Improving the *Nursing Home Compare* Web site:

The Five-Star Nursing Home Quality Rating System

Material for Nursing Home Open Door Forum – June 24, 2008

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I. Overview - Improving the CMS *Nursing Home Compare* Web site

Increase Usefulness to Consumers: It is CMS' intention to increase the usefulness of the CMS *Nursing Home Compare* Web site to consumers, family members, and the public.

Timing: We are interested in ideas for both (a) near-term and (b) long-term strategies. We are looking for certain improvements in the near-term to be accomplished in November 2008 for posting on a revised website in December 2008. In order to allow time for data analysis, quality checks, and website programming, the major design elements will need to be accomplished by August 2008.

Dimensions of Content: The website currently features different types of content. In the long-term each dimension might be improved.

	Dimension	Examples: Existing Information	Examples: Ideas Already Received
1	Characteristics of Each Nursing Home	Number of beds, Medicare/Medicaid participation, resident council, address and phone, etc.	Collect and describe specialty services (e.g. special services for dementia care, ventilator-dependency services, rehabilitation capabilities, etc). Begin to collect information on culture change efforts.
2	Quality of Care and Safety Information	(a) Survey results for 3 years (b) Staffing level data (c) Quality measures (19 discrete quality measures, such as pressure ulcer prevalence, immunization rates, etc)	Develop methods to case-mix adjust the staffing information. Develop methods for more frequent and accurate reporting of staffing data based on payroll information. Develop a 5-star rating system for nursing home quality. Begin to include information on resident and family satisfaction.
3	Explanations + Technical Assistance	Explanations of the survey results, quality measures, staffing data, how to use the website. Information about other resources. Map and directions.	Expand on the explanations and on other resources available to assist in decision-making or interpreting the data. Emphasize even more that there is no substitute to visiting the nursing home, talking with staff and residents, and talking with other knowledgeable sources in the community (e.g. ombudsman programs). Provide information on additional community resources (e.g. assisted living, home & community-based programs).

Public Participation: CMS has established a dedicated email box to receive comments ("BetterCare@cms.hhs.gov"). Subsequent discussions will be held with individual stakeholder groups as we focus on particular ideas.

Beginning to Focus: For the near-term, we are particularly interested in feedback regarding the suggestion for a "five-star" rating system for nursing home quality that would make effective use of available information. A considerable amount of relevant work was previously accomplished in the development of a proposal for a Nursing Home Value-Based Purchasing (NHVBP) demonstration that would use data from surveys, quality measures, staffing information, and other sources to sensitize the payment system to differences in quality of care.

II. "Five-Star" Rating System - *Nursing Home Compare* Web site

Consistent with CMS' press release of June 18, 2008, a "five-star" rating system will provide a composite view of quality and safety information currently on *Nursing Home Compare* to help beneficiaries, their families, and caregivers compare nursing homes more easily.

A. Setting the Stage

CMS first launched Nursing Home Compare in 1998, a Web site designed to help consumers choose a nursing home, as part of 22 initiatives to improve nursing home quality of care. The Nursing Home Compare Web site (which has 1.3 million page views per month) has evolved--adding information on quality measures as well as survey results and information about individual nursing homes such as the name, address, and participation in Medicare, Medicaid or both programs.

Currently, a consumer may search for a nursing home by geography (state or county), by proximity (city or zip code), or by name. Helpful information includes web pages on data details, resources, and background information about the tool. Once a consumer has gone through the initial selection steps, and nursing homes have been identified, a wealth of data is available providing nursing home summary information on quality measures, total number of health deficiencies, fire safety deficiencies, nursing staff hours per resident per day, CAN hours per resident per day, location of the nursing homes, as well as maps and directions. We also provide the consumer with a "Nursing Home Checklist," to help evaluate the nursing homes that consumers visit; we also encourage those when selecting to visit nursing homes, contact long-term care ombudsman or the State Survey Agency. All of these key contacts can by obtained by clicking on the link "Helpful Contacts."

B. "Five-Star" Rating Data Sources

The "five-star" quality rating system will provide a nursing home quality of care rating of 1 to 5 stars derived from three data sources. This data is currently provided on Nursing Home Compare. The rating will include health survey inspections, quality measures, and the nurse staffing information from the most recent health survey inspection. CMS' intent for this rating is to provide useful information to consumers in a simple format about how each nursing home performs in terms of quality. This will be the first time that CMS will offer such a rating system for the fee-for-service, or traditional Medicare program. Currently, CMS assists beneficiaries and their families in making nursing home choices by providing information on individual measures of quality of care, staffing, and survey inspection information, all of which is listed on the Compare site.

The more sources and dimensions the greater the potential to convey a full sense of quality and to discern key strengths and weakness. CMS currently posts on *Nursing Home Compare* certain information from surveys, quality measures, and staffing data. However, it is not easy for consumers to gain from the current postings an overall sense of the quality of care in a nursing home. The goal of the "five-star" composite score will be to take information currently available to the public and create a mechanism to make this data more user-friendly and more meaningful distinctions between high performing and low performing homes.

B1. Survey & Certification Data or Health Survey Inspections

CMS' nursing home survey & certification system classifies deficiencies by scope and severity according to a national rating grid. Shaded boxes within the enforcement grid (Figure 1) denote deficiency ratings that constitute ***Substandard Quality of Care*** if the requirement which is not met is one that falls under one or more of the following federal regulations:

1) 42 CFR 483.13 Resident behavior and facility practices,
2) 42 CFR 483.15 Quality of life, and
3) 42 CFR 483.25 Quality of care.

Figure 1: Nursing home survey deficiency scope + severity grid

Enforcement Grid		**Scope of the Deficiency**		
		Isolated	***Pattern***	***Widespread***
Severity of the Deficiency	***Immediate jeopardy*** to resident health or safety	**J**	**K**	**L**
	Actual harm that is not immediate jeopardy	**G**	**H**	**I**
	No actual harm with potential for more than minimal harm that is not immediate jeopardy	**D**	**E**	**F**
	No actual harm with potential for minimal harm	**A**	**B**	**C**

CMS and States conduct approximately 16,000 standard (comprehensive) surveys each year and about 45,000 to 50,000 complaint investigations that are focused on particular areas that are the subject of complaints. Over a three-year period, this yields a total of 183,000 to 208,000 records.

Using more than one year of survey findings will minimize the chance that a nursing home's results could come from just a short time period of poor performance. We therefore propose to use three years of survey experience, with the more recent findings weighted more heavily. In this manner the nursing home rating will most closely reflect the more recent pattern of quality.

B2. Quality Measures (QMs)

The nursing home quality measures come from resident assessment data that nursing homes routinely collect on all residents at specified intervals during their stay. This data is converted into quality measures that give you another source of information about how well nursing homes are caring for their residents' physical and clinical needs. The quality measures have four intended purposes:

1. To give information about the care at nursing homes to help consumers choose a nursing home for themselves
2. To give consumers information about the care at nursing homes where they already live
3. To get consumers to talk to nursing home staff about the quality of care
4. To give data to the nursing home to help them with their quality improvement efforts.

We are proposing to use only a subset of the nineteen quality measures. The quality measures are not benchmarks, thresholds, guidelines, or standards of care. They are based on care provided to the population of residents in a facility, not to any individual resident, and are not appropriate for use in a litigation action. This information is self-reported by a nursing home. (*See Appendix Two for a discussion of the 19 Quality Measures)*

B2. Staffing Data

Nursing home staffing data have been posted on *Nursing Home Compare* for a number of years. The staffing data posted are shown at the level of a facility and represent the average number of hours and minutes per day of care provided per resident in the facility. The staffing data are collected at the time of the on-site survey of the nursing home, on average once a year. This information is self-reported by the nursing home. The data are stored in the CMS OSCAR database. While these data are informative, this raw form of display has limited ability to address whether the facility seems to be adequately staffed or not.

CMS is considering a case-mix adjustment system that will be designed based on the Resource Utilization Groups (RUGs) used by CMS for payment to nursing homes. As part of the Medicare payment system for nursing homes, residents are assigned to one of 53 RUGs, based on the amount of resources needed, on average, to take care of a resident with similar needs. These resources include the minutes of nursing care needed, based on a CMS time study that involved actually timing the minutes of care delivered.

Connections between Staffing and Quality

Staffing is a vital component of quality care for nursing home residents. Associations have been found between higher staffing levels in nursing homes and fewer hospitalizations, fewer infections, fewer pressure ulcers, less skin trauma, less weigh loss, decreased resistance to care, and improved functional status. Reports by the US General Accounting Office, the US Office of the Inspector General, and CMS have identified a range of serious problems in nursing homes and have implicated inadequate direct care staffing as a potential cause of many of the problems observed. In 2003, the National Quality Forum (NQF) Nursing Home Steering Committee recommended that a nurse staffing quality measure be included in the set of nursing home quality measures that are publicly reported by CMS (*See* National Quality Forum. *National Voluntary Consensus Standards for Nursing Home Care*. 2005. Available at http://www.qualityforum.org). In 2004, the Institute of Medicine (IOM) report entitled "Keeping Patients Safe: Transforming the Work Environment of Nurses" cited further evidence for a relationship between nurse staffing and quality of care (*See* Institute of Medicine, Committee on the Work Environment for Nurses and Patient Safety. 2004. Page, Ann., editor. *Keeping Patients Safe: Transforming the Work Environment for nurses*. Washington, DC, National Academies Press.). A recent CMS-funded systematic review of the literature assessing studies of staffing and quality in nursing homes provides further documentation of the relationship (*See*, Bostick, JE, Rantz, MJ, Flesner, MK, and Riggs, CJ: Systematic Review of Studies of Staffing and Quality in Nursing Homes. J Am Med Dir Assoc 7: 366-376, 2006).

III. Long-Term Strategies for *Nursing Home Compare* Web site

CMS receives a steady stream of feedback from consumers, advocates, nursing homes, and associations. We also believe this Open Door Forum is an additional opportunity for the public, as we receive comments specific to the "five-star" rating system, to also have input into our long-term strategies.

We have begun to compile this information; some of this feedback has included the following:

On the look of the web page & the use of the search tool:

- Provide more enhanced communication prior to the immediate request to select a nursing home based on search criteria and that CMS should emphasize that this selection is only part of the process, that we can rearrange our information to identify the "Nursing Home Checklist" and "Helpful Contacts" section as the first step.
- Provide more direction on navigating through the tool.
- Review the content on the web site, use plain language to provide consumers with a clearer understanding of the context and how this information affects there particular interests, such as how is this information useful for "my situation, my values, or my decisions."
- CMS needs to improve its navigational styles, such as tabs, or hypertext.

On the data sources available:

- Information should be added about the 2567 form available at the nursing home. Currently many states provide this information on the State and local web sites. Currently States are obligated to make available 2567s within 14 days from the end of the health survey inspection.

On the nursing home characteristics:

- CMS should consider adding more characteristics about nursing homes, such as specialty units, and various languages spoken by the staff.
- CMS should require nursing homes to conduct or provide resident satisfaction survey results, or CMS should collect this information on nursing homes.
- Include various additional accreditation aspects, such as CARF accreditation

Appendix One: Public Comments & Questions

CMS has established a dedicated email box to receive comments ("BetterCare@cms.hhs.gov"). Specifically, CMS would like your comments on the following:

A. On the Rating System:

A1. What is your position on the "five-star" rating system as proposed?

A2. What do you see as the pitfalls of such a rating system?

A3. What do you see as the benefits of such a rating system?

B. On the Available Data Sources:

B1. CMS has decided that it will use only a subset of the nineteen quality measures currently available. Of the nineteen what would you consider your top selections? Why should CMS consider these specifically? (See Appendix Two for the full list and explanation).

B2. Do you have any concerns regarding case-mix adjusting the staffing data?

B3. CMS has received continued feedback on the addition of 2567 forms for each health inspection and compliant investigation. One 2567 could be an upwards 100 to 150 pages of regulatory text and the manner in which the nursing home did not meet the particular regulatory requirement. Although, this would require a great deal of investigation as to costs, web feasibility, federal regulatory compliance and CMS would not be able to tackle this concern in the near term, we would still like input to determine if this information would prove beneficial to consumers? And if beneficial, in what way?

B4. Currently, some States provide 2567 forms on their State Web sites, should this be left for States to determine this function?

C. On Additional Nursing Home Characteristics:

C1. How useful would it be for consumers to have resident satisfaction surveys made available? What's your opinion on consumer and staff survey results as well?

C2. What kinds of nursing home characteristics would prove informative for consumers when conducting a search?

Appendix Two: Existing Quality Measures for Long-Stay and Short-Stay Residents

***Existing Quality Measure for Long-Stay Residents*: Long-Stay Residents are people in an extended or permanent nursing home stay**

Quality Measures for Long-Stay Residents	Used on NH Compare or NH-VBP*	Explanation
1. **ADLs**: Percent of residents whose need for help with daily activities has increased.	Yes - Yes	Measures change over time - Daily activities included are feeding oneself, moving from one chair to another, changing positions while in bed, and going to the bathroom alone. Residents value independent functioning. The ability to perform daily functions is important in maintaining health status and quality of life.
2. **Mobility**: Percent of residents whose ability to move about in and around their room got worse.	Yes - Yes	Measures change over time – includes moving either by walking or by using a wheelchair. Residents who lose mobility may also lose the ability to perform other activities of daily living, making it difficult to participate in physical and social activities. Lack of mobility can affect sleep quality, risk of heart disease or blood clots, risk of pressure sores, depression and anxiety.
3. **Pressure Ulcers:** Percent of *high-risk* residents who have pressure sores.	Yes - Yes	"High-risk" includes those who are comatose, unable to move or change position on their own, or nutritionally compromised. Pressure ulcers are included in GPRA goals. Pressure sores can be painful, take a long time to heal, and cause complications such as skin and bone infections.
4. **Long-term Catheters:** Percent of residents who have a catheter inserted and left in their bladder.	Yes - Yes	Catheters should be used only when it is medically necessary, and not for the convenience of nursing home staff. Catheters may result in urinary tract infections, sepsis, physical injury, skin problems, bladder stones, or blood in the urine.
5. **Restraints**: Percent of residents who were physically restrained.	Yes - Yes	Physical restraints are included in GPRA goals. Restraints may only be used on a doctor's order as part of treatment of a medical condition. Those restrained can become weak, lose ability to toilet independently, or develop pressure sores.
6. **UTIs**: Percent of residents with a urinary tract infection.	Yes - No	Most urinary tract infections are preventable through good hygiene, provision of frequent opportunities to empty the bladder, and maintaining hydration. Urinary tract infections can result in sepsis, kidney problems, or complications like delirium.
7**. Flu**: Percent of residents given vaccine during flu season	Yes - No	The "flu" (also called influenza), is a very contagious respiratory infection. Flu is spread very easily from person to person. People are usually infected when a person coughs or sneezes. The flu shot (influenza vaccination) can prevent one from getting the flu or reduce one's risk of becoming seriously ill from the flu. People who are age 65 and older are at higher risk for developing serious life-threatening medical complications from the flu.
8. **Pneumonia**: Percent of residents who were	Yes - No	The pneumococcal shot (pneumococcal vaccination) may help you prevent, or lower the risk of becoming seriously ill from

Quality Measures for Long-Stay Residents	Used on NH Compare or NH-VBP*	Explanation
assessed and given Pneumoccal-vaccination		pneumonia caused by bacteria. It may also help prevent future infections.
9. **Pain: Percent of** residents who have moderate to severe pain	Yes - No	Residents should always be checked regularly by nursing home staff to see if they are having pain. Residents (or someone on their behalf) should let staff know if they are in pain so efforts can be made to find the cause and make the resident more comfortable. If pain is not treated, a resident may not be able to perform daily routines, may become depressed, or have an overall poor quality of life. This percentage may include some residents who are getting or have been prescribed treatment for their pain, but who refuse pain medicines or choose to take less. Some residents may choose to accept a certain level of pain so they can stay more alert.
10. **Pressure Ulcers**: Percent of *low-risk* residents who have pressure sores	Yes - No	"Low-risk" residents include those who are active, change positions and are getting the nutrients they need. Pressure ulcers are included in GPRA goals. Pressure sores can be painful, take a long time to heal, and cause other complications such as skin and bone infections.
11. **Depression/Anxiety**: Percent of residents who are more depressed or anxious	Yes - No	Depression is a medical problem of the brain that can affect how a resident thinks, feels, and behaves. Signs of depression may include fatigue, a loss of interest in normal activities, poor appetite, and problems with concentration and sleeping. Anxiety is excessive worry. Signs of anxiety can include trembling, muscle aches, problems sleeping, stomach pain, dizziness and irritability. Feeling depressed or anxious can lessen one's quality of life and lead to other health problems.
12. **Incontinence**: Percent of Low-Risk residents who lose control of their bowels or bladder	Yes - No	Loss of bowel or bladder control is not a normal sign of aging and can often be successfully treated. Loss of bowel and bladder control can be caused by a number of factors: Physical problems (like constipation, muscle weakness, or a bladder infection), Location problems (like the bathroom is too far away), Reaction to medication, Limited ability to walk or move around, Diet and fluid intake, Toilet routine (timing trips to the bathroom), and Whether someone can provide assistance when needed. Certain medical conditions. For instance, residents with diabetes, dementia, spinal cord injury, or neurological disease are at a higher risk of losing bowel and bladder control.
13. **Bed or Chair**: Percent of residents who spent most of their time in bed or in a chair	Yes - No	A decline in physical activity may come with age due to muscle loss, joint stiffness, and fear of injury, worsening illness, or depression. Residents who spend too much time in bed or a chair may lose the ability to perform activities of daily living, like eating, dressing, or getting to the bathroom.
14. **Weight Loss**: Percent		A loss of 5% or more of body weight in one month is usually

Quality Measures for Long-Stay Residents	Used on NH Compare or NH-VBP*	Explanation
of residents who lose too much weight	Yes - No	considered unhealthy (for example, a 150 pound person should not lose more than 71/2 pounds in one month). Too much weight loss can make a person weak, change how medicine works in the body, or cause the skin to break down which can lead to pressure sores. Too much weight loss may mean that the resident is ill, refuses to eat, is depressed, or has a medical problem that makes eating difficult (like weakness caused by a stroke). It could also mean that the resident is not being fed properly, their medical care is not being properly managed, or that the nursing home's nutrition program is poor.

***Existing Quality Measures for Short-Stay Residents*: Short-Stay Residents are people needing short-term skilled nursing care or rehabilitation services following a hospital stay, who are expected to return home.**

Quality Measures for Short-Stay Residents	Used on NH Compare or NH-VBP*	Explanation
15**. Delirium**: Percent of residents with delirium	Yes - No	Delirium is severe confusion and rapid changes in brain function, usually caused by a treatable physical or mental illness. It is not a normal part of aging and should not be confused with dementia. Left untreated, the death rate is high. Finding and treating the cause can help restore the resident's health and quality of life.
16. **Severe Pain**: Percent of residents who had moderate to severe pain during the past week	Yes - No	Residents should be checked regularly to see if they are having pain. Untreated pain may make it difficult to perform daily routines, and may contribute to depression or an overall poor quality of life.
17. **Pressure Ulcers**: Percent of residents who have pressure sores	Yes - No	Pressure ulcers are included in GPRA goals. Pressure sores can be painful, take a long time to heal, and cause complications such as skin and bone infections.
18. **Flu**: Percent of residents given influenza vaccination during the flu season	Yes - No	The "flu" (also called influenza), is a very contagious respiratory infection. Flu is spread very easily from person to person. People are usually infected when a person coughs or sneezes. The flu shot (influenza vaccination) can prevent one from getting the flu or reduce one's risk of becoming seriously ill from the flu. People who are age 65 and older are at higher risk for developing serious life-threatening medical complications from the flu.
19. **Pneumonia**: Percent of residents who were assessed and given pneumococcal vaccination	Yes - No	The pneumococcal shot (pneumococcal vaccination) may help you prevent, or lower the risk of becoming seriously ill from pneumonia caused by bacteria. It may also help prevent future infections.

* NH-VBP is the proposed Nursing Home Value-Based Purchasing Demonstration

Press Releases: CMS TO RATE NURSING HOME QUALITY NEW FIVE-STAR SYSTEM TO BE ADDED TO NURSING HOME COMPARE SITE

CMS TO RATE NURSING HOME QUALITY NEW FIVE-STAR SYSTEM TO BE ADDED TO NURSING HOME COMPARE SITE

The Centers for Medicare & Medicaid Services today announced it will soon launch a ground-breaking ranking system of America's nursing homes, giving each a "star" rating. CMS is requesting comments on the system designed to provide patients and their families an easy to understand assessment of nursing home quality, making meaningful distinctions between high performing and low performing homes.

The ratings will be posted on the agency's Nursing Home Compare Web site by the end of this year. A sample screen shot of the proposed star ratings is available at www.cms.hhs.gov/PressContacts/10_PR_fivestar.asp. Nursing Home Compare can be found at www.medicare.gov.

"More than three million Americans rely on services provided by a nursing home at some point during the year. The new "five-star" rating system will provide a composite view of the quality and safety information currently on Nursing Home Compare to help beneficiaries, their families, and caregivers compare nursing homes more easily," said Kerry Weems, CMS acting administrator.

Through its consumer information Web sites, CMS has begun to offer more and better information on the quality, patient satisfaction, and cost of care. Today's announcement, for example, closely follows the agency's first nationwide identification of chronically underperforming nursing homes. Facilities enrolled in the Special Focus Facility (SFF) initiative are placed under special scrutiny and undergo twice as many inspections as other homes. The "SFF" designation was recently added to the Nursing Home Compare Web site at www.medicare.gov/NHCompare.

Last year, CMS also initiated a star rating system for health and prescription drug plans that are available to Medicare beneficiaries.

This will be the first time that CMS will offer such a rating system for the fee-for-service, or traditional Medicare program. Currently, through the Compare Web site, CMS assists beneficiaries and their families in making nursing home choices by providing information on individual measures of quality of care, staffing, and survey inspection information.

"Nursing Home Compare's new rating system will also provide an incentive for nursing homes to strive toward earning a five-star rating by providing an environment of better quality care," Weems said.

This new rating system is rooted in the tradition of the OBRA'87 nursing home reform law and quality improvement campaigns such as the *Advancing Excellence in America's Nursing Homes*, a collaborative coalition of consumers, health care providers, labor, and nursing home professionals. CMS plans to work with other health care providers and consumers to make similar rating systems available for hospitals, home health agencies, and end-stage renal disease facilities in the future.

The agency is also considering adding new information to that already available on Nursing Home Compare such as whether a nursing home specializes in caring for patients with dementia, on ventilators, or in need of specialized rehabilitation services. Information on patient and family satisfaction with services at a facility may also be added to *Nursing Home Compare*. A "Guide to Choosing a Nursing Home," a publication that includes information about the types of long-term care, local nursing home comparisons, and how to pay for nursing home care, can also be found on the site.

The five-star rating system will begin to be published in December 2008. During June and July 2008 the agency is soliciting ideas, comments, and suggestions from the public, consumer groups, nursing homes, and many others. Comments may be sent to BetterCare@cms.hhs.gov.

Descriptive information about the quality rating system and its progress may be obtained after June 22, 2008 on the CMS "Hot Topics" webpage at http://www.cms.hhs.gov/SurveyCertificationGenInfo/02_HotTopics.asp#TopOfPage. This webpage will also provide details about a national conference call (called an "open door forum") that the agency will have about the proposed five-star system on June 24, 2008.

"While Nursing Home Compare is very informative, it is important to note that this should be just one of the tools that family members and caregivers use in the selection of a nursing home," Weems said. "There is no substitute for visiting a nursing home in person and meeting with staff, residents, and other families."

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