust the percentage weights so that the system is not heavily weighted on the one-star. The current system allows 10 percent to get five stars, and 20 percent to get one stars. What if it were flip-flopped so that 20 percent got five stars, while 10 percent (or even five percent) earned one star. This would make it possible for a greater number of facilities to earn five stars. With this

alternative (the bell curve staying in place but having some adjustments for weighting), we would recommend ranking the hospital-based facilities against each other; as well as the freestanding nursing facilities against each other. This would help ensure more of a measure of “apples to apples” and improve consistency while removing some of the setbacks in the current bell curve ranking.

A supplemental recommendation is for CMS to have a program in place advising facilities on how they could advance their star ratings; giving them a sort of pathway to success with concrete steps a facility could take for improvement. CMS could consider a model similar to the Advancing Excellence campaign, which provides free, practical and evidence-based resources to support quality improvement efforts in America’s nursing homes.^{xxxv}

Health Inspection Recommendations

National Implementation of QIS

The Quality Indicator Survey (QIS) is a new survey system currently implemented in 17 states. It is replacing the Standard survey used by CMS in the remaining states. The objectives of QIS are to improve consistency and accuracy of the survey, enhance documentation through automation, comprehensively review more regulatory areas within current survey resources and focus survey resources on facilities with the greatest quality concerns^{xxxvi}.

More specifically, QIS guides surveyors through a structured investigation intended to allow surveyors to systematically and objectively review all regulatory areas and subsequently focus on selected areas for further review. These features represent a departure from the Standard survey process and are consistent with measurement principles designed to improve how consistently different surveyors conduct investigations^{xxxvii}.

Another added benefit is that the QIS is more resident centered with a much greater focus on resident and family interviews and resident observations, leading to more citation in regulatory areas such as quality of life. These concerns were often overlooked in the Standard survey process^{xxxviii}.

When the QIS pilot program was first launched in 2005, CMS also funded a QIS evaluation to answer questions about accuracy, documentation, changes in the number and type of deficiencies, and whether the QIS process was more efficient. The evaluation noted that over 75% of surveyors in the pilot preferred QIS to the traditional process by three months of implementing QIS in their respective states. However, the evaluation also showed no evidence that the QIS was more accurate than the Standard survey and it also indicated that QIS cited more deficiencies, at higher levels, than the Standard survey^{xxxix}. It is noted that the evaluation was somewhat constrained by modest resources, both in terms of funds and time^{xl}.

On August 7, 2009, CMS confirmed it was implementing the new survey nationally^{xli}. While we recognize some flaws in the QIS, we do support CMS' decision because the benefits of this survey outweigh its weaknesses. We also suggest CMS providing a comprehensive surveyor training to ensure the success of this implementation on a national scale. By offering thorough training, CMS will promote consistency among surveyors. CMS will also need to provide adequate evaluation tools for its supervisors to assess the performance of the surveyor teams and ensure qualified individuals are implementing QIS properly.

Distinction Between Self-Reported and External Complaints

To resolve the ambiguity of the complaint data presented on the CMS's web site, we propose distinguishing the self-reported incidents from the external complaints by adding a column to the health deficiency chart as presented below (Figure 3).

If the deficiency is self-reported, the letter Y ('Yes') will be entered into the chart. Alternatively, if the deficiency results from the health inspection, the letter N ('No') will be recorded. This approach should keep the presentation of the information simple and easy to understand for the consumers.

For further details, the definition of a self-reported incident and an external complaint will be available under the current existing link 'How to Read a Health / Fire Safety Deficiency Chart'.

Figure 3

Inspectors determined that the building did not have:	Self Reported	Inspection Date	Date of Correction	Level of Harm (Least -> Most)	Residents Affected (Few -> Some -> Many)
1. Store, cook, and give out food in a safe and clean way.	Y	10/04/2008	11/30/2008	2 = Minimal harm or potential for actual harm	Few

The explanation will allow customers to recognize the difference between the two sets of complaint data and identify which operators are striving to ensure a safe environment by being proactive in dealing with their deficiencies.

Another benefit of adding the ‘self reported’ column in the chart includes further transparency on the part of nursing homes. A self-reported incident has a better connotation than an incident reported by a third party. Consumers will prefer operators who are aware of their problems and who are implementing processes to prevent or minimize the chance of such incidents recurring. Consequently, it is in the best interest of the facilities to report deficiencies before they are discovered by external sources.

Further analysis must be performed to determine if this change to the web site is feasible and efficient.

Change the Severity Level of the Deficiency Reporting

A simple solution is offered to resolve the incongruity in levels of severity in the CMS’ deficiency table. The highest level of severity should be ‘actual harm’ followed by ‘immediate jeopardy’. Thus the first and second row of the deficiency table should be switched to more appropriately reflect the level of harm to patients. The modified table is presented in Figure 4:

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

Figure 4

Improve Appeal Process

According to a report issued by the Center of Medicare Advocacy on May 14, 2007, facilities lost a vast majority of their administrative appeals. In fact, CMS's decision to cite deficiencies and impose remedies was upheld in 66 of the 71 decisions (93%). At the Appellate Division, CMS won all 18 cases decided on the merits (100%); at the Civil Remedies Division, 48 of 53 cases decided on the merits (90%)^{xliii}.

Since there is only a small probability of nursing homes winning their appeal, we recommend CMS to discount the deficiency points by 15% when a particular deficiency is going through the appeal process. For example, if a facility has a deficiency at level G, worth 20 points, and it is on appeal, then it would only count as 17 points toward the final rating score.

If the nursing home wins the appeal, the points are removed from the final score. To eliminate the delay between the result of the

appeal and the score of the original survey, we recommend crediting a facility its points on its next annual state survey. For instance, if the nursing home has a total point of 36 on its 2010 survey, and it won its appeal regarding a G deficiency from a 2008 survey; it would now have a final score of 19. Conversely, if the facility loses the appeal, then the 3 points previously credited would be reinstated in the survey results and the facility would receive a final score of 39 for 2010.

This new computation should be fairly simple to implement and should reflect the number and severity of the nursing homes' deficiencies more accurately. Additionally, this new system should be sufficient to not create an abusive appeal system. In addition to the fact that a facility will still get penalized if the appeal is lost, the costs associated with filing an appeal should discourage flagrant appeals.

We also recommend CMS to list which deficiencies are on appeal and the filing date on its Nursing Home Compare web site. A possible format is suggested below (*Figure 5*):

To educate customers, the definition and a simple explanation of the implication of an appeal should be added under the current existing link 'How to Read a Health / Fire Safety Deficiency Chart'.

Survey Schedule

Even though we do not recommend health care facilities to undergo health inspection more than once a year, we do want to mention AHCA's proposal regarding this matter. The association suggested to Congress to consider quarterly offsite review of a set of quality markers across all nursing homes, which would offer an incentive for the top performing nursing homes to have a full onsite survey every 36 months, and a half-day onsite survey during the two intervening years. Other operators would continue with the annual full onsite survey. This scheme would free up surveyors' time that could be directed toward greater oversight for homes showing the poorest performance^{xliii}. However, as previously mentioned, we believe the costs involved with more frequent surveys, regardless if they are offsite, would most likely exceed the benefits of this proposal.


Inspectors determined that the building did not have:	Inspection Date	Date of Correction	Level of Harm (Least -> Most)	Residents Affected (Few -> Some -> Many)
Make sure that the nursing home area is free of dangers that cause accidents. Appeal filed 8/5/09	07/24/2009	10/07/2009	3 = Actual harm 	Few

Figure 5

Staffing Recommendations

Standardize the Measurement System

Until the federal government adopts standardized measurements for staffing across the country for nursing homes, the Five-Star model cannot impose a standard across the board.

However, each state has its own requirements regarding staffing in nursing homes. The Five-Star model could improve its accuracy on this measure by taking into account each individual state's staffing requirements. This would require customization on the part of CMS, but it would help insure that nursing homes are staffing up to their respective state's standards and measured against other within their state; rather than measuring all nursing homes across the country against each other, neglecting whether or not they are meeting the standards mandated by their state. We also recommend measuring facilities of the same type: hospitals to hospitals, freestanding to freestanding facilities.

Revise and Update the Methodology Used in Obtaining the Staffing Information

To get the most accurate read on staffing, the Five-Star program should automate the system. Making the reporting automated and tracking a facility's staffing on a regular (daily) basis would account for more accurate information. It would also reduce the number of errors due to self-reporting, including incorrectly completed forms due

to incomplete knowledge by staffing members. Measuring a facility's staffing numbers regularly throughout the year would ensure a more complete profile of the facility, rather than only measuring a two-week snapshot in time.

Within this system, a component for error detection should be included. This system could report/send the data directly to CMS, eliminating the need for the middle-man (in this case, the states) and again removing another opportunity for errors.

The automated system would measure actual hours worked, regardless of salaried or hourly employees. An automated system could track for cases such as a large increase or decrease in the number of residents or staff. The system could also track staff turnover, a key measurement for measuring quality of care of an industry.

Revise the Case-Mix Adjustment Criteria

- *Update the data set being used for measurement.*

The idea of having a case-mix adjustment in order to have more staffing for facilities with patients with a higher level of needs is respectable in theory. However, the validity of this measure depends solely on the accuracy and applicability of the data set being used.

We recommend that CMS determine a new standard to replace the 1995-1997 Staff Time Measurement Data Set.. To do so, additional research and clinical experts may

need to be brought in to determine adequate model framework for this measure.

Determining this measurement would require research of the correlation between quality of care and staffing. While studies have been done, like those of Charlene Harrington advising a staffing standard of 4.1^{iv}; this standard or any other has yet to be adopted or widely used. In fact, CMS rejected staffing at this level as they found it too expensive and not feasible to implement^{xliv}.

More research should be done to measure the correlation between number of staff and quality of staff. Other suggested revisions of the new data set include one that is an accurate representation of staffing in today's facilities. Legislation and new policies have changed the industry since the 1995-1997 Time Studies, and a new benchmark is needed.

- *Update the Threshold Data*

The staffing requirement in California is 3.2 hours per patient day. Although most facilities have achieved an average staffing level of 3.6 hours per patient day (hppd), a facility cannot receive a five-star rating for the staffing component unless it meets a threshold of 4.08 nurse staffing hours per resident day (including a minimum of .55 RN hours)^{xliv}.

The Five-Star Rating system imposes a wishful staffing ratio that was expressly rejected by CMS as too costly for Medicare to reimburse. Why would CMS not adapt this standard for being too costly to be

funded, but then still measure facilities against it in regards to staffing? We recommend one of the following: a) revising this measure to better reflect the current situation in facilities or b) define an adequate, widely adopted, and implementable hppd for a benchmark.

Clearer Explanation of Staffing Rating to Consumers

The current User's Guide is anything but transparent especially in relation to staffing. In speaking with health care professionals very familiar with this system, they could not clearly explain the staffing calculation. Mary Jann, Director of Developmental Programs & Regulatory Affairs at the California Association of Health Facilities, mentioned having to call the CMS help line to have it explained to her several times. If it is this difficult for industry professionals to understand, then it is certainly challenging for consumers to understand. We recommend that the measure be revised to be more simple and transparent, which in turn will be more easily understood by consumers.

Include All Health Care Providers

We recommend including all health care providers in the staffing measurement. This includes physicians, therapists (occupational, physical, speech, dietician, etc.) in the categories that would use these types of doctors; or in specific facilities that have a prevalence of these types of care providers, i.e., subacute facilities. The staffing component was made to measure

the level/amount of care provided to patients, and in the cases where that care is provided by doctors or therapists, those providers should be counted. This measurement could be accounted for in the automated system we recommended. In the absence of that, the CMS form 672 for staffing could be revised.

Include a Customer Satisfaction Component to Measure If Resident/Family's Perceptions of Staff Quality of Care

More detail of the customer satisfaction component can be found in that respective area of our report. But it is important to note within the staffing section, the current staffing measure does not have a qualitative measurement aspect. While measured in an overall customer satisfaction component, residents and their family's satisfaction with the quality of care they are given by their staff should be incorporated into this measure.

Recommendations for Quality Measures

In October of 2010, all hospitals are set to officially switch to from the Minimum Data Set ("MDS") 2.0 to MDS 3.0 for data collection. Thus, the mechanism currently used for collecting quality measure information will change and the current quality measures will cease to exist. No one is quite sure what CMS plans to do when the change occurs and the agency has not yet come forward with any official statement. It

is clear, however, that the change presents CMS with a unique opportunity to update the QM's used in the Five-Star Rating so that they capture more appropriate clinical measures in a more reliable manner to present a more accurate picture of nursing home quality. The following are the proposed recommendations for the shortcomings of the QM rating process:

Incorporate the 'Quality' Aspect Into the QMs

Since there is no tangible evidence to claim that the existing quality measures do an adequate job of measuring quality and many industry experts suggest the opposite, CMS should take steps to improve on this front. The MDS 3.0 data set that captures a large amount of useful information is soon to be inducted, replacing the long-used MDS 2.0.

We suggest that CMS illicit suggestions from industry experts such as doctors, nurses, therapists, and both patient and industry advocacy groups; a process similar to its acceptance of quality measure suggestions for inclusion in the 2010 Physician Quality Reporting Initiative (PQRI) incentive program. CMS should then create a working group with all aforementioned parties represented to choose the appropriate set and number of indicators that utilize the MDS 3.0 information in a manner that truly represents quality and also imparts useful information to the consumer.

We recommend that the new indicators include at least two new measures that are not currently reported: Discharge to

Community and Functional Ability. Discharge to Community measures the duration of the rehabilitation process as an indication of how quickly and skillfully a nursing home rehabilitates a patient. Functional Ability measures the functional abilities of the patient in comparison to how the patient entered the facility to give an idea about how successful the facility was at rehabilitating the patient. Factors such as the ability of a patient to walk without assistance and dress himself or herself represent a big part of any skilled nursing facility care.

The information extracted from the MDS 3.0 and reported to consumers should seek to provide a comprehensive evaluation of each facility's performance in key areas so that consumers may better understand the strengths and specialties of various facilities. As of now, the indicators are focused on flagging violations by setting a level above which a facility's performance is considered suspect. The indicators should be designed in such a way that apart from gauging quality of facilities, they should convey information in simple terms to consumers about certain positive features of the facilities so that the consumers can connect with the Five-Star Rating system in practical terms. Moreover, instead of purely flagging violations based on cut-off points, the QMs would be better off measuring the intensity of violations so one could understand the severity of violation clearly.

Aggregate the Quality Measures

Problems with individual quality measures notwithstanding, the aggregating of the

measures in the currently existent ad hoc fashion does not in any way capture quality. The methodology for scoring of these aggregated results is in no way indicates that the aggregation indeed identifies above average versus poor performing nursing homes. The biggest drawback of the aggregation is that since most facilities tend to do well in some areas and poorly in others depending on their focus and resident population, the good and bad average out and they look just "average."

To solve this issue, we recommend that for long stay measures, two QMs, - ADL change and mobility change, should be weighed at par with other QMs. As of now, these two QMs are weighted 1.66 times more than other Quality Measures.

Moreover, ADL change and Mobility change should be compared to the national rates, along with the other QMs, and not to the statewide rates. Statewide rate comparison causes major discrepancies in the ratings of nursing homes as statewide rates on the ADL decline fluctuate heavily from state to state. For example, statewide rates on the ADL decline QM range from 10.6% in Oregon to 24.2% in North Dakota. The rates on the Mobility decline QM range from 10.2% in Oklahoma to 25.7% in Pennsylvania. Other measures too vary the same way from state to state. As a result of this variation, facilities in states like North Dakota and Pennsylvania with very high rates of decline are held to far lower standards of quality than facilities in other states. For all we know, a facility that ranks in top 20th percentile in Pennsylvania may

rank in the worst 20th percentile in Oklahoma.

Thus, subjecting the QMs to a national level comparison would not only yield a fair, equal-weighted methodology, but would also promote transparency in the process.

Create Distinctions Between Short Term and Long Term Patient stay

The existing methodology results in facilities that accept short-term and high acuity residents being penalized in the rankings. For example, of the 53 subacute facilities in California, only three of those facilities have a five-star rating while 14 have a one star. This report does not purport to explain these results, but suggest that it could be due to one or more factors. Higher acuity and shorter lengths of stay decrease the number in the denominator for the Quality Measures increasing volatility. Patients who stay for short periods of time tend to be higher acuity patients who enter for wound care or post-surgery recovery. Further, higher acuity patients tend to be in more pain than lower acuity patients.

Currently, most Quality Measures are prevalence indicators. Thus, if a facility specializes in caring for complex pressure ulcers and the wound is not completely healed within 90 days, the facility is unfairly penalized once again for admitting highly complex patients. In other cases, a facility could admit a patient with a preexisting pressure ulcer yet still be penalized for its existence. With the arrival of MDS 3.0, Quality Measures should account for

variances in types of patient populations and reflect fairly on both chronic and post acute providers. Further, the updated quality measures should reflect pre-existing conditions so that facilities are only penalized for conditions and violations that they are responsible for and have the ability to prevent.

Patients with short term and long term stays need to be segregated in terms of the rating methodology. The ten clinical quality measures are aimed to measure clinical factors of long-term care patients, but the most recent data available shows that over 58% of patients stay less than one month in a skilled nursing facility. This number stands in stark contrast to the minimal 19.3% who stay for any period longer than three months^{xlvi}. Furthermore, different scales should be used to evaluate each patient stay type. Also, since stay time is usually correlated with acuity, similar patients could be grouped together when measuring related indicators.

While we do acknowledge the existing discrepancy in reimbursement rates between hospitals and free-standing institutions as a factor that could impact the QM indicators, we believe that the impact the discrepancy would have on the rating system would be offset by the proposed segregation of patients according to their stay types.

Modify the QM Risk Adjustment factors for Long Stay Measures:

- Adjustment for ADL change

ADL change needs to be fully risk adjusted for deviation from the current partial adjustment.

The measure needs to include residents who cannot decline further in function, so as to not set negative incentives for facilities that have most residents as functionally dependent.

The measure should also include residents who are comatose, have end-stage disease, or are in hospice. This way, the measure would risk adjust for diseases and conditions that are not in control of the facility but put residents at far greater risk for functional decline.

- Adjustment for Mobility Change

The measure needs to go beyond the covariates adjustment that is currently incorporated.

The current method of down risk adjusting the facility mobility decline rate to account for the number of residents with falls needs to be done away with. The current scenario is flawed in the sense that it seems to reward facilities with high rates of falls that are often preventable and under the control of the facility.

- Adjustment for Pressure Ulcers

The current risk adjustment for pressure ulcers using the "stratification method" defines the *high risk* group very narrowly, and in a way that the group lacks potency. Thus, to be effective, the *high risk* group

should not be confined only to rarely occurring scenarios such as comatose and malnutrition.

Moreover, parameters for gauging pressure ulcers risk of residents during short stays should be applicable to long term residents as well. These important parameters that are left out of long term care include taking into account resident's history with pressure ulcers, and considering resident's history of other ailments like diabetes, CVA, hip fracture and so on.

- Adjustment for Pain

The factor that attempts to risk adjust pain for cognitive impairment based on resident's ability to make independent decisions does not capture a large number of dementia patients, and thus requires tweaking.

Also, there are many conditions such as fracture, physical therapy, surgical wound and so on, that put residents at risk for pain, and thus should be incorporated into the measure.

Conclusion

The Five-Star Quality Rating system is a useful tool still in its infancy. Less than two years old, the system is a giant leap in an industry historically known for its lack of transparency. Now that the program has been in effect for some time, CMS should accept the feedback it has received from different sectors of the industry to reevaluate the system and implement changes.

We are not proposing that CMS do away with any component of the system. Nor do we propose eliminating stars as a tool to rate facilities. Some advocacy groups argue that the stars are not appropriate in the nursing home setting because the use of stars diminishes the brevity of the decision in the consumers mind. We do not agree. While stars are also used to rate amenities like hotels and restaurants, the Five-Star System represents a consumer-friendly metric.

We do strongly urge, however, that CMS update the metrics used to assign stars to facilities so that the system becomes more fair, reliable, and accurate. Key to this change is the implementation of the satisfaction component, which can be done by re-allocating a star from the health inspections components. Further, CMS should eliminate the arbitrary forced curve and instead create a merit-based system that gives every facility the opportunity to earn five stars.

Making those two key changes and updating the technical aspects of each rating component is a necessary next step for the Five-Star Quality Rating system. We highly encourage CMS to consider our recommendations, as well as recommendations from industry and advocacy groups alike, to make the Five-Star Rating system a better, more accurate system for the public to utilize.

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Exhibit 1

State	Facilities	%SQC	%IJ	%SC	%Def-free	Avg Defs	Median Defs
US	15,691	3.50%	2.50%	9.00%	7.80%	6.80	6.00
AK	15	13.30%	13.30%	0.00%	0.00%	6.10	4.00
AL	231	1.30%	1.30%	13.90%	11.70%	4.10	4.00
AR	230	10.40%	2.60%	2.20%	2.20%	7.60	7.00
AZ	135	4.40%	1.50%	0.70%	0.70%	10.10	9.00
CA	1,250	3.40%	3.00%	2.30%	1.40%	11.00	10.00
CO	210	3.80%	2.90%	1.00%	1.00%	10.40	10.00
CT	240	2.50%	1.30%	4.20%	4.20%	7.30	6.00
DC	19	5.30%	0.00%	0.00%	0.00%	16.30	15.00
DE	46	0.00%	0.00%	0.00%	0.00%	12.30	11.50
FL	676	0.40%	0.60%	4.60%	4.40%	7.70	7.00
GA	359	3.10%	1.40%	12.50%	9.70%	5.40	4.00
HI	47	0.00%	0.00%	2.10%	2.10%	8.70	7.00
IA	447	0.00%	0.00%	8.70%	6.70%	5.80	5.00
ID	79	7.60%	7.60%	2.50%	2.50%	9.80	10.00
IL	791	3.20%	1.90%	7.70%	6.70%	6.20	5.00
IN	504	1.40%	1.40%	13.10%	12.70%	7.20	7.00
KS	341	3.80%	1.80%	7.60%	7.30%	9.80	8.00
KY	287	6.30%	4.20%	11.80%	11.80%	5.00	4.00
LA	282	3.20%	3.20%	4.60%	4.30%	7.30	6.00
MA	428	0.70%	0.00%	24.30%	22.70%	4.30	3.00
MD	230	2.20%	1.70%	4.30%	3.00%	9.00	8.00
ME	109	2.80%	0.00%	12.80%	5.50%	6.70	6.00
MI	427	4.20%	2.80%	3.50%	3.00%	8.10	7.00
MN	385	5.50%	3.60%	3.60%	3.40%	8.70	8.00
MO	513	5.50%	4.50%	5.80%	5.70%	8.30	7.00
MS	202	3.50%	3.00%	10.90%	10.90%	5.00	5.00
MT	90	2.20%	1.10%	5.60%	4.40%	6.90	7.00
NC	423	1.40%	1.20%	19.60%	16.80%	3.90	3.00
ND	84	0.00%	0.00%	7.10%	6.00%	4.80	3.00
NE	225	0.40%	0.00%	8.90%	7.60%	5.40	5.00
NH	80	2.50%	1.30%	20.00%	16.30%	4.40	3.50
NJ	360	8.10%	5.30%	6.10%	5.60%	5.50	4.00
NM	70	7.10%	8.60%	4.30%	2.90%	5.10	4.00
NV	49	6.10%	4.10%	4.10%	2.00%	9.10	8.00
NY	640	2.30%	2.70%	10.20%	9.20%	4.60	4.00
OH	961	2.20%	1.40%	11.60%	10.00%	6.10	5.00
OK	316	18.00%	9.50%	6.00%	5.70%	9.60	8.00
OR	137	2.90%	4.40%	24.80%	18.20%	4.40	3.00
PA	711	0.80%	10.00%	9.60%	8.00%	4.70	4.00

RI	86	5.80%	3.50%	33.70%	26.70%	3.00	2.00
SC	177	4.00%	4.00%	13.60%	13.00%	5.80	5.00
SD	109	1.80%	1.80%	11.90%	11.90%	4.50	4.00
TN	318	4.70%	3.50%	4.10%	4.10%	4.90	5.00
TX	1,165	6.30%	3.90%	15.60%	12.50%	5.40	4.00
UT	96	1.00%	1.00%	15.60%	13.50%	5.80	6.00
VA	281	1.80%	2.50%	4.30%	4.30%	9.00	8.00
VT	40	2.50%	2.50%	2.50%	0.00%	6.80	7.00
WA	233	1.30%	1.30%	6.90%	0.00%	6.80	7.00
WI	391	5.40%	7.90%	10.50%	9.70%	5.70	5.00
WV	128	1.60%	0.80%	1.60%	1.60%	8.50	7.00
WY	38	2.60%	2.60%	7.90%	7.90%	8.60	9.00

SQC = Substandard Quality of Care; IJ = Immediate Jeopardy; SC = Substantial Compliance
Source: AHCA Nursing Facilities' Standard Health Survey Results – Quarterly Reference Table

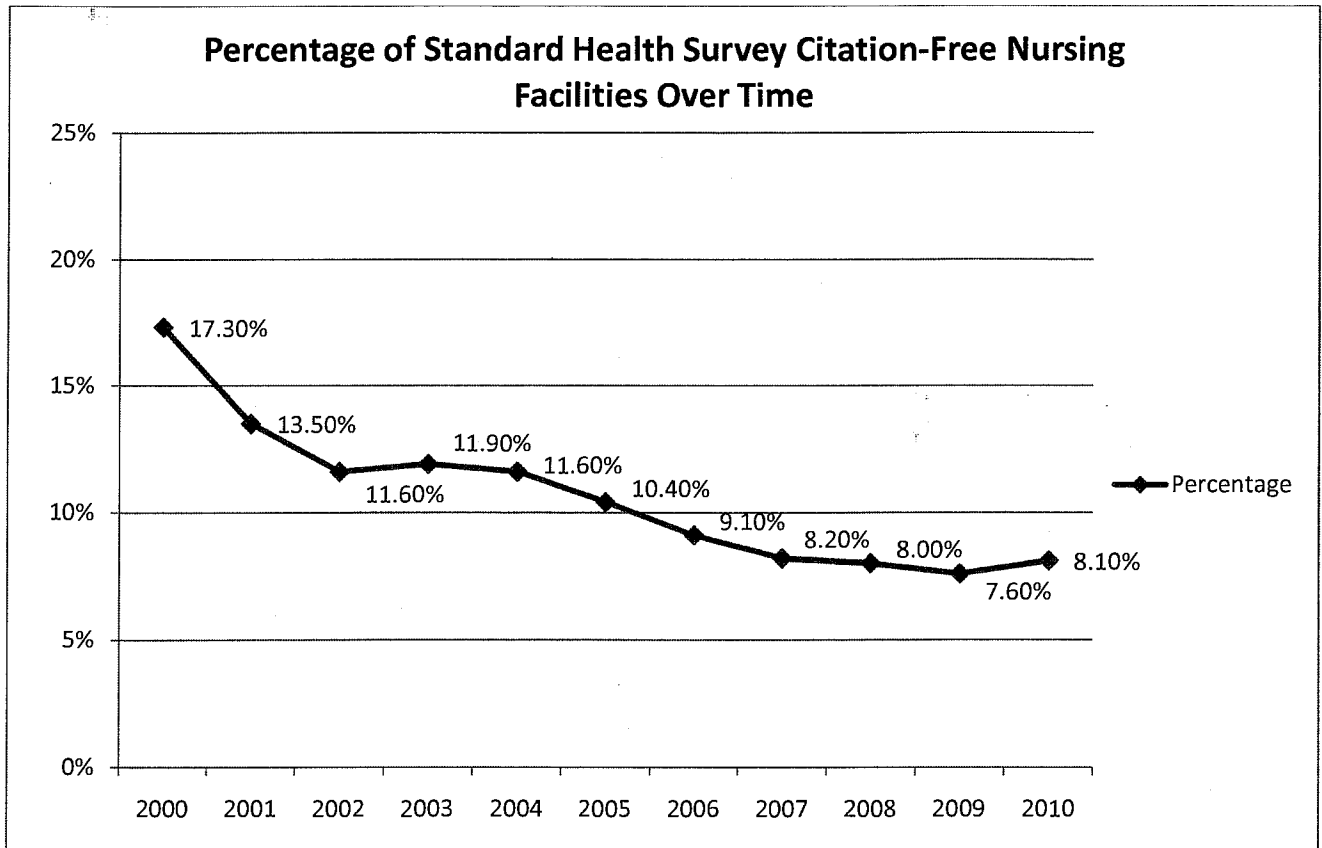
Exhibit 2

District Office*	2005	2006	2007	2008	2009
Statewide	10.4	12	11.9	11.7	10.5
Redwood Coast	13.1	10.9	11.1	10.9	9.4
East Bay	10.6	10.4	10.5	9.6	9.2
Sacramento	10.8	12.5	12.1	12.7	11
Fresno	8.2	9.5	8.2	7.6	7.6
Santa Brabra (Ventura)	8.9	12.4	10.6	8.7	7.6
Bakersfield	10.1	13.3	12	10.9	9.7
Santa Ana (Orange)	8.4	10.9	17.9	18.1	19.7
San Jose	13.5	15.3	17.2	17.1	14.4
San Diego-North	9.9	11.3	11.6	11.2	10.8
San Diego-South	13.2	11.6	11.8	12.4	9.8
San Francisco (Daly City)	10.7	15.3	9.6	11.1	8.1
Chico	15.9	17.8	14.3	11.7	9.9
San Bernadino	14	15.8	15	15	12.8
Riverside	9.5	12.2	13.1	10.9	9.1
LA-West	8.1	10.4	11.4	11.9	11.1
LA-North	9.6	12.5	12.7	13.1	12.3
LA-East	8.8	10.8	9.3	9.5	8.7
LA-San Gabriel	8.7	9.9	10.5	9	7.8
LA-Central	7.2	10	7	.	5
State Facilities	13.2	18.3	15.2	13.9	11.2

*in all five years, each survey is counted under its current district office

Source: CMS OSCAR Survey data - updated March 2010

Exhibit 3

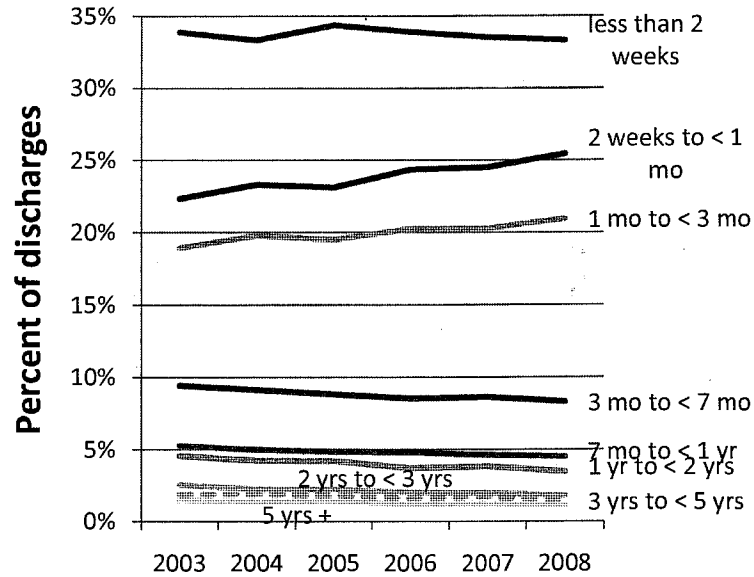


Source: Computed by AHCA R&R Department using CMS Nursing Facility OSCAR standard health survey data. Various years. March.

American Health Care Association. Reimbursement and Research Department.

Exhibit 4

California free-standing SNFs:
Length of stay at discharge



Source: OSHPD utilization data.

Free-standing California SNFs from OSHPD utilization data

Year	Totals*			Length of stay at discharge											for graph
	SNFs	Beds	Discharges	less than 2 weeks	2 weeks to < 1 mo	1 mo to < 3 mo	3 mo to < 7 mo	7 mo to < 1 yr	1 yr to < 2 yrs	2 yrs to < 3 yrs	3 yrs to < 5 yrs	5 yrs to < 7 yrs	7 yrs to < 10 yrs	10 yrs +	5 yrs +
2003	990	97,110	217,807	73,720	48,618	41,181	20,434	11,373	9,836	5,458	4,040	1,796	904	447	3,147
2004	1012	101,096	239,550	79,747	55,791	47,375	21,768	11,871	10,003	5,303	4,465	1,871	886	470	3,227
2005	1031	102,239	256,681	88,161	59,272	50,004	22,538	12,358	10,653	5,602	4,547	2,075	1,066	405	3,546
2006	1055	104,491	272,493	92,343	66,316	55,165	23,094	12,940	9,923	5,355	4,244	1,850	890	373	3,113
2007	1060	103,753	279,748	93,740	68,540	56,672	23,968	12,819	10,604	5,443	4,611	2,061	915	375	3,351
2008	1067	105,050	304,730	101,510	77,501	63,765	25,157	13,618	10,395	5,287	4,209	1,881	1,010	397	3,288

* There are varying numbers of non-responders from year to year, so these are not necessarily the total SNFs, beds and discharges for each year.

Percents for Graphs (the shaded columns are graphed)

Year	Length of stay at discharge											for graph
	less than 2 weeks	2 weeks to < 1 mo	1 mo to < 3 mo	3 mo to < 7 mo	7 mo to < 1 yr	1 yr to < 2 yrs	2 yrs to < 3 yrs	3 yrs to < 5 yrs	5 yrs to < 7 yrs	7 yrs to < 10 yrs	10 yrs +	5 yrs +
2003	33.8%	22.3%	18.9%	9.4%	5.2%	4.5%	2.5%	1.9%	0.8%	0.4%	0.2%	1.4%
2004	33.3%	23.3%	19.8%	9.1%	5.0%	4.2%	2.2%	1.9%	0.8%	0.4%	0.2%	1.3%
2005	34.3%	23.1%	19.5%	8.8%	4.8%	4.2%	2.2%	1.8%	0.8%	0.4%	0.2%	1.4%
2006	33.9%	24.3%	20.2%	8.5%	4.7%	3.6%	2.0%	1.6%	0.7%	0.3%	0.1%	1.1%
2007	33.5%	24.5%	20.3%	8.6%	4.6%	3.8%	1.9%	1.6%	0.7%	0.3%	0.1%	1.2%
2008	33.3%	25.4%	20.9%	8.3%	4.5%	3.4%	1.7%	1.4%	0.6%	0.3%	0.1%	1.1%

Exhibit 5

'95 + '97 Staff Time Measurement Data Set

RUG-III Group	04/03/1998 ADL INDEX	DAYS	1995 - 1997 Staff Time Study Distribution					National Nurs. Weighted Index
			Salary Weighted RST Plus NRST MINS.					
			Summed by STAFF TYPE			Total Minutes	TOT. MINS.	
			RN	LVN	AIDE			
			117.4	48.0	84.0	249.5	249.5	
Distribution BA1 and BA2 modified so BA2 has pop.								
REHABILITATION								
REHAB ULTRA HIGH								
RUC	16 - 18	544,183	86,474,410	32,204,721	57,824,289	176,503,420	324.3	1.30
RUB	9 - 15	2,612,076	323,001,486	107,460,808	190,791,258	621,253,552	237.8	0.95
RUA	4 - 8	991,621	90,183,013	44,067,658	57,569,575	191,820,246	193.4	0.78
REHAB VERY HIGH								
RVC	16 - 18	408,508	52,358,034	22,782,479	39,744,131	114,884,645	281.2	1.13
RVB	9 - 15	1,402,175	187,228,271	64,163,545	112,758,737	364,150,554	259.7	1.04
RVA	4 - 8	982,627	104,744,090	32,426,686	61,917,282	199,088,058	202.6	0.81
REHAB HIGH								
RHC	13 - 18	1,538,849	239,977,399	90,561,283	151,622,825	482,161,507	313.3	1.26
RHB	8 - 12	2,101,843	303,176,139	92,249,889	161,087,349	556,513,377	264.8	1.06
RHA	4 - 7	769,425	97,314,524	23,359,733	46,576,353	167,250,610	217.4	0.87
REHAB MEDIUM								
RMC	15 - 18	3,133,849	491,362,405	230,275,202	332,814,732	1,054,452,340	336.5	1.35
RMB	8 - 14	5,528,823	788,918,741	257,864,282	462,552,348	1,509,335,370	273.0	1.09
RMA	4 - 7	1,936,362	259,375,663	72,206,931	134,009,791	465,592,385	240.4	0.96
REHAB LOW								
RLB	14 - 18	1,953,299	217,578,003	105,067,966	220,463,026	543,108,996	278.0	1.11
RLA	4 - 13	4,432,487	403,112,508	156,023,534	321,142,530	880,278,572	198.6	0.80
EXTENSIVE								
SE3	NOT USED	538,349	106,801,432	60,106,660	60,761,830	227,669,922	422.9	1.70
SE2	NOT USED	1,814,162	282,399,744	170,422,397	174,682,049	627,504,190	345.9	1.39
SE1	NOT USED	147,493	16,200,468	9,750,753	16,995,160	42,946,381	291.2	1.17
SPECIAL								
SSC	17 - 18	177,352	18,229,826	12,544,101	19,263,787	50,037,713	282.1	1.13
SSB	15 - 16	192,641	19,258,115	11,654,773	19,594,659	50,507,546	262.2	1.05
SSA	7 - 14	246,152	31,826,744	11,291,002	18,937,967	62,055,713	252.1	1.01
CLINICAL COMPLEX								
CC2	17 - 18 D	36,946	4,438,401	1,727,227	4,165,628	10,331,256	279.6	1.12
CC1	17 - 18	251,905	19,783,844	15,988,395	26,291,551	62,063,790	246.4	0.99
CB2	12 - 16 D	157,860	13,688,857	7,258,417	14,808,876	35,756,150	226.5	0.91
CB1	12 - 16	836,324	69,573,776	33,302,413	72,682,392	175,558,581	209.9	0.84
CA2	4 - 11 D	137,708	11,417,089	6,559,029	10,586,573	28,562,691	207.4	0.83
CA1	4 - 11	644,876	54,283,742	26,672,079	39,303,268	120,259,089	186.5	0.75
IMPAIRED COG.								
IB2	6 - 10	54,465	3,071,846	1,917,180	4,408,861	9,397,887	172.5	0.69
IB1	6 - 10	223,132	12,270,042	7,854,255	17,114,243	37,238,539	166.9	0.67
IA2	4 - 5	7,028	376,549	208,725	414,639	999,914	142.3	0.57
IA1	4 - 5	177,452	8,256,824	5,075,116	10,050,860	23,382,800	131.8	0.53
BEHAV. ONLY								
BB2		3,541	199,699	116,845	284,111	600,655	169.6	0.68
BB1	6 - 10	8,852	474,285	272,639	678,941	1,425,865	161.1	0.65
BA2*	4 - 5	1,770	94,857	58,423	94,007	247,287	139.7	0.56
BA1*	4 - 5	23,015	1,103,337	632,911	998,043	2,734,291	118.8	0.48

PHYSICAL FUNCTION

PE2	16 - 18	200,328	10,451,123	7,051,553	21,842,187	39,344,863	196.4	0.79
PE1	16 - 18	781,769	40,784,871	25,282,399	83,761,822	149,829,092	191.7	0.77
PD2	11 - 15	371,340	18,849,224	10,211,853	37,245,414	66,306,491	178.6	0.72
PD1	11 - 15	1,749,207	88,789,767	53,105,936	165,125,178	307,020,881	175.5	0.70
PC2	9 - 10	24,430	881,835	881,444	2,225,500	3,988,779	163.3	0.65
PC1	9 - 10	200,328	12,739,072	4,539,437	14,679,651	31,958,161	159.5	0.64
PB2	6 - 8	39,088	1,543,211	1,582,300	1,858,811	4,984,322	127.5	0.51
PB1	6 - 8	420,201	16,293,281	12,803,514	23,279,537	52,376,331	124.6	0.50
PA2	4 - 5	48,861	2,197,698	1,644,646	2,101,541	5,943,885	121.7	0.49
PA1	4 - 5	855,059	33,998,875	28,028,850	36,726,515	98,754,239	115.5	0.46

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