

August 2009

NURSING HOMES

CMS's Special Focus Facility Methodology Should Better Target the Most Poorly Performing Homes, Which Tended to Be Chain Affiliated and For-Profit



GAO

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Highlights of [GAO-09-689](#), a report to congressional requesters

Why GAO Did This Study

In 1998, CMS established the Special Focus Facility (SFF) Program as one way to address poor performance by nursing homes. The SFF methodology assigns points to deficiencies cited on standard surveys and complaint investigations, and to revisits conducted to ensure that deficiencies have been corrected. CMS uses its methodology periodically to identify candidates for the program—nursing homes with the 15 worst scores in each state—but the program is limited to 136 homes at any point in time because of resource constraints. In 2008, CMS introduced a Five-Star Quality Rating System that draws on the SFF methodology to rank homes from one to five stars. GAO assessed CMS's SFF methodology, applied it on a nationwide basis using statistical scoring thresholds, and adopted several refinements to the methodology. Using this approach, GAO determined (1) the number of most poorly performing homes nationwide, (2) how their performance compared to that of homes identified using the SFF methodology, and (3) the characteristics of such homes.

What GAO Recommends

GAO is recommending that the CMS Administrator consider a home's relative performance nationally when allocating SFFs across states and take actions to refine the SFF methodology to improve the identification of SFFs. CMS generally agreed in principle with our recommendations and said that it would evaluate the effects of adopting them.

View [GAO-09-689](#) or [key components](#). For more information, contact John Dicken at (202) 512-7114 or dickenj@gao.gov.

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CMS's Special Focus Facility Methodology Should Better Target the Most Poorly Performing Homes, Which Tended to Be Chain Affiliated and For-Profit

What GAO Found

According to GAO's estimate, almost 4 percent (580) of the roughly 16,000 nursing homes in the United States could be considered the most poorly performing. These 580 homes overlap somewhat with the 755 SFF Program candidates—the 15 worst homes in each state—and the 136 homes actually selected by states as SFFs. For example, GAO's estimate includes 40 percent of SFF Program candidates and about half of the active SFFs as of December 2008 and February 2009, respectively. Under GAO's estimate, however, the most poorly performing homes are distributed unevenly across states, with 8 states having no such homes and 10 others having from 21 to 52 such homes.

CMS has structured the SFF Program so that every state (except Alaska) has at least one SFF even though the worst performing homes in each *state* are not necessarily the worst performing homes in the *nation*. To identify the worst homes in the nation, GAO applied CMS's SFF methodology on a nationwide basis using statistical scoring thresholds and made three refinements to that methodology, which strengthened GAO's estimate. The scoring thresholds were (1) necessary because there were no natural break points that delineated the most poorly performing homes from all other nursing homes and (2) conservative, focusing on chronic poor performance generally over a 2- or 3-year period or very poor performance over about 1 year. The most poorly performing homes identified by GAO averaged over 46 percent more serious deficiencies that caused harm to residents and over 19 percent more deficiencies that placed residents at risk of death or serious injury (immediate jeopardy), compared to the 755 SFF Program candidates identified by CMS's approach. GAO's three refinements to CMS's SFF methodology had a moderate effect on the composition of the list of homes that GAO identified as the most poorly performing. First, deficiency points from CMS's Five-Star Quality Rating System were used because they decreased the disparity between immediate jeopardy and lower-level deficiencies, such as those with the potential for more than minimal harm, which compensates somewhat for the understatement of serious deficiencies in some states. Second, homes received extra points when certain actual harm deficiencies occurred in standards areas that CMS categorizes as substandard quality of care, an important change because we found that many homes had at least one such deficiency. Third, the full deficiency history of homes was included. CMS recognizes that its methodology overlooks deficiencies for some homes, which almost always results in scores that are lower than if all deficiencies were included in the scores.

GAO found that the most poorly performing nursing homes had notably more deficiencies with the potential for more than minimal harm or higher and more revisits than all other nursing homes. For example, the most poorly performing nursing homes averaged about 56 such deficiencies and 2 revisits, compared to about 20 such deficiencies and less than 1 revisit for all other homes. In addition, the most poorly performing homes tended to be chain affiliated and for-profit and have more beds and residents.

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Abbreviations

CMS	Centers for Medicare & Medicaid Services
LPN/LVN	licensed practical nurse/licensed vocational nurse
OSCAR	On-Line Survey, Certification, and Reporting system
SFF	Special Focus Facility
SQC	substandard quality of care

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United States Government Accountability Office
Washington, DC 20548

August 28, 2009

The Honorable Herb Kohl
Chairman
Special Committee on Aging
United States Senate

The Honorable Charles E. Grassley
Ranking Member
Committee on Finance
United States Senate

The nation's 1.4 million nursing home residents are a highly vulnerable population of elderly and disabled individuals who rely on nursing homes to provide high-quality care. The Centers for Medicare & Medicaid Services (CMS) contracts with state survey agencies to conduct inspections, known as standard surveys, and complaint investigations to determine whether the nation's roughly 16,000 nursing homes are complying with federal quality standards. Nursing homes must meet those standards in order to participate in Medicare and Medicaid.¹ Our prior reports have found that some nursing homes are chronically noncompliant; that is, they have been cited repeatedly by state survey agencies for serious deficiencies, such as residents having preventable pressure sores that harmed them or put them at risk of death or serious injury.² In 1998, CMS established the Special Focus Facility (SFF) Program as one way to address poor performance by nursing homes.

CMS uses a formula—the SFF methodology—to score the relative performance of nursing homes and identify the 15 poorest performing homes in each state as candidates for the SFF Program. State survey agencies then work with CMS to choose some of those candidates to

¹Medicare is the federal health care program for elderly and disabled individuals. Medicaid is the joint federal-state health care financing program for certain categories of low-income individuals. Combined Medicare and Medicaid payments for nursing home services were about \$78 billion in 2007, including a federal share of about \$54 billion.

²Such nursing homes often have a pattern of cycling in and out of compliance. See GAO, *Nursing Homes: Additional Steps Needed to Strengthen Enforcement of Federal Quality Standards*, [GAO/HEHS-99-46](#) (Washington, D.C.: Mar. 18, 1999), and *Nursing Homes: Proposal to Enhance Oversight of Poorly Performing Homes Has Merit*, [GAO/HEHS-99-157](#) (Washington, D.C.: June 30, 1999).

participate in the program; those selected receive more intensive oversight, including more frequent surveys. CMS limits the SFF Program to 136 nursing homes nationwide (fewer than 1 percent of nursing homes) at any point in time because of resource constraints.³ Our prior reports have demonstrated that not all chronically noncompliant nursing homes are included in this program and that the number of poorly performing nursing homes nationwide is therefore greater than 136.⁴

You expressed interest in CMS's efforts to influence the performance of poorly performing nursing homes. In this report, we (1) determined the number of nursing homes in the United States that can be identified as the most poorly performing, (2) analyzed how those homes' performance compared to that of nursing homes identified using CMS's SFF methodology, and (3) assessed the characteristics of the most poorly performing nursing homes that distinguish them from all other nursing homes. You also asked us to examine the operation of the SFF Program, including its effect on the performance of homes selected as SFFs. We will address this portion of your request in a subsequent report.

To determine the number of poorly performing nursing homes in the nation and how the performance of such homes compared to that of homes identified using CMS's SFF methodology, we began by interviewing CMS officials, reviewing documentation related to the agency's SFF methodology, obtaining a copy of the computer program CMS used to score and rank nursing homes, and analyzing data on deficiencies and revisits from CMS's On-Line Survey, Certification, and Reporting system (OSCAR) database. The SFF methodology creates a total score for each nursing home over three cycles by assigning points to (1) deficiencies cited during the three most recent standard surveys, (2) deficiencies cited on the last 3 years of complaint investigations, and (3) the number of revisits surveyors made to ensure that the nursing home had corrected the

³In a 2007 report, we recommended that the Administrator of CMS consider further expanding the SFF Program to include all homes that met a certain threshold established by CMS to qualify as poorly performing. CMS agreed with the concept of expanding the program, but indicated that it lacked the resources needed to expand the number of surveys. See GAO, *Nursing Homes: Efforts to Strengthen Federal Enforcement Have Not Deterred Some Homes from Repeatedly Harming Residents*, [GAO-07-241](#) (Washington, D.C.: Mar. 26, 2007).

⁴See [GAO-07-241](#), and GAO, *Nursing Homes: Federal Actions Needed to Improve Targeting and Evaluation of Assistance by Quality Improvement Organizations*, [GAO-07-373](#) (Washington, D.C.: May 29, 2007).

deficiencies cited on the three most recent standard surveys.⁵ To determine the adequacy of the SFF methodology, we compared it to other compliance-based measures of poor performance and tested the sensitivity of the methodology to variations such as not giving greater weight to recent poor performance compared to poor performance that occurred in earlier years. Based on our examinations of the SFF methodology, document review, and interviews, we concluded that the SFF methodology is reasonable and comprehensive. Using our assessment of the SFF methodology, we developed our estimate of the most poorly performing nursing homes by (1) applying the SFF methodology on a nationwide basis using statistical scoring thresholds and (2) adopting three refinements that helped to identify some homes that would otherwise have been missed but that had a moderate impact on the composition of the list of homes we identified as the most poorly performing. We estimated the number of most poorly performing nursing homes in the nation and the number of homes identified using CMS's SFF methodology—which we refer to as SFF Program candidates—by analyzing OSCAR data from a particular point in time (December 2008).⁶ We also analyzed a list obtained from CMS of SFFs that participated in the program from January 2005 through February 2009 to determine the number of poorly performing nursing homes that were also SFFs.

To determine the characteristics of the most poorly performing nursing homes that distinguish them from all other nursing homes, we analyzed CMS data as of December 2008 on deficiencies, revisits, and other information that describe nursing home characteristics.⁷ We also analyzed case-mix-adjusted nurse staffing hours available from CMS's Five-Star Quality Rating System (Five-Star System), which were dated November

⁵Each cycle consists of a standard survey, which occurs roughly annually, revisits associated with the standard survey, and 12 months of complaint investigations. Multiple revisits are an indicator of more serious problems in achieving or sustaining compliance.

⁶OSCAR data change continually as new surveys are conducted and entered into the database, but there can be a lag time. As a result, the data we analyzed did not necessarily include all surveys conducted through December 2008. The number and composition of our estimates of the most poorly performing nursing homes and the SFF Program candidates will change over time as new surveys and revisits are conducted and considered.

⁷One characteristic we analyzed, "multi-nursing home (chain) ownership," is self-reported by nursing homes. According to CMS, multi-nursing home chains have two or more homes under one ownership or operation. In this report, we refer to nursing homes that have indicated that they operate under multi-nursing home (chain) ownership as having chain affiliation.

2008, and data related to certain enforcement actions obtained from CMS in October 2008.

Our work was also informed by analyzing information available at CMS's Providing Data Quickly Web site; reviewing our prior reports; interviewing experts in long-term care research; interviewing officials from CMS's central office, all 10 CMS regions, and 14 state survey agencies; and reviewing some states' approaches to rating nursing home quality. For a more detailed discussion of our scope and methodology, see appendix I. To ensure the reliability of the OSCAR deficiency and revisit data for our purposes as well as the reliability of the data we analyzed to determine the characteristics of the most poorly performing nursing homes compared to those of all other nursing homes, we interviewed CMS officials, reviewed CMS documentation, conducted electronic testing to identify obvious errors, and traced a selection of records to another CMS reporting system. Based on these activities, we determined that the data we analyzed were sufficiently reliable for our purposes.

We conducted this performance audit from February 2008 through August 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Titles XVIII and XIX of the Social Security Act establish minimum requirements that all nursing homes must meet to participate in the Medicare and Medicaid programs, respectively. The Omnibus Budget Reconciliation Act of 1987 focused the requirements on the quality of care actually provided by a home.⁸ To help beneficiaries make informed decisions when selecting or evaluating nursing homes, CMS increased the amount of information publicly available on its Nursing Home Compare Web site in 2008 by rating the quality of each nursing home on a five-level scale.⁹

⁸Pub. L. No. 100-203, §§ 4201, 4211, 101 Stat. 1330, 1330-160, 1330-182 (codified in pertinent part at 42 U.S.C. § 1395i-3 and 42 U.S.C. § 1396r).

⁹Nursing Home Compare is available at <http://www.medicare.gov/NHCompare>.

Standard Surveys and Complaint Investigations

To assess whether nursing homes meet federal quality standards, state survey agencies conduct standard surveys, which occur roughly once per year, and complaint investigations.¹⁰ A standard survey involves a comprehensive assessment of quality standards.¹¹ In contrast, complaint investigations generally focus on a specific allegation regarding resident care or safety made by a resident, family member, or nursing home staff.

Federal quality standards focus on the delivery of care, resident outcomes, and facility conditions. These quality standards, totaling approximately 200, are grouped into 15 categories, such as Resident Rights, Quality of Care, Quality of Life, and Resident Behavior and Facility Practices.¹² Nursing homes that meet these quality standards can be certified to participate in Medicare, Medicaid, or both programs. Homes may occasionally change their participation type, or, according to CMS, states may require nursing homes to change their participation type. We refer to this type of change that results in a new provider identification number as a “technical status change.” Such a change may affect the source of payment—Medicare or Medicaid—that the nursing home is eligible to receive. When a technical status change occurs, CMS’s SFF methodology as applied does not incorporate the nursing home’s complete survey history.

Survey Deficiencies

States classify deficiencies identified during either standard surveys or complaint investigations in 1 of 12 categories according to their scope (i.e., the number of residents potentially or actually affected) and severity (i.e., the potential for or occurrence of harm to residents).¹³ (See table 1.)

¹⁰Every nursing home receiving Medicare or Medicaid payment must undergo a standard survey not less than once every 15 months, and the statewide average interval for these surveys must not exceed 12 months. See 42 U.S.C. § 1395i-3(g)(2)(A)(iii); 42 U.S.C. § 1396r(g)(2)(A)(iii). CMS generally interprets these requirements to permit a statewide average interval of 12.9 months and a maximum interval of 15.9 months for each home.

¹¹The standard survey also includes an assessment of federal fire safety standards. The fire safety portion of a standard survey is not always conducted concurrently with the assessment of other standards.

¹²Other areas include Admission, Transfer and Discharge Rights; Resident Assessment; Pharmacy Services; Administration; Nursing Services; Dietary Services; Physician Services; Specialized Rehabilitative Services; Dental Services; Infection Control; and Physical Environment.

¹³In this report, we use the term states, including the District of Columbia, to refer to state survey agencies.

An A-level deficiency is the least serious and is isolated in scope, while an L-level deficiency is the most serious and is widespread throughout the nursing home. Nursing homes with deficiencies at the A, B, or C levels are considered to be in substantial compliance with quality standards, whereas nursing homes with D-level through L-level deficiencies are considered noncompliant. For most deficiencies, a home is required to prepare a plan of correction, and depending on the severity of the deficiency, surveyors may conduct a revisit to ensure that the nursing home has implemented its plan and corrected the deficiency. Revisits are not required for most deficiencies below the actual harm level—A through F.¹⁴

Table 1: Scope and Severity of Deficiencies Identified during Nursing Home Surveys

Severity	Scope		
	Isolated	Pattern	Widespread
Immediate jeopardy ^a	J	K	L
Actual harm	G	H	I
Potential for more than minimal harm	D	E	F
Potential for minimal harm ^b	A	B	C

Source: CMS.

^aActual or potential for death/serious injury.

^bNursing home is considered to be in “substantial compliance.”

As we reported in May 2008, there can be considerable variation among states in the proportion of nursing homes cited for deficiencies at the G through L levels.¹⁵ We concluded that this interstate variation suggests that surveyors in some states are missing some serious deficiencies or understating their scope and severity. We provided examples of such understatement in our May 2008 report. Specifically, we reported that during fiscal years 2002 through 2007, about 15 percent of federal comparative surveys nationwide found that the state surveys had failed to cite at least one deficiency at the most serious levels of noncompliance (G

¹⁴A revisit is required for deficiencies at the G through L levels as well as certain F-level deficiencies.

¹⁵See GAO, *Nursing Homes: Federal Monitoring Surveys Demonstrate Continued Understatement of Serious Care Problems and CMS Oversight Weaknesses*, [GAO-08-517](#) (Washington, D.C.: May 9, 2008).

through L levels) and about 70 percent of them found that the state surveys had failed to cite at least one deficiency at the potential for more than minimal harm level (D through F levels).¹⁶

Enforcement Actions

When deficiencies are cited, federal enforcement actions known as sanctions can be imposed to encourage homes to make corrections. Sanctions are generally reserved for serious deficiencies—those at the G through L levels—that constitute actual harm and immediate jeopardy to residents.¹⁷ Sanctions include fines known as civil money penalties, denial of payment for new Medicare or Medicaid admissions, and termination from the Medicare and Medicaid programs. Such sanctions can affect a home’s revenues and therefore provide financial incentives to return to and maintain compliance. CMS requires states to refer for immediate sanction homes that receive at least one G- through L-level deficiency on successive standard surveys or intervening complaint investigations.¹⁸ In addition, a nursing home with one or more deficiencies at the F through L level—but not G level—in Quality of Care, Quality of Life, or Resident Behavior and Facility Practices must be cited for substandard quality of care (SQC), which generally results in the home’s losing its approval to hold in-house or facility-sponsored nurse aide training.

CMS Efforts That Identify Poorly Performing Nursing Homes

Two of CMS’s efforts that identify poorly performing nursing homes are the SFF Program and the Five-Star System. CMS’s Nursing Home Compare Web site identifies nursing homes that are in the SFF Program, provides a rating of from one to five stars, and also includes data on deficiencies cited during standard surveys and complaint investigations, selected quality of

¹⁶In a federal comparative survey, federal surveyors independently evaluate state surveys by resurveying a home recently inspected by state surveyors and comparing the deficiencies identified during the two surveys. In our May 2008 report, we analyzed the results of 976 comparative surveys conducted by federal surveyors from fiscal years 2002 through 2007. (See [GAO-08-517](#).)

¹⁷The scope and severity of a deficiency is one of the factors that CMS may take into account when imposing sanctions. CMS may also consider a home’s compliance history, desired corrective action and long-term compliance, and the number and severity of all the home’s deficiencies.

¹⁸See [GAO-07-241](#).

The Special Focus Facility Program

care measures, and nurse staffing hours.¹⁹ Both the SFF Program and the Five-Star System score nursing homes by assigning points to deficiencies and the number of revisits, but the points assigned to certain deficiencies differ.

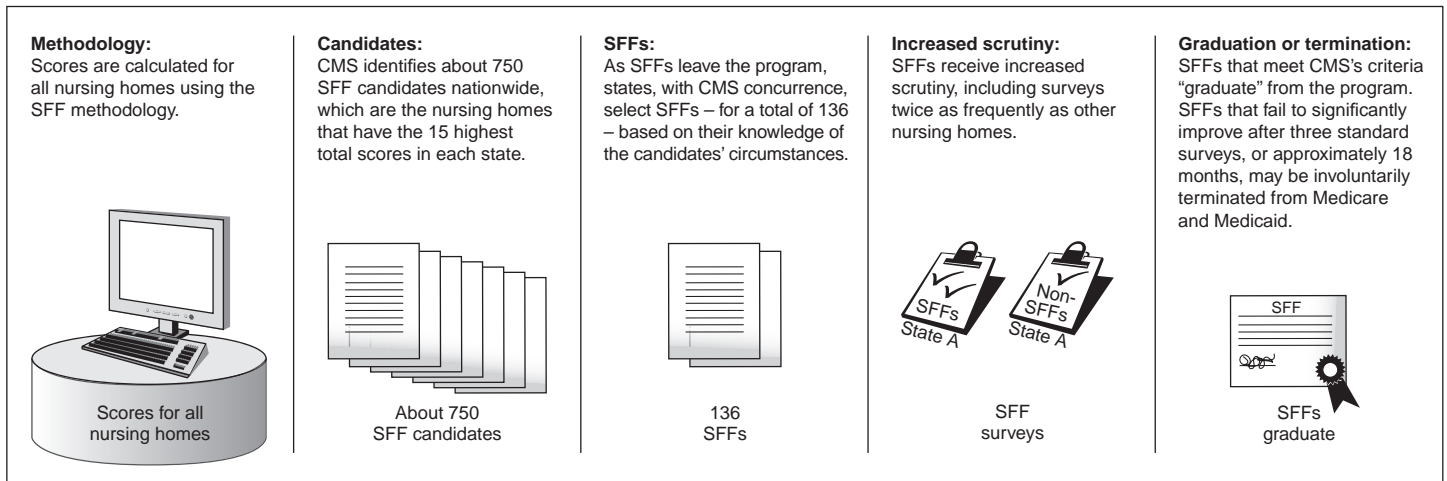
CMS compiles a list of SFF candidates for each state generally on a quarterly basis by using the numeric score generated by its SFF methodology. The SFF candidates are those nursing homes with the 15 highest total scores in each state. From the candidate list, state officials select, with CMS concurrence, nursing homes they think should participate in the program based on their knowledge of the candidates' circumstances. With the exception of Alaska, each state has between one and six SFFs, depending on the number of nursing homes in the state.²⁰ CMS requires states to survey SFFs twice as frequently as other nursing homes to help motivate SFFs to improve. If an SFF meets CMS's criteria for improved performance, CMS removes the SFF designation and the nursing home "graduates" from the program.²¹ According to CMS guidance to states, SFFs that fail to significantly improve after three standard surveys, or about 18 months, may be involuntarily terminated from Medicare and Medicaid. Nursing homes may also choose to terminate from Medicare and Medicaid voluntarily. (See fig. 1.)

¹⁹In addition to deficiencies cited during standard surveys and complaint investigations, quality of care measures are also indicators of nursing home quality. Nursing homes participating in Medicare and Medicaid are required to submit clinical assessment data—known as the Minimum Data Set—on all of their residents. Data are collected on the residents' health, physical functioning, mental status, and general well-being and are used to compute quality of care measures, which indicate potential problem areas that need further review and investigation.

²⁰Alaska does not have any SFFs because it has few nursing homes—only 15 in fiscal year 2008.

²¹The criteria for an SFF to graduate are two consecutive standard surveys and no intervening complaint investigations with deficiencies higher than an E level. In addition, an SFF may not have a deficiency at the G level or higher on the fire safety portion of its most recent standard survey.

Figure 1: How CMS and States Operate the Special Focus Facility Program



Sources: GAO analysis of CMS's SFF program (data); Art Explosion (images).

Note: With 15 SFF candidates per state, including the District of Columbia, but excluding Alaska (because Alaska does not have SFFs), there are a total of 750 SFF candidates. There can be more than 750 SFF candidates if nursing homes in the same state have the same total score.

The SFF methodology assigns points to deficiencies on standard surveys and complaint investigations, and to revisits associated with deficiencies cited on standard surveys, as follows:

- *Deficiencies.* More points are assigned to deficiencies that are higher in scope and severity.²² Additional points are assigned to deficiencies classified as SQC. For example, a nursing home with one J-level deficiency in the Quality of Care category would be assigned 75 points (50 points plus an additional 25 points because the deficiency was SQC). See table 2 for a comparison of the deficiency points assigned by the SFF methodology and the Five-Star System.

²²To avoid potential double-counting, deficiencies that appear on complaint surveys that are conducted within 15 days of a standard survey (either before or after the standard survey) are only counted once. If the scope or severity differs on the two surveys, the highest scope-severity combination is used.

- *Revisits.* Multiple revisits are an indicator of more serious problems in achieving or sustaining compliance. The points for revisits are as follows: 0 for the first revisit, 50 for the second revisit, an additional 75 (total 125) for the third revisit, and an additional 100 (total 225) for the fourth revisit.²³

Table 2: Comparison of Points Assigned to Deficiencies in the SFF Methodology and in the Five-Star System

Methodology	Scope and severity											
	Potential for minimal harm			Potential for more than minimal harm			Actual harm			Immediate jeopardy		
	A	B	C	D	E	F	G	H	I	J	K	L
SFF points	0	0	0	2	4	6	10	20	30	50	100	150
Five-Star System points	0	0	0	4	8	16	20	35	45	50	100	150
Additional SQC points	0	0	0	0	0	4	0	5	5	25	25	25

Source: CMS.

For each nursing home, CMS sums the points associated with the deficiencies (including SQC) and the revisits to create a cycle score for each of the last three cycles. CMS then creates the total score by weighting the more recent cycle scores more heavily.²⁴ The effect of this weighting is that nursing homes that had more recent poor performance have higher total scores and nursing homes that made improvements have lower total scores.

Since the inception of the SFF Program, CMS has changed its scope and methodology several times. For example:

- From 1999 to 2004, each state had two SFFs at any one time, which they selected from a list of four candidates, and the SFF methodology assigned a different number of points to deficiencies using only about 1 year of deficiency data.

²³The SFF methodology does not assign points to revisits associated with deficiencies cited on complaint investigations.

²⁴The most recent score is assigned a weighting factor of one-half, the second most recent score is assigned a weighting factor of one-third, and the third most recent score (from the earliest period) is assigned a weighting factor of one-sixth.

-
- In 2005, CMS expanded the program’s scope by changing the number of SFFs from 1 to 6 per state (excluding Alaska), for a total of 136, and altered the SFF methodology by changing the points assigned to deficiencies and using about 3 years of deficiency data, weighted equally.
 - In 2007, CMS began requiring states to notify a nursing home and its other accountable parties (i.e., the nursing home’s administrator, owners, operators, and governing body) when the nursing home was designated as an SFF.
 - In 2008, CMS began designating SFFs on the Nursing Home Compare Web site and also changed the scoring methodology to assign weights to each year, such that the most recent year’s standard and complaint surveys are given the greatest weight.

The Five-Star Quality Rating System

During the course of our work, CMS implemented its Five-Star System for nursing homes. Every nursing home in the United States is rated from one (much below average) to five (much above average) stars.²⁵

The Five-Star System provides an overall quality rating based on individual ratings for three separate components: (1) assessment of federal quality standards from standard surveys and complaint investigations, which CMS refers to in the Five-Star System as health inspections; (2) ratings on nursing home staffing levels; and (3) ratings on quality of care measures. In December 2008, CMS’s Nursing Home Compare Web site began reporting the star ratings that nursing homes receive for each component of the Five-Star System as well as an overall quality rating.²⁶ According to CMS officials, as of March 2009 the rating for the health inspections component was based on CMS’s SFF methodology, with one variation: the Five-Star System assigns more points to D- through I-level deficiencies

²⁵A two-star rating means a facility ranks “below average;” a three-star rating means “about average;” and a four-star rating means “above average.”

²⁶To determine the overall quality rating, CMS starts with a nursing home’s rating from the health inspections component. One star is then added to the rating for very high component ratings or subtracted from the rating for very low component ratings. The overall quality rating is capped in two circumstances. First, if any nursing home’s health inspections rating is one star, then the overall quality rating cannot exceed two stars. Second, nursing homes currently in the SFF Program have their overall quality rating capped at three stars even if they have high ratings in individual components.

than does the SFF methodology.²⁷ (See table 2.) CMS explained that it changed some of the points assigned to deficiencies in the Five-Star System because the purpose is different from that of the SFF Program. The SFF Program focuses on facilities in each state whose performance is consistently extremely poor, and so it assigns many points to immediate jeopardy deficiencies relative to other, lower-level deficiencies. In contrast, the purpose of the Five-Star System is to distinguish performance across all nursing homes, rather than focus on the poorest performers, and so CMS modified the points to provide more emphasis on deficiencies at the potential for more than minimal harm and actual harm levels. The rating for the second component, staffing data, is based on two elements—total nursing hours per resident day and registered nurse hours per resident day.²⁸ The rating for the third component of the Five-Star System is based on nursing home performance on 10 quality of care measures, such as percentage of high-risk residents who have pressure sores.²⁹

²⁷The Five-Star System assigns the same number of additional points to SQC deficiencies and revisits as the SFF methodology does. According to CMS officials, CMS has not adopted the deficiency points used in CMS's Five-Star System for the SFF methodology because it has not yet analyzed the effects of that change.

²⁸Total nursing hours includes hours for registered nurses, licensed practical nurses/licensed vocational nurses (LPN/LVN), and nurse aides. In general, registered nurses have more training than LPNs/LVNs. Nurse aides include certified nursing assistants, who work under the direction of licensed nurses.

²⁹The quality of care measures component uses 10 measures—7 measures for long-term residents of a facility and 3 measures for individuals who enter a nursing home for a short stay. The 7 measures for long-term residents are the percentage of residents who have an increasing need for help with daily activities, have a worsened ability to move about in and around their rooms, are high risk and have pressure sores, have catheters inserted and left in their bladders, were physically restrained, have urinary tract infections, and have moderate to severe pain. The 3 short-stay measures are the percentage of residents with pressure sores, moderate to severe pain, and delirium.

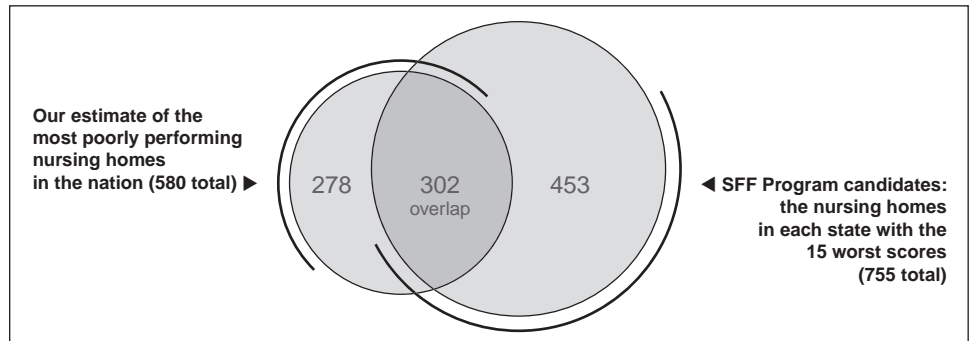
Five Hundred Eighty Nursing Homes Could Be Considered the Most Poorly Performing—Fewer Than CMS’s SFF Program Candidates but More Than the Number of SFFs

We estimated that almost 4 percent—or 580—of the nation’s roughly 16,000 nursing homes could be considered the most poorly performing. These 580 homes overlap somewhat with the 755 SFF Program candidates and the 136 nursing homes actually selected as SFFs.³⁰ For example, our estimate of 580 most poorly performing nursing homes includes (1) 302, or 40 percent, of the 755 SFF Program candidates as of December 2008 (see fig. 2) and (2) 65 nursing homes that 31 states selected as SFFs from among the SFF Program candidates, or about half of the active SFFs as of February 2009.³¹ In addition, our estimate resulted in some states having fewer or more poorly performing homes than CMS currently allocates to states under the SFF Program. For example, 10 states each had over 20 of the most poorly performing nursing homes. Indiana had the greatest number, with 52 such nursing homes, or almost 9 percent of the total of 580 homes. Eight states had no such nursing homes. (See fig. 3.)

³⁰CMS generally identifies SFF Program candidates on a quarterly basis. Because the December 2008 time frame when we conducted our analysis did not coincide with CMS’s quarterly cycle, we use the term SFF Program candidates to refer to the nursing homes in each state with the 15 worst scores at the time that we conducted our analysis. We determined the SFF Program candidates using CMS’s SFF methodology, without our refinements. There are 755 SFF Program candidates because some nursing homes in the same state shared the same total score and because we excluded nursing homes in Alaska, which does not have SFFs, and included nursing homes in the District of Columbia, which has one SFF.

³¹One reason that additional SFFs were not identified as the most poorly performing by our methodology may be that the homes’ performance improved since entering the program. Our estimate included another 13 nursing homes that were no longer active SFFs as of February 2009.

Figure 2: Overlap between Our Estimate of the Most Poorly Performing Nursing Homes in the Nation and the SFF Program Candidates, as of December 2008



Source: GAO analysis of CMS data.

Note: We determined the 755 SFF Program candidates using CMS's SFF methodology. There are 755 such homes because some nursing homes in the same state had the same total score and because we excluded nursing homes in Alaska, which does not have SFFs, and included nursing homes in the District of Columbia, which has one SFF.

Figure 3: Our Estimate of the Number of Most Poorly Performing Nursing Homes as of December 2008 Compared to the Number of SFFs by State



Sources: Copyright © Corel Corp. All rights reserved (map); GAO analysis of CMS data.

Note: Our estimate of 580 most poorly performing nursing homes included 65 nursing homes that were SFFs as of February 2009.

CMS's Application of the SFF Methodology Misses Many of the Nation's Most Poorly Performing Nursing Homes

CMS has structured the SFF Program so that every state (except Alaska) has at least one SFF, and therefore the agency applies the SFF methodology to identify the 15 worst performing nursing homes *in each state*, which are not necessarily the worst performing homes *in the nation*. We developed an estimate that identified homes with worse compliance histories—more deficiencies at the potential for more than minimal harm level or higher and more revisits—than SFF Program candidates by applying CMS's SFF methodology on a nationwide basis and using statistical scoring thresholds. These two changes had the greatest impact on the composition of the list of homes we identified as the most poorly performing compared to CMS's approach. Our estimate also incorporated several refinements to the SFF methodology that moderately improve its ability to identify the most poorly performing nursing homes.

Compliance history. Our estimate of 580 nursing homes identified homes with more deficiencies at the potential for more than minimal harm level or higher and more revisits, on average, compared to the 755 SFF Program candidates. For example, the most poorly performing nursing homes averaged 46.5 percent more actual harm-level deficiencies and 19.5 percent more immediate jeopardy-level deficiencies, compared to the 755 SFF Program candidates. (See table 3.)

Table 3: Compliance History over the Last Three Cycles for Our Estimate of the Most Poorly Performing Nursing Homes Compared to the SFF Program Candidates, as of December 2008

Compliance history	Average number of deficiencies and revisits in the last three cycles		
	Most poorly performing nursing homes (580 homes)	SFF Program candidates (755 homes)	Percentage difference ^a
Total deficiencies at the D level or higher	55.7	43.9	26.9
Deficiencies at the potential for more than minimal harm level (D-F)	47.3	37.7	25.5
Deficiencies at the actual harm level (G-I)	5.4	3.7	46.5
Deficiencies at the immediate jeopardy level (J-L)	3.0	2.5	19.5
<i>Deficiencies by survey type (D-L)</i>			
Deficiencies cited on standard surveys	40.8	33.7	21.3
Deficiencies cited on complaint investigations	14.9	10.2	45.6
<i>Number of revisits</i>	2.4	1.9	28.7

Source: GAO analysis of CMS data.

Notes: (1) We determined the 755 SFF Program candidates using CMS's SFF methodology. There are 755 of these nursing homes because some nursing homes in the same state had the same total score and because we excluded nursing homes in Alaska, which does not have SFFs, and included nursing homes in the District of Columbia, which has one SFF. (2) We did not determine whether the differences between groups were significant because the nursing homes in each group overlapped.

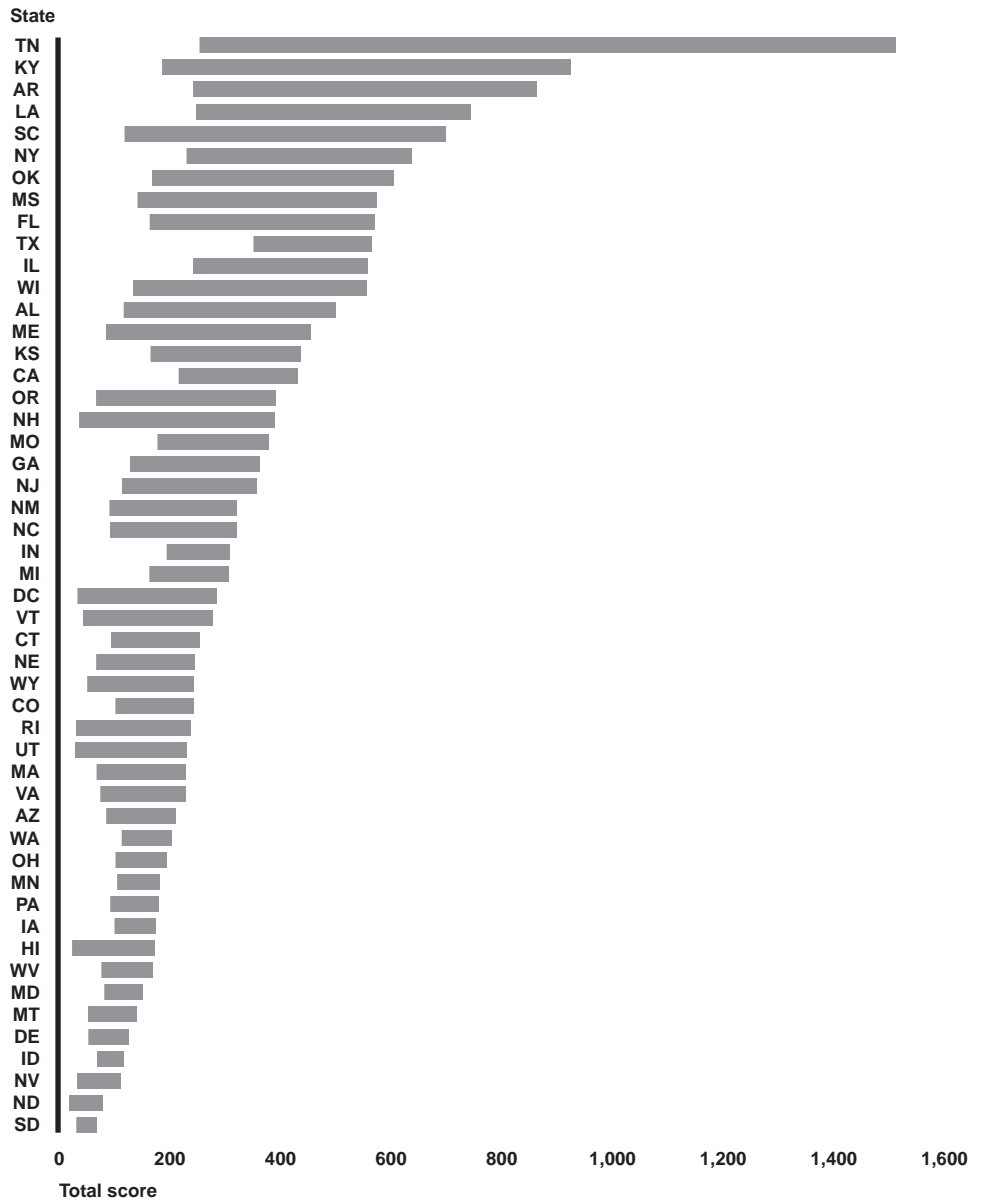
^aPercentage differences were calculated using unrounded data and therefore differ slightly from percentage differences calculated directly from this table.

Nationwide estimate. We developed a nationwide estimate because the worst performing nursing homes in some states had high total scores from a combination of numerous deficiencies, serious deficiencies, and revisits, while the worst performing nursing homes in other states did not (see fig. 4).³² For example, in the preceding three cycles, we found that the worst performing nursing home in South Dakota had a score of about 68. The score was composed of 32 deficiencies at the D level or higher, 2 of which were at the actual harm level (where the highest scope and severity level was H) and none of which were at the immediate jeopardy level. In contrast, during the same three cycles, the worst performing nursing home in Tennessee had a score of about 1,512, with 63 deficiencies at the D level

³²Some of this variation could be attributed to understatement. Our estimate did not adjust for state variation because we do not know which nursing homes are potentially affected. However, we know that nursing homes cited for many serious deficiencies or those that require multiple revisits have quality problems and therefore deserve federal and state attention.

or higher. Of these deficiencies, 3 were at the actual harm level and 22 at the immediate jeopardy level (where the highest scope and severity level was L). Even the 15th highest-scoring home in Tennessee, with a score of about 253, had notably more deficiencies at the D level or higher and more severe deficiencies than the highest-scoring home in South Dakota: specifically, the Tennessee home had 63 deficiencies at the D level or higher, 2 of which were at the actual harm level and 8 of which were at the immediate jeopardy level. If CMS applied its SFF methodology to identify the worst 755 homes in the nation rather than the worst 15 in each state, the home ranked 755 would have a score of about 127; however, 48 percent of the SFF Program candidates had scores below this threshold. As a result, the SFF Program is missing some of the worst performing nursing homes in the nation.

Figure 4: Total Score Ranges for the SFF Program Candidates, as of December 2008



Source: GAO analysis of CMS data.

Notes: (1) This figure illustrates the range of scores for the 755 SFF Program candidates, as of December 2008, which we determined based on CMS's SFF methodology. There are 755 such homes because some nursing homes in the same state had the same total score and because we excluded nursing homes in Alaska, which does not have SFFs, and included nursing homes in the District of Columbia, which has one SFF. (2) The left side of the bars represents the homes with the lowest scores, and the right side represents the homes with the highest scores.

Statistical scoring thresholds. Absent a fixed number of homes per state, we developed statistical scoring thresholds because there was no natural break point delineating the most poorly performing nursing homes from all other homes.³³ The two statistical scoring thresholds we used were conservative, because they focused on chronic poor performance and nonchronic, very poor performance. About 87 percent of the 580 nursing homes that we identified as the most poorly performing exhibited chronic poor performance; that is, they had high scores in at least two of the three cycles measured, as well as a high total score. The remaining roughly 13 percent of nursing homes had nonchronic but very poor performance; that is, they had very serious poor performance in one cycle only, which resulted in a very high total score.

Homes that met our chronic poor performance threshold had total scores above the 93rd percentile for all nursing homes, or total scores ranging from approximately 168 to approximately 1,017.³⁴ All of the nonchronic but very poor performing homes had total scores at or above the 99th percentile for all nursing homes, or total scores ranging from approximately 330 to approximately 1,577. Table 4 summarizes the compliance history of two of the most poorly performing homes identified by our estimate, and appendix II provides a detailed compliance history for these two homes.

³³Because the distribution of nursing home scores is highly skewed, we identified a statistical approach that focuses on identifying outliers.

³⁴As noted earlier, our estimate of the most poorly performing nursing homes incorporated several refinements to the SFF methodology, which are discussed in the next section. These refinements had a moderate effect on the composition of the list of most poorly performing homes we identified. Not all nursing homes with total scores above the 93rd percentile are included in our estimate, just those that were also chronic poor performers.

Table 4: Compliance Histories over the Last Three Cycles for Two of the Most Poorly Performing Nursing Homes, as of December 2008

	Number of deficiencies			Number of complaint investigations with deficiencies ^a	Example of standard for which highest deficiency was cited ^b
	Potential for more than minimal harm	Actual harm	Immediate jeopardy		
<i>Example of a chronic poor performer (total score of about 507)</i>					
Cycle 1	32	3	0	4	Proper treatment to prevent or heal pressure sores
Cycle 2	13	4	0	5	Facility is free of accident hazards
Cycle 3	21	5	15	5	Facility prohibits abuse or neglect
<i>Example of a nonchronic, very poor performer (total score of about 344)</i>					
Cycle 1	15	4	7	3	Resident's care supervised by a physician
Cycle 2	7	0	0	1	Facility establishes infection control program
Cycle 3	5	0	0	0	Medication error rates of 5 percent or more

Source: GAO analysis of CMS data.

Notes: (1) Both homes had one revisit that contributed to their total scores. (2) Total score incorporates our refinements to the SFF methodology, which are discussed in the next section.

^aThis column only includes complaint investigations with deficiencies at the D level or higher.

^bThe descriptions of the standards in this column have been abbreviated from those that appear in CMS guidance.

Additional homes might have been identified as the most poorly performing had we used different thresholds. For example, one nursing home with a total score of about 324 did not meet our definition for chronic poor performance and was below the threshold of 330 for nonchronic, very poor performance. During the three-cycle period, this nursing home had 41 D- through F-level deficiencies, 5 immediate jeopardy deficiencies, and a second revisit that contributed to the score, but most of the deficiencies and the revisit occurred in one cycle.

Refinements made to CMS's SFF methodology. Our three refinements to CMS's SFF methodology had a moderate effect on the composition of the list of homes we identified as the most poorly performing.

- *Deficiency points.* We believe that the deficiency points used in the Five-Star System are more appropriate for identifying the most poorly performing nursing homes nationwide than those used in the SFF methodology because they compensate somewhat for understatement and the interstate variation in the citation of serious deficiencies. First, given the significant disparity between immediate jeopardy (50 to 150 points) compared to lower-level deficiencies (2 to 6 points for D- through F-level deficiencies), our use of SFF deficiency points to identify the most poorly performing nursing homes nationwide might have missed poorly performing nursing homes in states with significant understatement. Second, there is considerable interstate variation in the citation of serious deficiencies, including immediate jeopardy-level deficiencies. For example, in 2008, about 11.3 percent of deficiencies were at the immediate jeopardy level in one state, but less than 1.0 percent of deficiencies were cited at that level in 26 states.³⁵ The Five-Star System, on average, doubles the points assigned to deficiencies below the immediate jeopardy level, giving a D-level deficiency 4 points and a G-level deficiency 20 points, compared to 2 and 10 points, respectively, using the SFF deficiency methodology. As a result, using the Five-Star System deficiency points, homes with numerous D- through I-level deficiencies are more likely to be identified as the most poorly performing. CMS officials told us that they planned to evaluate the effect of using the Five-Star System deficiency points on identifying SFF candidates; our analysis showed that it changed the composition of SFF Program candidates by an average of about 2.5 candidates per state.
- *Substandard quality of care.* In comparison with the SFF methodology and the Five-Star System, we assigned 5 more points to G-level deficiencies that occurred in any of the three categories of standards that CMS considers to be SQC.³⁶ As noted earlier, CMS does not classify any G-level deficiencies as SQC. Without this modification, an F-level deficiency in an SQC area is assigned the same number of points as a G-

³⁵About 1.7 percent of all deficiencies cited in 2008 were at the immediate jeopardy (J-L) level, about 4.9 percent were at the actual harm (G-I) level, and about 84.6 percent were at the D through F levels.

³⁶This is the same number of additional points that CMS assigns to H- and I-level deficiencies if they occur in areas considered to be SQC. (See table 2.)

level deficiency even if the G-level deficiency is in an SQC standard—10 and 20 points, respectively, under the SFF or Five-Star System methodologies. (See table 2.) This adjustment was important because approximately 45 percent of all nursing homes had one or more G-level deficiencies in an SQC category during the three cycles used for calculating SFF scores. Therefore, assigning SQC points to G-level deficiencies had an effect on total scores for the nursing homes, which we used to determine the most poorly performing homes nationwide, and would have an effect on the composition of CMS's SFF candidate list. For example, about 4 percent of the SFF Program candidates—or less than one candidate per state on average—would change if CMS assigned SQC points to G-level deficiencies.

- *Technical status changes.* While the SFF methodology does not consider all deficiencies and revisits identified within the three-cycle period that occurred before the nursing home's technical status change, we incorporated the full histories of nursing homes that underwent a technical status change.³⁷ At the time of a technical status change, a new provider identification number is assigned, and the nursing home's complete history under the old number is not combined with that of the new provider number. For example, a nursing home with a status change on January 1, 2008, might have a compliance history for only 1 year at the time we did our work instead of the three cycles called for in the SFF methodology. The SFF scores for nursing homes that have undergone technical status changes within the last three cycles are almost always lower than would be the case if three cycles of deficiency history were included and, therefore, more favorable than would be justified by the complete history. We found that almost 1 percent of all nursing homes (148), including 11 of the 580 we identified as the most poorly performing, had a technical status change during the last three cycles that affected

³⁷We developed a list of all provider numbers—the identification numbers used by CMS to identify nursing homes—associated with any nursing homes that were indicated by CMS's data as having made such a change to their provider numbers from October 1, 2004 (i.e., the beginning of fiscal year 2005), through December 17, 2008. We did so by using a field that identifies the new provider number after a home undergoes a technical status change, or in two instances, using the nursing home's address to link provider numbers. In the health inspections component of its Five-Star System, CMS adjusts for any nursing home with only two standard surveys by imputing a total score to account for the missing survey. This adjustment is less precise because it imputes the results instead of using a home's actual performance history. CMS does not report star ratings for nursing homes with only one standard health inspection.

their SFF scores.³⁸ For most states, this change would not have affected their SFF candidate lists.

Key Characteristics, such as Chain Affiliation and For-Profit Status Differentiated the Most Poorly Performing Nursing Homes

Compared to all other nursing homes, the most poorly performing nursing homes in the nation averaged notably more deficiencies at the D level or higher, more serious deficiencies, and more revisits. They were also more likely to be for-profit and part of a chain and have more beds and residents. In addition, they had an average of almost 24 percent fewer registered nurse hours per resident per day.

Actual Harm and Immediate Jeopardy Deficiencies Occurred Significantly More Often for the Most Poorly Performing Nursing Homes

Compared to all other nursing homes, deficiencies over the last three cycles at the actual harm (G through I) level occurred over 5 times as often, and deficiencies at the immediate jeopardy (J through L) level occurred 15 times as often for the most poorly performing homes.³⁹ (See table 5.) Furthermore, we found that revisits were made to the most poorly performing nursing homes 6 times as often as to all other nursing homes.

³⁸In 6 of the 11 nursing homes, this modification increased their total score by less than about 8 percent; however, the total score of the other 5 nursing homes increased from about 10 to about 370 percent.

³⁹The OSCAR data we analyzed were as of December 2008. We analyzed only D- through L-level deficiencies because nursing homes with deficiencies at the A, B, or C levels are considered to be in substantial compliance with federal quality standards.

Table 5: Compliance History over Last Three Cycles for the Most Poorly Performing Nursing Homes and All Other Nursing Homes, as of December 2008

Compliance history	Average number of deficiencies and revisits in the last three cycles	
	Most poorly performing nursing homes	All other nursing homes
Total deficiencies at the D level or higher	55.7	20.3
<i>Deficiencies by scope and severity level (D-L)</i>		
Deficiencies at the potential for more than minimal harm level (D-F)	47.3	19.1
Deficiencies at the actual harm level (G-I)	5.4	1.0
Deficiencies at the immediate jeopardy level (J-L)	3.0	0.2
<i>Deficiencies by survey type (D-L)</i>		
Deficiencies cited on standard surveys	40.8	17.3
Deficiencies cited on complaint investigations	14.9	3.0
<i>Number of revisits</i>	2.4	0.4

Source: GAO analysis of CMS data.

Note: All differences between groups are significant at the 0.05 level.

The most poorly performing nursing homes were more frequently cited for deficiencies in important care areas and specific standards related to the delivery of care compared to all other nursing homes. Seven of the 10 most frequently cited deficiencies at the immediate jeopardy level involved standards in the categories of care that CMS considers to be SQC and four of the 10 are related to abuse or neglect. For example, about 42 percent of the most poorly performing nursing homes had at least one immediate jeopardy deficiency related to being free of accident hazards in the last three cycles, compared with about 5 percent for all other nursing homes. (See table 6.) A larger proportion of the most poorly performing nursing homes were cited for actual harm in each of the three SQC areas—about 90 percent in Quality of Care, about 31 percent in Resident Behavior and Facility Practices, and about 17 percent in Quality of Life. In comparison, a smaller proportion of all other nursing homes were cited for actual harm in those same categories of care—about 42 percent in Quality of Care, about 6 percent in Resident Behavior and Facility Practices, and about 2 percent in Quality of Life. (See app. III.)

Table 6: The 10 Standards Most Often Cited at the Immediate Jeopardy Level in the Last Three Cycles among the Most Poorly Performing Homes Compared to All Other Nursing Homes, as of December 2008

Ten standards most often cited at the immediate jeopardy level among the most poorly performing nursing homes ^a	Federal quality standard category	Percentage of the most poorly performing nursing homes with at least one immediate jeopardy citation	Percentage of all other nursing homes with at least one immediate jeopardy citation
Facility is free of accident hazards	Quality of Care ^b	42.1	5.4
Facility is administered effectively to obtain highest practicable physical, mental, and psychosocial well-being of each resident	Administration	28.6	2.1
Provides necessary care for highest practicable physical, mental, and psychosocial well-being	Quality of Care ^b	25.7	2.5
Facility prohibits abuse or neglect	Resident Behavior and Facility Practices ^b	15.3	1.2
Policies and procedures prohibit abuse or neglect	Resident Behavior and Facility Practices ^b	12.6	0.7
Facility must inform resident, resident's physician, and family of any accidents; changes in the resident's physical, mental, or psychosocial status, or treatment; or of a decision to transfer or discharge resident	Resident Rights	11.9	0.8
Proper treatment to prevent or heal pressure sores	Quality of Care ^b	10.9	0.6
Facility must not employ persons guilty of abuse, neglect, or mistreatment, and must investigate and report alleged violations involving abuse, neglect, or mistreatment	Resident Behavior and Facility Practices ^b	10.0	0.6
Facility maintains a quality assessment and assurance committee	Administration	9.5	0.5
Residents have a right to be free from abuse	Resident Behavior and Facility Practices ^b	8.6	0.8

Source: GAO analysis of CMS data.

Note: All differences between groups are significant at the 0.05 level.

^aThe descriptions of the standards in this column have been abbreviated from those that appear in CMS guidance.

^bDeficiencies cited at the immediate jeopardy level in these standards are considered to be SQC.

We also found that from fiscal years 2006 through 2008 the most poorly performing nursing homes were much more likely to have had deficiencies that could have resulted in the imposition of at least one immediate sanction compared to all other nursing homes.⁴⁰ For example, in fiscal year 2008, about 33 percent of the most poorly performing homes may have been at risk of having at least one immediate sanction imposed, compared to about 4 percent for all other nursing homes. Nursing homes that receive at least one G- through L-level deficiency on successive standard surveys or complaint investigations must be referred for immediate sanctions, and about 15 percent of the deficiencies for the most poorly performing nursing homes, on average over the last three cycles, were at the actual harm or immediate jeopardy level.

The Most Poorly Performing Nursing Homes Differed from All Others in Several Ways, Including Chain Affiliation and For-Profit Status

We found that the most poorly performing nursing homes differed from all other nursing homes in terms of the proportion of each group that was chain affiliated, for-profit, or both. They also differed in size and nurse staffing.⁴¹

Type of organization. We found that the most poorly performing nursing homes were less likely to be hospital based compared to all other nursing homes. Additionally, compared to all other nursing homes, we found that the most poorly performing nursing homes were more likely to be part of for-profit organizations, more likely to be affiliated with a chain organization, and more likely to be both for-profit and affiliated with a chain organization. About 55 percent of the most poorly performing nursing homes were for-profit and chain affiliated, compared to about 41 percent of all other homes. (See table 7.)

⁴⁰We analyzed a CMS file that identifies nursing homes whose deficiency histories could have subjected them to immediate sanctions. A CMS official told us that the file is not used by states to refer homes for immediate sanction. As a result, the file does not indicate that immediate sanctions were imposed on homes but represents CMS's analysis of probable instances of immediate sanctions.

⁴¹The data we analyzed were as of December 2008, except for the data on nurse staffing, which were as of November 2008.

Table 7: Distribution of the Most Poorly Performing Nursing Homes and All Other Nursing Homes by Type of Organization, as of December 2008

Type of organization	Percentage of the most poorly performing nursing homes	Percentage of all other nursing homes
<i>Facility type</i>		
Hospital based	1.9	7.8
Freestanding	98.1	92.2
<i>Ownership type</i>		
For-profit (individual, partnership, or corporation)	84.1	67.0
Nonprofit (corporation, church, or other)	11.6	27.1
Government owned	4.3 ^a	5.9 ^a
<i>Chain affiliation</i>		
For-profit and chain affiliated	54.5	41.4
Nonprofit and chain affiliated	6.6	11.2
Government owned and chain affiliated	0.9 ^a	0.7 ^a

Source: GAO analysis of CMS data.

Notes: Unless otherwise noted, all differences between groups are significant at the 0.05 level. Individual entries may not sum to totals because of rounding.

^aThe difference between most poorly performing and all other nursing homes for this variable is not significant.

Participation in Medicare and Medicaid. We found that a higher percentage of the most poorly performing homes participated in both Medicare and Medicaid, and a smaller percentage of such homes participated only in Medicare or only in Medicaid, compared to all other nursing homes. (See table 8.)

Table 8: Distribution of the Most Poorly Performing Nursing Homes and All Other Nursing Homes by Medicare and Medicaid Participation, as of December 2008

Medicare and Medicaid participation	Percentage of the most poorly performing nursing homes	Percentage of all other nursing homes
Medicare and Medicaid	96.2	90.2
Medicare only	0.2	5.3
Medicaid only	3.6	4.5

Source: GAO analysis of CMS data.

Note: All differences between groups are significant at the 0.05 level.

Beds and residents. We found that a larger percentage of the most poorly performing homes had more than 100 beds, compared to all other nursing homes.⁴² On average, the most poorly performing nursing homes had about 23 percent more beds than all other nursing homes. Additionally, our analysis found that on average, the most poorly performing homes had almost 14 percent more residents, a lower occupancy rate, and a greater share of Medicaid patients. (See table 9.)

⁴²For this section, we analyzed the number of certified beds, which is the number of Medicare beds, Medicaid beds, or both.

Table 9: Distribution of the Most Poorly Performing Nursing Homes and All Other Nursing Homes by Beds and Residents, as of December 2008

Beds and residents	Most poorly performing nursing homes	All other nursing homes
<i>Average number of beds per home^a</i>	129.7	105.3
<i>Bed size (percentage)</i>		
0 to 49 beds	3.4	14.1
50 to 99 beds	28.8	36.6
100 to 199 beds	57.2	43.0
More than 199 beds	10.5	6.2
<i>Average number of residents per home</i>	101.7	89.4
<i>Average occupancy rate (percentage)^b</i>	78.3	84.6
<i>Average share of resident type (percentage)</i>		
Medicare	12.2	15.8
Medicaid	69.5	59.5
Other	18.3	24.7

Source: GAO analysis of CMS data.

Notes: All differences between groups are significant at the 0.05 level. Individual entries may not sum to totals because of rounding.

^aWe analyzed the number of certified beds, which is the number of Medicare beds, Medicaid beds, or both.

^bAverage occupancy rate is the average of the number of residents per home divided by the number of certified beds per home.

Nurse staffing levels. Compared to all other nursing homes, the most poorly performing homes had almost 24 percent fewer registered nurse hours per resident per day on average.⁴³ One effect of this difference is that the most poorly performing nursing homes averaged fewer registered nurse hours per resident per day as a share of total nursing hours. Specifically, registered nurse hours made up about 8 percent of total nurse staffing hours in the most poorly performing nursing homes, compared to about 10 percent in all other nursing homes. (See table 10.)

⁴³The staffing data we analyzed were case-mix adjusted by CMS for use in the Five-Star System.

Table 10: Distribution of the Most Poorly Performing Nursing Homes and All Other Nursing Homes by Case-Mix-Adjusted Nurse Staffing Levels, as of November 2008

Nurse staffing levels ^a	Most poorly performing nursing homes	All other nursing homes	Percentage difference ^b
<i>Type of staff (average hours per resident per day)</i>			
Registered nurse	0.28	0.36	-23.51
Licensed practical and vocational nurses	1.03	0.98	4.16
Nurse aide	2.37 ^c	2.40 ^c	-1.13
Total	3.42	3.55	-3.76
<i>Registered nurse hours as a share of total nurse staffing hours (percentage)^d</i>			
	8.15	10.07	n/a

Source: GAO analysis of CMS data.

Note: Unless otherwise noted, all differences between groups are significant at the 0.05 level.

^aThe staffing data we analyzed were case-mix adjusted by CMS for use in the Five-Star System.

^bPercentage differences were calculated using unrounded data and therefore differ slightly from percentage differences calculated directly from this table.

^cThe difference between most poorly performing and all other nursing homes for this variable is not significant.

^dRegistered nurse hours as a share of total nurse staffing hours is an average across all homes in each group; therefore, the percentages differ slightly from those as calculated directly from this table.

Conclusions

Our estimate of the most poorly performing nursing homes nationwide is more than four times greater than the 136 homes that receive enhanced scrutiny under CMS’s SFF Program. We believe that our estimate is conservative, because we focused only on those nursing homes with chronic poor performance over time or with very poor performance in one survey cycle. Because of resource constraints, CMS limits the size of the SFF Program, requiring every state except Alaska to select from 1 to 6 homes—an allocation based on the number of nursing homes in each state—from a list of 15 candidates. The homes selected are not necessarily the most poorly performing homes in the nation but rather are among the poorest performers in each state. In contrast, the 580 homes we identified have more deficiencies at the potential for more than minimal harm level or higher and more revisits on average than the 755 homes identified as potential SFF candidates using CMS’s SFF methodology. Our estimate also revealed that the state-by-state distribution of the most poorly performing homes nationwide is uneven, calling into question the approach CMS uses to allocate SFFs across states.

Furthermore, we believe that CMS's SFF Program and the Five-Star System could be strengthened by incorporating the three enhancements we made to identify the most poorly performing homes nationwide:

- First, we adopted the deficiency points that CMS developed for its Five-Star System because they compensate somewhat for understatement and the interstate variation in the citation of serious deficiencies, an important consideration for our nationwide estimate of the most poorly performing nursing homes. Currently, CMS uses a different set of deficiency points for the SFF methodology, but agency officials told us that they planned to study the effect of using a common set of numeric points—the Five-Star System deficiency points—for both methodologies.
- Second, we added points for G-level deficiencies in the three standard areas that CMS considers to be an indication of SQC. We found that about 4 percent of the SFF candidates—or less than 1 candidate per state, on average—would change if CMS assigned SQC points to G-level deficiencies when they were cited in an SQC area. Without such an adjustment, an F-level deficiency in an SQC area would receive the same number of deficiency points as a G-level deficiency in the same standard area. Approximately 45 percent of all nursing homes had one or more G-level deficiencies in an SQC category during the three cycles used for calculating SFF scores.
- Third, we incorporated the full compliance history of homes that underwent technical status changes. For example, a nursing home with a technical status change on January 1, 2008, might have a compliance history for only 1 year at the time we did our work instead of the three cycles called for by the SFF methodology. The SFF scores of homes that have undergone technical status changes within the last three cycles are almost always lower than if all three cycles were considered. We also found that the Five-Star System does not accurately take into consideration technical status changes because it imputes a total score to account for one missing standard survey rather than using actual survey results.

Recommendations for Executive Action

To improve the targeting of scarce survey resources, the Administrator of CMS should consider an alternative approach for allocating the 136 SFFs across states, by placing more emphasis on the relative performance of homes nationally rather than on a state-by-state basis, which could result in some states having only one or not any SFFs and other states having more than they are currently allocated.

To improve the SFF methodology’s ability to identify the most poorly performing nursing homes, the Administrator of CMS should make the following three modifications:

1. Consider using a common set of numeric points for identifying poorly performing nursing homes by determining the effect of adopting those associated with the Five-Star System for the SFF methodology.
2. Assign points to G-level deficiencies in SQC areas equivalent to those additional points assigned to H- and I-level deficiencies in SQC areas.
3. Account for a nursing home’s full compliance history regardless of technical status changes.

To ensure consistency with the SFF methodology, CMS should also consider making two of these modifications—the SQC and full compliance history changes—to its Five-Star System.

Agency Comments and Our Evaluation

We obtained written comments on our draft report from CMS, which are reprinted in appendix IV. CMS noted that our report adds value regarding the methods that CMS and the nursing home industry should use to address the issue of homes that consistently demonstrate quality of care problems and indicated that the agency would seriously consider all of our recommendations. CMS generally agreed in principle with our recommendations.

In response to our first recommendation, CMS noted that it would evaluate a “hybrid” approach that would assign some SFFs using homes’ performance in each state and other SFFs on their relative national ranking. If implemented, CMS’s proposed hybrid approach would address our recommendation that it consider placing more emphasis on the relative performance of homes nationally, which might result in some states having fewer SFFs and others having more than their current allocation. We did not recommend that CMS allocate SFFs solely on the basis of the relative performance of homes nationally, an approach CMS would disagree with according to its comments.

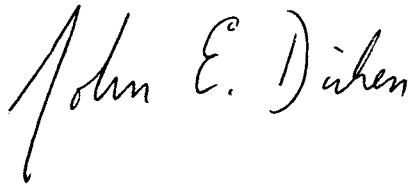
CMS agreed in principle with our remaining recommendations—intended to improve the SFF methodology’s ability to identify the most poorly performing nursing homes and ensure its consistency with the agency’s Five-Star System—and noted that it would evaluate the effects of adopting them. The agency explained that there might be technical barriers to fully

implementing our recommendation that it account for a nursing home's full compliance history regardless of technical status changes, but noted that it would implement the recommended adjustment to the maximum extent practicable. CMS agreed that although this change would affect a small number of providers, it would improve the accuracy of ratings for those providers.

CMS also provided technical comments, which we incorporated as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Administrator of the Centers for Medicare & Medicaid Services and appropriate congressional committees. The report will also be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or at dickenj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix V.



John E. Dicken
Director, Health Care

Appendix I: Scope and Methodology

This appendix provides a more detailed description of our scope and methodology.

Determining the Number and Comparing the Performance of the Most Poorly Performing Nursing Homes

To determine the number of most poorly performing nursing homes in the nation and compare their performance to that of homes identified using the Centers for Medicare & Medicaid Services' (CMS) approach, we began by interviewing agency officials about the Special Focus Facility (SFF) Program and methodology and by reviewing documentation related to the methodology. In addition, we interviewed officials in all 10 CMS regional offices and 14 state survey agencies regarding their impressions of the SFF methodology and also asked the state survey agencies what they consider to be indicators of poor performance.¹ To ensure that we calculated the scores for each nursing home consistent with CMS's SFF methodology, we obtained a copy of the computer programming that CMS used to score and rank nursing homes, verified that our use of CMS's program generated results that were consistent with output on scores that CMS provided to states, and used the program as the basis for our estimate of the most poorly performing nursing homes in the United States. The SFF methodology creates a total score for each nursing home over three cycles by assigning points to the following data, which we obtained from CMS's On-Line Survey, Certification, and Reporting system (OSCAR) database: (1) deficiencies cited on the three most recent standard surveys, (2) deficiencies cited on the last 3 years of complaint investigations, and (3) revisits associated with the three most recent standard surveys.² Additional points are assigned to deficiencies classified as substandard quality of care (SQC). Each cycle consists of one standard survey, revisits associated with the standard survey, and 12 months of complaint investigations. We extracted these data from OSCAR in December 2008.³

¹We interviewed officials in a nongeneralizable sample of 14 state survey agencies, which were selected based on a combination of factors, including the number of SFFs allocated to the state and SFF scores.

²Points are only assigned to facilities that require more than one revisit before being able to demonstrate substantial compliance.

³OSCAR data change continually as new surveys are conducted and entered into the database, but there can be a lag time. As a result, the data we analyzed did not necessarily include all surveys conducted through the date of our data extract.

To learn about methods used to rate nursing home performance, we interviewed officials of two nursing home associations—the American Health Care Association and the American Association of Homes and Services for the Aging, interviewed experts in long-term care research, attended meetings that CMS held to seek input from long-term care researchers on the development of the agency’s Five-Star Quality Rating System (Five-Star System), analyzed information available at CMS’s Providing Data Quickly Web site, reviewed prior GAO reports, and interviewed officials from some states with nursing home rating systems. We also reviewed documentation describing additional approaches to rating nursing home performance. Specifically, we reviewed eight nursing home rating systems, which considered a variety of rating factors.⁴

Examination of the SFF Methodology

To determine the adequacy of the SFF methodology, we compared the methodology to other compliance-based measures of poor performance and tested the sensitivity of the methodology to variations, such as weighting.

We compared the SFF methodology to two other compliance-based measures of poor performance—SQC and immediate sanctions.⁵ We found that those nursing homes with the worst total scores in the nation were much more likely to have met the criteria for SQC in the last 1, 2, and 3 years compared to all other nursing homes. Similarly, we found that the same nursing homes were much more likely to have had deficiencies that could have resulted in the imposition of at least one immediate sanction in the last 1, 2, and 3 years compared to all other nursing homes.⁶ In addition,

⁴We reviewed materials describing systems that rate nursing homes in the following states: California, Florida, Indiana, Massachusetts, Minnesota, New Jersey, Ohio, and Texas. We did not conduct a comprehensive review to identify all states that have nursing home rating systems. New Jersey no longer maintains its own rating system and refers individuals instead to CMS’s Five-Star System.

⁵For these analyses, we compared the 766 nursing homes in the nation with the highest total scores to all other nursing homes. The number 766 is equal to 50 states (including Alaska) and the District of Columbia multiplied by 15 nursing homes per state, and there was a tie in total score among these homes, for a total of 766 nursing homes.

⁶We analyzed a CMS file that identifies nursing homes whose deficiency histories would have subjected them to immediate sanctions. A CMS official told us that the file is not used by states to refer homes for immediate sanction. As a result, the file does not indicate that immediate sanctions were imposed on homes but represents CMS’s analysis of probable instances of immediate sanctions. We did not determine which nursing homes were sanctioned in this way.

we tested the sensitivity of CMS's SFF methodology to several variations, some of which led us to consider making modifications to the methodology that affected facility scores. For example, in one variation, we modified the SFF methodology so that the cycle scores were no longer weighted—CMS began weighting the cycle scores in June 2008. We concluded from this test that the SFF methodology was sensitive to weighting, which influenced our decision to impose a requirement in our scoring thresholds such that the most poorly performing nursing homes have high scores in at least two of three cycles or a very high score overall.

Based on our examinations of the SFF methodology, document review, and interviews, we concluded that the SFF methodology is reasonable and comprehensive because it uses multiple years of data, includes all deficiencies as opposed to a subset of deficiencies, includes deficiencies from standard surveys and complaint investigations, and accounts for the scope and severity of deficiencies and the number of revisits. Furthermore, CMS has refined the SFF methodology over time.

Development of the Nationwide Statistical Scoring Thresholds

Although we concluded that estimating the number of the most poorly performing nursing homes on a state-by-state rather than on a national basis would yield inconsistent results, we determined that there was no natural break point that differentiated the most poorly performing nursing homes from all other homes. As a result, we investigated several statistical approaches and determined that Tukey's method was appropriate because the distribution of nursing homes' total scores is highly skewed.⁷ Tukey's method is meant to identify the extreme ends of the distribution. It labels an observation as a potential outlier if its value is greater than the threshold identified by the following equation:⁸

$$\text{Potential Outlier Threshold} = Q3 + 1.5 * (Q3 - Q1)$$

Where: Q3 = 75th percentile and

Q1 = 25th percentile

⁷See John W. Tukey, *Exploratory Data Analysis* (Reading, Mass.: Addison-Wesley Publishing Company, 1977), 39-47. See also, John M. Chambers, William S. Cleveland, Beat Kleiner, and Paul A. Tukey, *Graphical Methods for Data Analysis* (Boston, Mass.: Wadsworth International Group and Duxbury Press, 1983), 21-22.

⁸If there is no observation exactly at the value identified by the equation, the observation with the next lower value would be the threshold.

The range identified by (Q3 – Q1), called the interquartile range, covers 50 percent of the observations in the center of the distribution. We applied this method by identifying nursing homes that had scores that were above the potential outlier threshold.

We then explored several options to identify the most poorly performing nursing homes using Tukey’s method as a basis. For each option, we analyzed the group of resulting nursing homes identified as poor performers and those missed by the thresholds. As the result of our examination of the SFF methodology and prior work in which we classified nursing homes as low, moderately, or high performing, we knew that nursing homes that have serious deficiencies in one year may not demonstrate *consistent* poor performance—what we term chronic poor performance in this report.⁹ Thus, another option we considered was to identify as a poor performer any nursing home that had a total score that (1) was above the potential outlier threshold and (2) was also above the potential outlier threshold for at least two of its three cycle scores. This option identified 507 nursing homes. Because these nursing homes had poor performance in at least two of three cycles as well as high total scores, we concluded that this threshold identified chronic poor performance. However, we found that when we limited the most poorly performing nursing homes to this group of chronic poor performers we missed some nursing homes with very poor performance that was not chronic. Therefore, we established a second threshold to identify those *very* poor performers—those nursing homes that were at or above the 99th percentile—or approximately 330—of total score.¹⁰ This threshold added another 73 nursing homes.¹¹

⁹For a prior report, using deficiencies from three standard surveys from January 1, 1999, through November 1, 2002, we classified 15 percent of nursing homes as low performing, 65 percent as moderately performing, and 20 percent as high performing. See [GAO-07-373](#).

¹⁰We explored using the 95th percentile of total score to identify nonchronic but very poor performance, but decided that the 99th percentile was a more conservative approach because it limited this group to those with extremely high total scores.

¹¹We considered additional thresholds that would have identified additional poor performers with many D-level or higher or many G-level or higher deficiencies. For example, 50 additional nursing homes would have been identified as poor performers if we had also included nursing homes with a large number of D-level or higher deficiencies (greater than or equal to the 99th percentile of the number of D-level or higher deficiencies). An additional 25 nursing homes would have been identified as poor performers if we had also included nursing homes with a large number of G-level or higher deficiencies (greater than or equal to the 99th percentile of the number of G-level or higher deficiencies).

Determining the Characteristics of the Most Poorly Performing Nursing Homes

To determine the characteristics of the most poorly performing nursing homes that distinguish them from all other nursing homes, we analyzed deficiencies and revisits from the three most recent cycles—that is, the three most recent standard surveys as of the date of our data extract (December 17, 2008) and any associated revisits, as well as deficiencies cited on complaint investigations conducted 3 years before our data extract. We also analyzed other data that describe the characteristics of nursing homes: a December 17, 2008, extract of other OSCAR variables; case-mix-adjusted nurse staffing hours available from CMS’s Five-Star System, which were dated November 2008; and a list developed by CMS of nursing homes whose deficiency histories could have subjected them to immediate sanctions, which we obtained from CMS in October 2008.¹²

Following are highlights of how we analyzed certain characteristics:

- We calculated the number of nursing homes in each fiscal year that had deficiencies that could have resulted in the imposition of at least one immediate sanction.
- Nursing homes self-report their ownership type. We created the ownership type of for-profit by combining three categories of for-profit nursing homes designated in CMS’s data (individual, partnership, and corporation) and the category of limited liability corporation. Similarly, we created the ownership type of nonprofit by combining three categories of nonprofit nursing homes (corporation, church related, and other), and the ownership type of government from the six designations made in CMS data (state, county, city, city/county, hospital district, and federal).
- CMS maintains a variable in its data called multi-nursing home (chain) ownership, which is self-reported by nursing homes and which we refer to as chain affiliation. According to CMS, multi-nursing home chains have two or more homes under one ownership or operation. We determined the percentage of nursing homes that were for-profit and chain affiliated, nonprofit and chain affiliated, or government owned and chain affiliated by combining the ownership type described above with CMS’s designation of multi-nursing home (chain) ownership.

¹²As previously noted, this file is not used by states to refer homes for immediate sanction and does not indicate that immediate sanctions were imposed on homes but represents CMS’s analysis of probable instances of immediate sanctions.

- We used the number of beds certified for payment for Medicare, Medicaid, or both to calculate the following: the average number of beds per nursing home and the percentage of nursing homes by bed size category (0 to 49, 50 to 99, 100 to 199, and more than 199 beds).
- We calculated the percentage share of residents by resident type (Medicare, Medicaid, or other) by dividing the number of Medicare, Medicaid, and other patients by the number of total residents.
- We calculated the occupancy rate by dividing the total number of residents by the number of certified beds. We used certified beds to calculate the occupancy rate instead of total beds because CMS officials told us that certified beds provided more reliable information.
- We analyzed the following nurse staffing hours, which were case-mix adjusted by CMS for use in its Five-Star System: registered nurse hours per resident per day, licensed practical nurse and vocational nurse hours per resident per day, nurse aide hours per resident per day, and total staffing hours per resident per day.¹³ We calculated resident nurse hours as a share of the total. Unadjusted nurse staffing hours data are collected by CMS, self-reported by nursing homes, and represent staffing levels for a 2-week period before the state inspection. CMS case-mix adjusted the staffing data using the average minutes of nursing care used to care for residents in a given resource utilization group category as reflected in the Medicare skilled nursing facility prospective payment system.¹⁴ CMS acknowledges that the staff hours collected from nursing homes have certain limitations. In order to increase the accuracy and comprehensiveness of the staffing data, CMS has been investigating whether it can use nursing home payroll data to report staffing levels on the Nursing Home Compare Web site.

¹³Nurse staffing hours were not available for 6.9 percent of nursing homes we determined were the most poorly performing and for 6.1 percent of all other nursing homes. Reasons these data were not available include that CMS deemed the data to be unreliable (e.g., very high nursing hours per resident per day) or that CMS newly certified the nursing home.

¹⁴See Centers for Medicare & Medicaid Services, *Design for Nursing Home Compare Five-Star Quality Rating System: Technical Users' Guide*, revised April 1, 2009, <http://www.cms.hhs.gov/CertificationandCompliance/Downloads/usersguide.pdf> (accessed June 17, 2009).

Appendix II: Detailed Compliance History for Two of the Most Poorly Performing Nursing Homes, as of December 2008

The following table provides the detailed compliance history over three cycles for two of the most poorly performing homes in the nation.

Table 11: Detailed Compliance History over Three Cycles for Two of the Most Poorly Performing Nursing Homes in the Nation, as of December 2008

Example A: Chronic poor performer

Cycle 1		
10/29/2008	Standard survey 2 G – I	24 D – F G: Proper treatment to prevent or heal pressure sores G: Proper care and services for residents with naso-gastric tube
8/20/2008	Complaint survey 1 D – F	
5/19/2008	Complaint survey 1 G – I	1 D – F G: Facility is free of accident hazards
3/25/2008	Complaint survey 4 D – F	
12/20/2007	Complaint survey 2 D – F	
Cycle 2		
12/6/2007	Standard survey 7 D – F	
8/31/2007	Complaint survey 1 D – F	
8/1/2007	Complaint survey 2 G – I	2 D – F G: Proper treatment to prevent or heal pressure sores G: Facility provides sufficient fluid intake
7/3/2007	Complaint survey 1 D – F	
6/14/2007	Complaint survey 1 G – I	1 D – F G: Facility is free of accident hazards
1/26/2007	Complaint survey 1 G – I	1 D – F G: Proper treatment to prevent or heal pressure sores

**Appendix II: Detailed Compliance History for
Two of the Most Poorly Performing Nursing
Homes, as of December 2008**

Example A: Chronic poor performer

Cycle 3^a

11/14/2006	Standard survey 1 G – I	9 D – F G: Facility is free of accident hazards
8/4/2006	Complaint survey 6 J – L	2 D – F L: Facility is administered effectively to obtain highest practicable physical, mental, and psychosocial well-being of each resident L: Plans to meet emergencies/disasters K: Resident not catheterized unless unavoidable K: Facility provides sufficient fluid intake J: Facility prohibits abuse or neglect J: Provides necessary care for highest practicable physical, mental, and psychosocial well-being
7/14/2006	Complaint survey 1 G – I	2 D – F G: Resident not catheterized unless unavoidable
6/16/2006	Complaint survey 1 D – F	
6/8/2006	Complaint survey 3 J – L	1 G – I 2 D – F J: Facility prohibits abuse or neglect J: Provides necessary care for highest practicable physical, mental, and psychosocial well-being J: Facility is free of accident hazards G: Proper treatment to prevent or heal pressure sores
5/4/2006	Complaint survey 6 J – L	2 G – I 5 D – F L: Facility prohibits abuse or neglect L: Facility is administered effectively to obtain highest practicable physical, mental, and psychosocial well-being of each resident K: Provides necessary care for highest practicable physical, mental, and psychosocial well-being K: Proper treatment to prevent or heal pressure sores J: Facility is free of accident hazards J: Proper treatment/care for special care needs G: Facility must inform resident, resident's physician, and family of any accidents; changes in the resident's physical, mental, or psychosocial status, or treatment; or of a decision to transfer or discharge resident G: Residents have a right to be free from abuse

**Appendix II: Detailed Compliance History for
Two of the Most Poorly Performing Nursing
Homes, as of December 2008**

Example B: Nonchronic very poor performer		
Cycle 1^b		
8/5/2008	Complaint survey 2 D – F	
5/8/2008	Complaint survey 2 G – I	2 D – F G: Proper treatment to prevent or heal pressure sores G: Accuracy of assessments/coordination with professionals
4/3/2008	Complaint survey 5 J – L	2 G – I 1 D – F J: Residents' care supervised by a physician J: Facility must inform resident, resident's physician, and family of any accidents; changes in the resident's physical, mental, or psychosocial status, or treatment; or of a decision to transfer or discharge resident J: Services by qualified persons in accordance with care plan J: Proper treatment to prevent or heal pressure sores J: Facility is administered effectively to obtain highest practicable physical, mental, and psychosocial well-being of each resident G: Responsibilities of medical director G: Physician promptly notified of lab results
1/25/2008	Standard survey 2 J – L	10 D – F J: Services by qualified persons in accordance with care plan J: Proper treatment to prevent or heal pressure sores
Cycle 2		
11/28/2007	Complaint survey 2 D – F	
4/25/2007	Standard survey 5 D – F	
Cycle 3		
5/18/2006	Standard survey 5 D – F	

Source: GAO analysis of CMS data.

Note: The descriptions of standards are provided only for deficiencies cited at the G level or higher. The descriptions of the standards have been abbreviated from those that appear in CMS guidance.

^aThe chronic poor performer had one revisit that contributed to its total score during cycle 3.

^bThe nonchronic, very poor performer had one revisit that contributed to its total score during cycle 1.

Appendix III: Performance by Standard Area for the Most Poorly Performing and All Other Nursing Homes, as of December 2008

The following table provides the percentages of the most poorly performing and all other nursing homes that were cited for actual harm or immediate jeopardy by standards area over three cycles.

Table 12: Percentage of the Most Poorly Performing and All Other Nursing Homes Cited for Actual Harm or Immediate Jeopardy, by Standards Area, in the Last Three Cycles as of December 2008

Standards area	Percentage with at least one actual harm deficiency (G through I level)		Percentage with at least one immediate jeopardy deficiency (J through L level)	
	Most poorly performing nursing homes	All other nursing homes	Most poorly performing nursing homes	All other nursing homes
Administration	15.5	2.0	31.4	2.5
Admission, Transfer, and Discharge Rights	0.5 ^a	0.2 ^a	0.2 ^a	0.0 ^a
Dental Services	1.0	0.1	0.0 ^a	0.0 ^a
Dietary Services	0.9	0.1	4.3	0.4
Infection Control	2.1	0.3	2.8	0.2
Nursing Services	5.9	0.5	4.5	0.1
Pharmacy Services	2.6	0.4	3.4	0.3
Physical Environment	1.2	0.1	3.1	0.3
Physicians Services	1.4	0.3	0.7	0.0
Quality of Care	89.7	42.1	67.2	9.1
Quality of Life	17.4	2.4	4.3	0.2
Resident Assessment	20.3	5.8	16.0	1.3
Resident Behavior and Facility Practices	30.9	5.9	28.8	2.4
Resident Rights	18.8	3.7	13.3	1.0
Specialized Rehabilitative Services	1.9	0.1	0.5	0.0

Source: GAO analysis of CMS data.

Note: Unless otherwise noted, all differences between groups are significant at the 0.05 level.

^aThe difference between the most poorly performing and all other nursing homes for this variable is not significant.

Appendix IV: Comments from the Centers for Medicare & Medicaid Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

OFFICE OF THE SECRETARY

Assistant Secretary for Legislation
Washington, DC 20201

AUG 18 2009

John Dicken
Director, Health Care
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Dicken:

Enclosed are the Department's comments on the U.S. Government Accountability Office's draft report entitled, "Nursing Homes: CMS's Special Focus Facility Methodology Should Better Target the Most Poorly Performing Homes, Which Tended to be Chain Affiliated and For Profit" (GAO-09-689).

The Department appreciates the opportunity to review and comment on this draft report before its publication.

Sincerely,

A handwritten signature in cursive script that reads "Barbara Pisaro Clark".

Barbara Pisaro Clark
Acting Assistant Secretary for Legislation

Enclosure

Appendix IV: Comments from the Centers for Medicare & Medicaid Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

DATE: AUG 14 2009

TO: Barbara Pisaro Clark
Acting Assistant Secretary for Legislation
Office of the Secretary

FROM: *Charlene Frizzera*
Charlene Frizzera
Acting Administrator

SUBJECT: Government Accountability Office (GAO) Draft Report: "Nursing Homes: CMS's Special Focus Facility Methodology Should Better Target The Most Poorly Performing Homes, Which Tended to Be Chain Affiliated and For Profit" (GAO-09-689)

The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the above-mentioned draft report. GAO was asked to examine CMS' efforts to improve the quality of care in poorly performing nursing homes. GAO examined the ability of CMS' Special Focus Facility (SFF) algorithm to identify poorly performing nursing homes and compared CMS's method with a variant method for identifying poorly performing nursing homes. GAO issued two basic recommendations: 1) that CMS use a national, rather than State-specific, algorithm for identifying SFF; and 2) that CMS revise its methodology slightly to more heavily emphasize certain types of deficiencies and to include a longer compliance history for providers that have changed certification type.

The GAO compared CMS' SFF methodology with a similar method that GAO constructed based on the SFF methods, some elements of CMS' *Five Star Quality Rating System*, and other GAO adjustments. GAO concluded that CMS' SFF methodology is "reasonable and comprehensive," but that it misses a number of poorly performing nursing homes because it is restricted to identifying only 15 nursing homes in each State. GAO states that if CMS made SFF selections on a national (rather than State-by-State) basis, then scarce resources could more effectively target survey activity on the worst-performing nursing homes in the country. As evidence, the GAO identifies several States in which no nursing homes meet its criteria for poor performance.

We believe that the GAO study adds value to the important public policy debate regarding methods by which CMS and the nursing home industry ought to address the problem of nursing homes that consistently evidence serious quality of care problems. We will seriously consider all of the GAO recommendations and convey to GAO the results of our further study.

Page 2 - Barbara Pisaro Clark

GAO Recommendation 1

To improve the targeting of scarce survey resources, the Administrator of CMS should consider an alternative approach for allocating the 136 SFFs across States, by placing more emphasis on the relative performance of homes nationally rather than on a State-by-State basis, which could result in some States having only one or not any SFFs and other States having more than they are currently allocated.

CMS Response

We disagree with the approach of adopting a totally national ranking system because it would ignore important differences between States. Instead, we will evaluate a hybrid approach in which the current State-by-State assignments are used for part of the SFF selections, while a portion of the selections are made on a national basis. The current system has the advantage of both controlling for State-to-State variation and creating a process by which additional State survey agency knowledge is brought to bear on the final selections. Examples of such knowledge include the facility's track record of making and sustaining their prior problem correction efforts, the track record of the owner in both the SFF nursing home and other nursing homes, and the track record of the operator. On the other hand, a national pool may permit greater recognition of the fact that there are important differences in quality of care between nursing homes in different States.

GAO Recommendation 2

To improve the SFF methodology's ability to identify the most poorly performing nursing homes, the Administrator of CMS should make the following three modifications:

- (1) Consider using a common set of numeric points for identifying poorly performing nursing homes by determining the effect of adopting those associated with the Five-Star System for the SFF methodology.
- (2) Assign points to G-level deficiencies in substandard quality of care (SQC) areas equivalent to those additional points assigned to H- and I-level deficiencies in SQC areas.
- (3) Account for a nursing home's full compliance history regardless of technical status changes.

CMS Response

(1) Consider using a common set of numeric points for identifying poorly performing nursing homes by determining the effect of adopting those associated with the Five-Star System for the SFF methodology.

We agree in principle. We appreciate the value of harmonizing SFF and *Five-Star* methodologies to the extent appropriate and will evaluate the effect of using the *Five-Star* methodology.

(2) Consider using a common set of numeric points for identifying poorly performing nursing homes by determining the effect of adopting those associated with the Five-Star System for the SFF methodology.

Page 3 - Barbara Pisaro Clark

We agree in principle. We will evaluate the effect of such a methodological change in both the SFF and the *Five-Star* system.

(3) Account for a nursing home's full compliance history regardless of technical status changes.

We agree to the extent practicable. This recommendation would require linking providers that have had a change in certification, and hence a change in provider number, to their earlier provider numbers. In this way, a longer compliance history could be used to calculate ratings. Although this affects a small number of providers, it would improve the accuracy of ratings for those providers. We will evaluate the technical barriers involved in this change and implement the recommended adjustment to the maximum extent practicable.

GAO Recommendation 3

To ensure consistency with the SFF methodology, CMS should also consider making two of these modifications—the SQC and full compliance history changes—to the Five-Star System.

CMS Response

We agree in principle. We appreciate the value of consistent SFF and *Five-Star* methodologies and will evaluate the effect of making these changes to both the SFF and Five-Star systems.

We appreciate the efforts that went into this report and look forward to working with the GAO on this and other issues.

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

John E. Dicken, (202) 512-7114 or dickenj@gao.gov.

Acknowledgments

In addition to the contact named above, Walter Ochinko, Assistant Director; Ramsey Asaly; Daniel Lee; Shannon Slawter Legeer; Jessica Morris; Jessica Nysenbaum; Dae Park; Roseanne Price; Jennifer Rellick; Kathryn Richter; and Jessica Smith made key contributions to this report.

Related GAO Products

Medicare and Medicaid Participating Facilities: CMS Needs to Reexamine Its Approach for Funding State Oversight of Health Care Facilities. [GAO-09-64](#). Washington, D.C.: February 13, 2009.

Nursing Homes: Federal Monitoring Surveys Demonstrate Continued Understatement of Serious Care Problems and CMS Oversight Weaknesses. [GAO-08-517](#). Washington, D.C.: May 9, 2008.

Nursing Home Reform: Continued Attention Is Needed to Improve Quality of Care in Small but Significant Share of Homes. [GAO-07-794T](#). Washington, D.C.: May 2, 2007.

Nursing Homes: Efforts to Strengthen Federal Enforcement Have Not Deterred Some Homes from Repeatedly Harming Residents. [GAO-07-241](#). Washington, D.C.: March 26, 2007.

Nursing Homes: Despite Increased Oversight, Challenges Remain in Ensuring High-Quality Care and Resident Safety. [GAO-06-117](#). Washington, D.C.: December 28, 2005.

Nursing Home Quality: Prevalence of Serious Problems, While Declining, Reinforces Importance of Enhanced Oversight. [GAO-03-561](#). Washington, D.C.: July 15, 2003.

Nursing Homes: Public Reporting of Quality Indicators Has Merit, but National Implementation Is Premature. [GAO-03-187](#). Washington, D.C.: October 31, 2002.

Nursing Homes: Federal Efforts to Monitor Resident Assessment Data Should Complement State Activities. [GAO-02-279](#). Washington, D.C.: February 15, 2002.

Nursing Homes: Sustained Efforts Are Essential to Realize Potential of the Quality Initiatives. [GAO/HEHS-00-197](#). Washington, D.C.: September 28, 2000.

Nursing Home Care: Enhanced HCFA Oversight of State Programs Would Better Ensure Quality. [GAO/HEHS-00-6](#). Washington, D.C.: November 4, 1999.

Nursing Home Oversight: Industry Examples Do Not Demonstrate That Regulatory Actions Were Unreasonable. [GAO/HEHS-99-154R](#). Washington, D.C.: August 13, 1999.

Related GAO Products

Nursing Homes: Proposal to Enhance Oversight of Poorly Performing Homes Has Merit. [GAO/HEHS-99-157](#). Washington, D.C.: June 30, 1999.

Nursing Homes: Complaint Investigation Processes Often Inadequate to Protect Residents. [GAO/HEHS-99-80](#). Washington, D.C.: March 22, 1999.

Nursing Homes: Additional Steps Needed to Strengthen Enforcement of Federal Quality Standards. [GAO/HEHS-99-46](#). Washington, D.C.: March 18, 1999.

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