SKILLED NURSING FACILITIES

Medicare Payments Exceed Costs for Most but Not All Facilities
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Abbreviations

AAHSA American Association of Homes and Services for the Aging
AHCA American Health Care Association
AHA American Hospital Association
BBA Balanced Budget Act of 1997
BBRA Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999
BIPA Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000
CMS Centers for Medicare & Medicaid Services
HCFA Health Care Financing Administration
IV intravenous
MDS minimum data set
MedPAC Medicare Payment Advisory Commission
OACT Office of the Actuary
OIG Office of Inspector General
OSCAR Online Survey Certification and Reporting System
PPS prospective payment system
RN registered nurse
RUG resource utilization group
SNF skilled nursing facility
December 31, 2002

The Honorable Max Baucus
Chairman
The Honorable Charles E. Grassley
Ranking Minority Member
Committee on Finance
United States Senate

The Honorable William M. Thomas
Chairman
The Honorable Charles B. Rangel
Ranking Minority Member
Committee on Ways and Means
House of Representatives

From the mid-1980s through 1997, Medicare’s spending for skilled nursing facility (SNF) care rose at an average annual rate of 30 percent, making it one of the fastest growing components of the Medicare program. During this period, Medicare paid SNFs based on their reported costs of delivering care, subject to certain limits that were higher for hospital-based SNFs than for freestanding SNFs.\(^1\) Growth in the number of services provided to an increasing number of patients resulted in Medicare spending for SNF care reaching $13 billion in 1997. In response, the Congress established in the Balanced Budget Act of 1997 (BBA) a SNF prospective payment system (PPS) under which SNFs receive a fixed payment that covers almost all services provided during each day of a Medicare-covered stay.\(^2\)

With the implementation of the PPS, providers stated that the payments were inadequate, threatening their financial viability and their ability to serve beneficiaries. The Congress subsequently modified the PPS with several temporary payment increases. Some of these increases expired on October 1, 2002, and provider representatives have said that they should be restored due to payment shortfalls from other payers. These

\(^1\)A freestanding SNF is a nursing home that provides skilled nursing care and is not attached to a hospital. A hospital-based SNF is a unit of an acute care hospital.

\(^2\)Pub. L. No. 105-33, § 4432(a), 111 Stat. 251, 414 (codified at 42 U.S.C. § 1395yy(e)).
representatives are mainly concerned about Medicaid, a joint federal-state program for certain low-income individuals. According to this argument, when Medicaid payments do not cover the costs of Medicaid patients, higher payments are needed from Medicare to offset current or anticipated financial difficulties.

The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA) directed us to examine the adequacy of Medicare payments for SNFs and the extent to which Medicare revenues contribute to SNFs' financial viability. This report addresses (1) the relationship between Medicare SNF payments and the costs of treating Medicare patients in freestanding SNFs, as well as the effect of Medicare SNF payments on the financial condition of these facilities, and (2) the relationship between Medicare SNF payments and the costs of treating patients in hospital-based SNFs, as well as the factors that may account for cost differences between hospital-based and freestanding SNFs. To address these issues, we analyzed 1997 through 2000 SNF Medicare cost reports, which are the financial documents that facilities submit annually to receive payment from Medicare. We supplemented the cost report data with admissions data from Medicare claims, data on facility characteristics from the Online Survey Certification and Reporting System (OSCAR) maintained by the Centers for Medicare & Medicaid Services (CMS), and data on patient services from CMS's nursing home minimum data set (MDS). We did not verify these data, but we excluded a SNF from our analysis if one or more of its reported data items likely represented data entry or other reporting errors. We also interviewed representatives of the SNF industry. (See app. I for a more complete discussion of our methods.) We performed our work from October 2001 through December 2002 in accordance with generally accepted government auditing standards.

Results in Brief

Under the PPS, most freestanding SNFs' Medicare payments substantially exceeded the costs of caring for Medicare patients, contributing to facilities' overall positive financial condition. In 1999, the first full year under the PPS, the median freestanding SNF Medicare margin—a measure that compares Medicare payments with Medicare costs—was slightly over

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4Hospital-based facilities' 2000 cost reports as well as more recent cost reports for all SNFs were not available when we did our analysis.
By 2000, when the temporary payment increases authorized by the Congress started to take effect, the median Medicare margin had risen to almost 19 percent. However, nearly one-quarter of SNFs in 2000 had Medicare margins exceeding 30 percent, while about one-fifth had negative Medicare margins; that is, the payments they received from Medicare did not cover their costs of providing care. Medicare margins were higher for freestanding SNFs affiliated with large, for-profit nursing home chains and for those with high occupancy. The median SNF total margin—which reflects total revenues and costs across all patients—was 1.3 percent in 1999 and 1.8 percent in 2000. A SNF's total margin tended to be higher when its Medicare margin was higher despite the fact that, in most SNFs, Medicare's share of patient days was small. The total margins for freestanding SNFs tended to be lower when a higher proportion of a SNF's patients had their care paid for by Medicaid.

Unlike freestanding SNFs, about 90 percent of hospital-based SNFs reported significantly negative Medicare margins after Medicare's new SNF payment system was launched. The median hospital-based SNF Medicare margin was –53 percent in 1999. Under the PPS, per diem payments to hospital-based SNFs dropped considerably, reflecting the change from payments based on a facility's own costs to fixed payments based on average costs for all facilities. At the same time, hospital-based SNFs' reported per diem costs rose from 1997 through 1999. This is in contrast to the experience of freestanding SNFs, which had lower per diem Medicare costs than hospital-based SNFs prior to the PPS and reduced their costs further after the shift to the PPS. The higher Medicare costs reported by hospital-based SNFs may stem in part from differences in services provided to patients. The higher costs may also reflect the historical allocation of overhead costs to the SNF from the hospital, an accounting practice that, while consistent with the payment incentives under the prior cost-based reimbursement system, means that hospital-based SNFs' reported costs should be treated cautiously.

We received written comments from CMS stating that our findings are consistent with a recent analysis conducted by MedPAC and other

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5The Medicare margin is the difference between Medicare payments and Medicare costs, divided by Medicare payments, expressed as a percentage. We computed Medicare margins for SNFs using methods similar to those developed by the Medicare Payment Advisory Commission (MedPAC) and CMS’s Office of the Actuary (OACT). These methods assume that the average routine costs per day of Medicare patients are equal to the average routine costs per day of all patients in the SNF. (See app. I.)
analyses of Medicare margins. CMS noted that this report supports its position that Medicare SNF payment rates are more than adequate to cover the cost of services provided to Medicare beneficiaries. CMS's comments are reprinted in appendix III.

Background

About 15,000 SNFs provide care for patients who are temporarily or permanently unable to care for themselves, but who do not require the level of care furnished in an acute care hospital. SNFs provide a variety of services to patients, including nursing care; physical, occupational, respiratory, and speech therapy; and medical social services. Medicare covers these SNF services for Medicare beneficiaries who have recently been discharged from a stay in an acute care hospital lasting at least 3 days and who need daily skilled care. In addition, many of these facilities provide long-term care, mostly to Medicaid or private paying patients. (Over 2,200 nursing homes are not SNFs and treat Medicaid but not Medicare patients.) A SNF must meet federal standards to participate in the Medicare or Medicaid program. About 85 percent of SNFs, or roughly 13,000, are freestanding and three-quarters of these are for-profit entities. Nearly half of freestanding SNFs are owned by for-profit chains—corporations operating multiple facilities. Hospital-based SNFs, which number about 1,900, are usually part of not-for-profit acute care hospitals. (See table 1.)

In 2000, Medicare SNF expenditures were $13 billion for services provided to 1.4 million Medicare patients. About two-thirds of these patients received care in freestanding SNFs and the remaining one-third received care in hospital-based SNFs. On any given day, about 10 percent of freestanding SNFs' residents were Medicare beneficiaries. Most other patients cared for in a freestanding SNF were longer-stay patients receiving nursing or long-term care, which generally is paid for by Medicaid or by the patients themselves. Medicare patients account for a larger share of patients in hospital-based SNFs compared to freestanding SNFs. About 56 percent of patients in hospital-based SNFs are Medicare patients.

The 10 percent refers to SNF patients whose care is covered by Medicare. It excludes Medicare beneficiaries who are long-stay patients receiving long-term care or nursing care that Medicare does not cover. In this report, Medicare patients refers to Medicare beneficiaries who receive Medicare-covered SNF care.
Table 1: Freestanding and Hospital-Based SNFs by Type of Ownership, 1999

<table>
<thead>
<tr>
<th>Type of ownership</th>
<th>Freestanding SNFs</th>
<th>Hospital-based SNFs</th>
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<tbody>
<tr>
<td>For-profit:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 largest chains(^a)</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Smaller chains</td>
<td>29</td>
<td>9</td>
</tr>
<tr>
<td>Independents</td>
<td>26</td>
<td>6</td>
</tr>
<tr>
<td>All for-profit</td>
<td>75</td>
<td>16</td>
</tr>
<tr>
<td>Not-for-profit</td>
<td>22</td>
<td>65</td>
</tr>
<tr>
<td>Government(^c)</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


\(^a\) Year refers to each SNF’s cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

\(^b\) Chain size is measured by the total number of beds in the chain’s SNFs. This number is self-reported.

\(^c\) Primarily facilities operated by counties or cities.

Medicare Payment for SNF Care

During most of the 1990s, Medicare spending for SNF care grew much more rapidly than spending for most other Medicare services. Under the cost-based reimbursement system then in effect, Medicare paid SNFs' costs for routine care (room and board and routine nursing) up to a specified limit, with higher limits applied to hospital-based SNFs than to freestanding SNFs. New providers were exempt from the routine-care cost limits for their first 4 years, and all providers could be granted exemptions to the limits by demonstrating that their higher costs were due to atypical patients or patterns of care. Unlike routine-care costs, payments for ancillary services such as therapy were not subject to cost limits, giving facilities few incentives to control those costs.

The Congress, in the BBA, directed the Health Care Financing Administration (HCFA)\(^7\) to replace the cost-based reimbursement system with a PPS. The PPS is designed to give SNFs incentives to furnish only necessary services and to deliver those services efficiently by allowing facilities to retain any excess of Medicare payments over costs, but

\(^7\) On July 1, 2001, the Secretary of Health and Human Services changed the name of HCFA to CMS. In this report, we will continue to refer to HCFA where our findings apply to the organizational structure and operations associated with that name.
requiring them to absorb any costs that are greater than payments. Under the PPS, SNFs receive a per diem payment, adjusted for geographic differences in labor costs and for differences in the resource needs of patients. Adjustments for patients' resource needs are based on a patient classification system, resource utilization group (RUG), version III. This system assigns patients to 1 of 44 payment groups or RUGs, based on their clinical condition, functional status, and use or expected use of certain types of services. With few exceptions, the payment covers all routine, therapy, and nursing costs incurred in treating patients.

Although we have reported that total SNF PPS payments are likely to be adequate, we, MedPAC, and others have raised concerns that the Medicare payments for certain types of patients may be too low because of inadequacies with the patient classification system.\(^8\) The patient classification system may not sufficiently reflect the greater resource needs of those patients who require multiple kinds of health care services, such as drugs, laboratory services, and imaging.\(^9\) In response to BIPA's requirement that CMS report on alternatives to the RUG patient classification system by January 1, 2005, CMS has sponsored research to determine the feasibility of refinements as well as alternatives to the RUG system.

After the implementation of the SNF PPS, some SNF representatives claimed that Medicare payments were inadequate and contributed to SNFs' poor financial performance. The Congress responded to provider concerns about the adequacy of SNF payments by making several temporary modifications to the PPS payment rates. Two of these changes, which applied to all Medicare SNF patients and represented about $1.4 billion in annual payments, expired on October 1, 2002:


an increase provided by the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999 (BBRA) of 4 percent in the payment rate for all RUGs for fiscal years 2001 and 2002,\textsuperscript{10} and
\begin{itemize}
\item an increase provided by BIPA of 16.66 percent in the nursing component of the payment rate for all RUGs for April through September 2001 and fiscal year 2002.\textsuperscript{11}
\end{itemize}

Two additional changes were enacted for selected types of Medicare patients. These changes, which affect 26 of the 44 RUGs and total about $1 billion per year, will remain in effect until CMS refines the patient classification system. CMS has announced that, although it is examining possible refinements, the system will not be changed for the 2003 payment year. The two payment changes are:

\begin{itemize}
\item an increase provided by BBRA of 20 percent in the payment rate for 15 RUGs, including those for extensive services, special care, clinically complex care, and certain rehabilitation services;\textsuperscript{12} and
\item an increase provided by BIPA of 6.7 percent in the payment rate for 14 rehabilitation RUGs.\textsuperscript{13} This redirected the funds from the 3 rehabilitation RUGs that had received the 20 percent BBRA increase and applied these funds to all 14 rehabilitation RUGs. As a result of this redirection of funds, aggregate payments did not increase.
\end{itemize}

Prior to October 1, 2002, when two of these temporary payment increases expired, some SNF representatives stated that Medicare payments were adequate, although they said inadequate Medicaid payments compromised SNF financial viability. Following the expiration of these two temporary Medicare payment increases, provider organizations have again expressed concern that Medicare payments are now not adequate.

Other legislative provisions also affected Medicare payments to SNFs. A key provision was the 3-year phased transition to the PPS that the BBA established. Under this transition, which began in 1998, SNFs were paid a

\textsuperscript{11}BIPA § 312(a). This increase raised the overall payment rate from 4 to 12 percent, depending on the RUG. See U.S. General Accounting Office, Skilled Nursing Facilities: Available Data Show Average Nursing Staff Time Changed Little after Medicare Payment Increase, GAO-03-176 (Washington, D.C.: Nov. 13, 2002).
\textsuperscript{12}BBRA § 101.
\textsuperscript{13}BIPA § 314.
blend of facility-specific rates, based on each SNF’s 1995 costs, and the PPS rate. BBRA allowed SNFs to receive the full PPS rate for cost reporting periods beginning on or after January 1, 2000.14 This provision permitted SNFs that were advantaged by the PPS rate to be paid under it, while SNFs that were disadvantaged by the new rate could transition to it on the original 3-year schedule.

### Use of Medicare-Covered SNF Care

Medicare-covered SNF use quadrupled from 1985 to 1997, rising from 10 SNF users per 1,000 Medicare fee-for-service beneficiaries to 41 users.15 A variety of factors contributed to this increase:

- In 1983, Medicare began paying hospitals a fixed rate per stay as an incentive to control costs. Hospitals responded as expected and, to reduce costs by cutting the length of hospital stays, transferred patients more quickly to SNFs and other post-acute care settings.
- In 1988, clarification of Medicare coverage guidelines allowed more beneficiaries to qualify for SNF services.
- From 1990 through 1996 the number of freestanding SNFs increased 49 percent, while hospital-based SNFs increased 82 percent. This growth in providers was encouraged by Medicare payment policies, which did not subject new SNFs to payment limits for their first 4 years of operation, and by the growth in payments. From 1990 through 1996, the average Medicare payment per SNF day of care climbed from $98 to $292.16

During this period prior to the implementation of the SNF PPS, hospitals that had SNFs were particularly advantaged by transferring acute care patients sooner to their own SNFs. Transfers enabled these hospitals to reduce their acute care costs and increase their SNF revenues. To help ensure that Medicare did not overpay for services at the end of an acute episode of care, the Congress required HCFA to reduce hospital payments for patients transferred to post-acute care after a shorter-than-average

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14BBRA § 102.

15Beneficiaries enrolled in managed care plans are excluded from the calculation.

hospital stay.\textsuperscript{17} In fiscal year 1999 HCFA implemented this policy for 10 types\textsuperscript{18} of patients with high use of post-acute care.

The reduction in hospital payment for patients transferred to post-acute care lessened the incentive for hospitals to shorten the stays of these patients. Following this change, SNF admissions per 1,000 hospital discharges decreased by 4 percent from 1996 to 2000. After adjusting for differences in patients' clinical conditions,\textsuperscript{19} the number of admissions was only 2 percent lower in 2000 than in 1996, indicating that part of the decline was due to reduced need for SNF care. However, if the 10 types of patients affected by the change in hospital payment for transfers are excluded, SNF admissions were the same in 2000 as in 1996. This suggests that some of the observed decline in SNF admissions may be due to the change in payment policy for hospital transfers.

Despite this observed decline in SNF admissions, the evidence does not suggest major problems with beneficiary access to SNF care. Beginning in 1999, the Department of Health and Human Services' Office of Inspector General (OIG) has examined SNF access in several surveys of hospital discharge planners to determine whether they are able to place their Medicare patients who need care in SNFs.\textsuperscript{20} These surveys have found that planners can place most patients needing care. In the most recent OIG survey, about three-quarters of discharge planners reported that they were able to place all patients. However, some planners reported delays in placing patients with particular medical conditions or service needs, resulting in these patients continuing to receive care in the hospital rather than SNFs.

\textsuperscript{17}BBA § 4407. Without this provision, Medicare would pay hospitals a fixed amount per stay—whether the patient had an average or shorter-than-average hospital stay. In addition, Medicare would pay SNFs for each day of SNF care, even if—prior to the change in hospital payment—some of this care would have been provided in the hospital.

\textsuperscript{18}"Types" refers to diagnosis-related groups (DRG), a classification scheme that groups acute care hospital patients according to diagnosis, type of treatment, age, and other criteria.

\textsuperscript{19}"Patients' clinical conditions" refers to DRGs.

than in a SNF. Patients who took longer to place included those who needed intravenous (IV) antibiotics or expensive drugs, as well as those who were ventilator-dependent or who required dialysis or wound care.

Medicare Payments Considerably Higher than Costs for Most Freestanding SNFs, Thereby Improving Their Overall Financial Performance

In the first 2 full years under the PPS, Medicare payments more than covered Medicare costs for most freestanding SNFs, although their experiences varied widely. Many SNFs had very high Medicare margins, particularly in 2000, although in both years a minority of SNFs had negative Medicare margins—payments from Medicare did not cover their costs of serving Medicare patients. The median Medicare margin for SNFs that were owned by large nursing home chains and for those SNFs with high occupancy was much higher than the overall median Medicare margin for all SNFs. SNFs' Medicare margins were sufficiently high that, while Medicare's share of most SNFs' total patient days was relatively small, SNFs with higher Medicare margins generally had higher total margins, which reflect all SNF revenues and costs. For-profit facilities generally had higher total margins, as did facilities owned by large chains. SNFs with higher proportions of Medicaid patients generally had lower total margins.

Medicare Margins Generally High, Particularly in 2000 and for SNFs in Large For-Profit Chains and Those with High Occupancy

For their first 2 years under PPS, most freestanding SNFs reported positive Medicare margins, meaning that their payments more than covered their costs. In 1999, the median facility had a Medicare margin exceeding 8 percent, and over one-tenth had margins of 30 percent or more. By 2000, the median Medicare margin for freestanding SNFs had risen to nearly 19 percent, and almost one-quarter of SNFs had Medicare margins of 30 percent or more. These positive margins resulted largely from SNFs reducing their costs. Although Medicare payments per day were 8 percent lower in 1999 than in 1997, for the median facility these lower payments

21In aggregate, Medicare payments to freestanding SNFs exceeded Medicare costs by 11 percent in 1999 and by 24 percent in 2000.

22We computed Medicare margins for SNFs using methods similar to those developed by MedPAC and CMS's OACT. These methods assume that average nursing costs are the same for Medicare and other patients. A more refined measure of costs would reflect the difference in nursing needs between Medicare patients and other patients in the facility. We tested such a refinement but could not calculate it for all SNFs due to incomplete data. Using available data, we estimated that the median Medicare margin in 2000, based on a more refined measure of costs, would have been between 0.6 and 1.6 percentage points lower than that reported here. (See app. I)
were more than offset by lower costs. (See table 2.) From 1999 through 2000, costs had again declined, although by a smaller amount. At the same time, payments increased, as the temporary increases authorized by the Congress began to be implemented.\textsuperscript{23}

| Table 2: Freestanding SNFs' Median Medicare Per Diem Payments and Costs, 1997-2000 |
|-----------------------------------------------|----------|----------|----------|----------|
| In dollars                                   | 1997     | 1998     | 1999     | 2000     |
| Medicare payments per day                    | 264      | 270      | 243      | 269      |
| Medicare costs per day                       | 273      | 279      | 224      | 220      |

Source: GAO analysis of Medicare cost report data.

\*Year refers to each SNF's cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

Although most freestanding SNFs had positive Medicare margins, for a minority of SNFs, Medicare payments did not cover Medicare costs. In 1999, more than one-third of freestanding facilities reported negative Medicare margins, with one-tenth reporting margins that were –30 percent or less.\textsuperscript{24} By 2000, the number of facilities with negative margins had declined substantially: about 19 percent had margins that were less than zero, and 4 percent had margins of –30 percent or less.

Freestanding SNFs' Medicare margins differed by type of ownership. For-profit SNFs—particularly those associated with the largest chains—had positive Medicare margins in both 1999 and 2000 that were higher than those of both not-for-profit and government-operated SNFs.\textsuperscript{25} In 1999, median margins for not-for-profit and government-operated SNFs were

\textsuperscript{23}The impact of the temporary increases on 2000 payments depended both on the effective date in the law and on the start date of each SNF's fiscal year. The 4 percent across-the-board increase was in effect for the entire year for all facilities. The 20 percent temporary increase in payments for 15 RUGs was in effect for part of 2000 for most facilities. The other two increases—the increase in the nursing component and the increase for rehabilitation RUGs—had a smaller effect in the 2000 cost reporting year: 16 percent of SNFs were affected for part of the year.

\textsuperscript{24}That is, Medicare payments fell short of costs by at least 30 percent.

\textsuperscript{25}This relationship held true even after accounting for other factors. (See app. I.)
negative, while in 2000 the median margins for all types of freestanding SNFs were positive. (See table 3.)

| Table 3: Median Medicare Margins for Freestanding SNFs by Type of Ownership, 1999 and 2000 |
|-----------------------------------------------|-----------------------------------------------|
| Numbers in percent                            | 1999*                                        | 2000*                                        |
| For-profit:                                   |                                              |                                              |
| 10 largest chains\(^b\)                      | 18.2                                         | 25.2                                         |
| Smaller chains                                | 7.6                                          | 16.8                                         |
| Independents                                  | 6.6                                          | 17.7                                         |
| All for-profit                                | 11.7                                         | 20.4                                         |
| Not-for-profit                                | -1.4                                         | 11.1                                         |
| Government\(^c\)                              | -13.9                                        | 8.2                                          |
| All freestanding SNFs                         | 8.4                                          | 18.9                                         |


*Year refers to each SNF's cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

*Chain size is measured by the total number of beds in the chain's SNFs. This number is self-reported.

*Primarily facilities operated by counties or cities.

Medicare margins also varied with occupancy.\(^26\) Higher occupancy resulted in higher margins. For example, in 1999, freestanding SNFs with occupancy rates\(^27\) of 90 percent or more had a median margin of 10.2 percent, while SNFs with occupancy rates below 70 percent had a median margin of 0.6 percent. (See table 4.) These results are not surprising, because higher occupancy reduces per diem costs, as fixed costs are spread across more patient days.

\(^{26}\)Other factors associated with higher Medicare margins included urban location, while factors associated with lower margins included having a small number of Medicare SNF patient days per year.

\(^{27}\)The occupancy rate is based on all beds in the facility, regardless of whether they were occupied by Medicare patients or other patients.
Table 4: Median Medicare Margins for Freestanding SNFs by Occupancy Rate, 1999

<table>
<thead>
<tr>
<th>Occupancy rate</th>
<th>Share of SNFs</th>
<th>Medicare margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 70 percent</td>
<td>11</td>
<td>0.6</td>
</tr>
<tr>
<td>70 to 79 percent</td>
<td>13</td>
<td>6.1</td>
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<tr>
<td>80 to 89 percent</td>
<td>28</td>
<td>8.3</td>
</tr>
<tr>
<td>90 to 100 percent</td>
<td>48</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Medicare cost report data.

Year refers to each SNF's cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

The occupancy rate is based on all beds in the facility, regardless of whether they were occupied by Medicare patients or other patients.

Despite the expiration of two temporary Medicare payment increases and the completed transition from payments based on a facility's own costs to PPS rates, SNFs' positive Medicare margins are likely to continue. MedPAC has estimated that freestanding SNFs' aggregate Medicare margin for 2002 would be 9.4 percent, excluding for the entire year the temporary payment increases that expired on October 1, 2002, and assuming that all facilities had completed the transition to the PPS.28

Although most freestanding SNFs had positive Medicare margins, most had few Medicare patients and Medicare accounted for a small share of their revenue. In 1999, the median SNF had about six Medicare patients each day and received about 13 percent of its revenue from Medicare. By contrast, the care for about two-thirds of patients was paid for by Medicaid with the remainder generally paid for by the patients themselves.

Despite Medicare's small share of most freestanding SNFs' patients, Medicare contributed substantially to these facilities' total margins, because Medicare payments were much higher than costs. In general,

28In its estimate, MedPAC updated 1999 costs and payments through 2002 for inflation and used payment policies expected to be in effect in 2003: temporary payment increases due to expire on October 1, 2002, were excluded and all facilities were assumed to be paid entirely under the PPS. MedPAC included the temporary payment increases that will be in effect in 2003 and will not expire until the patient classification system is refined. It estimated the margin using aggregate Medicare SNF payments and aggregate Medicare SNF costs. Medicare Payment Advisory Commission, Report to the Congress: Medicare Payment Policy (Washington, D.C.: March 2002).
facilities with higher Medicare margins had higher total margins. Moreover, in 1999 and 2000, the median total margin would have been negative without Medicare; for example, in 2000, it would have been −1.2 percent. With Medicare, the actual median total margin was 1.8 percent. (See table 5.)

<table>
<thead>
<tr>
<th></th>
<th>1999*</th>
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<tr>
<td>Medicare margin</td>
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<td>18.9</td>
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<tr>
<td>Total margin</td>
<td>1.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Total margin without Medicare</td>
<td>-0.1</td>
<td>-1.2</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Medicare cost report data.

a Year refers to each SNF's cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

Medicaid's share of freestanding SNFs' residents influenced facilities' overall profitability. The larger Medicaid's share of a SNF's patient days, the smaller its total margin.29 (See table 6.) For-profit status and ownership by a chain also affected freestanding SNFs' total margins. For-profit facilities showed higher median total margins than not-for-profit and government-operated facilities, and large chains displayed the highest total margins. (See table 7.)

Freestanding SNFs' Total Margins Varied by Medicaid Share of Residents and Type of Ownership

29Our statistical analysis of SNF total margins showed that the Medicaid share of patient days remains significant after accounting for SNF characteristics, including for-profit status.
**Table 6: Median Total Margins for Freestanding SNFs by Medicaid Share of Patient Days, 1999**

<table>
<thead>
<tr>
<th>Medicaid share of patients</th>
<th>Total margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 56 percent</td>
<td>2.2</td>
</tr>
<tr>
<td>56 to 69 percent</td>
<td>1.8</td>
</tr>
<tr>
<td>70 to 79 percent</td>
<td>1.0</td>
</tr>
<tr>
<td>80 percent and above</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Medicare cost report data.

*a Year refers to each SNF's cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

*b Each group contains roughly one-quarter of all freestanding SNFs.

**Table 7: Median Total Margins for Freestanding SNFs by Type of Ownership, 1999 and 2000**

<table>
<thead>
<tr>
<th></th>
<th>1999*</th>
<th>2000*</th>
</tr>
</thead>
<tbody>
<tr>
<td>For-profit:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 largest chains</td>
<td>2.7</td>
<td>3.8</td>
</tr>
<tr>
<td>Smaller chains</td>
<td>0.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Independents</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>All for-profit</td>
<td>1.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Not-for-profit</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Government</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>All freestanding SNFs</td>
<td>1.3</td>
<td>1.8</td>
</tr>
</tbody>
</table>


*a Year refers to each SNF's cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

*b Chain size is measured by the total number of beds in the chain's SNFs. This number is self-reported.

*c Primarily facilities operated by counties or cities.

Many other factors were also related to differences in freestanding SNFs' total margins. Factors contributing to high total margins included high occupancy and location in a rural area. Factors associated with low total margins were a high concentration of SNFs in a geographic area, and location in a state with relatively high average wages for nursing staff.
In contrast to freestanding SNFs, hospital-based SNFs reported very negative Medicare margins after the introduction of the PPS. These low margins reflected a substantial decline in Medicare payments to hospital-based SNFs under the PPS as well as hospital-based SNFs’ weak response to PPS incentives to reduce costs. Differences in services between hospital-based SNFs and freestanding SNFs could have resulted in higher costs for hospital-based SNFs that may not have been fully accounted for by the patient classification system in the PPS. The negative margins reported by hospital-based SNFs were also due in part to their high costs per day, which may reflect the historical allocation of hospitals’ overhead to their SNF units.

In 1999, about 90 percent of all hospital-based SNFs reported Medicare costs exceeding Medicare payments, and the median hospital-based SNF posted Medicare margins of −53 percent.\(^{30}\) While insufficient data were available to compute margins for hospital-based SNFs for 2000, their margins likely improved with the payment increases, but remained significantly negative.\(^{31}\) Only a small minority—about 10 percent—reported positive margins in 1999. These more successful hospital-based SNFs generally had high occupancy and did not rely heavily on Medicare payments.

The explanation of these low margins lies partly in the large decline in Medicare per diem payments that followed the shift to the PPS. Prior to the PPS, Medicare’s payments to SNFs were based on each facility’s own costs. This led to higher payments for hospital-based SNFs: a median of $378 per day for hospital-based SNFs in 1997 (see table 8), compared to a median of $264 for freestanding SNFs.

\(^{30}\)In aggregate, Medicare costs of hospital-based SNFs exceeded their Medicare payments by 55 percent.

\(^{31}\)We were not able to calculate margins for 2000 because most hospitals' cost reports were not yet available when we performed our work.
Table 8: Hospital-Based SNFs’ Median Medicare Per Diem Payments and Costs, 1997-1999

<table>
<thead>
<tr>
<th>Year</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare payments per day</td>
<td>378</td>
<td>347</td>
<td>281</td>
</tr>
<tr>
<td>Medicare costs per day</td>
<td>461</td>
<td>484</td>
<td>490</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Medicare cost report data.

*Year refers to each SNF’s cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

In the first year of the PPS, hospital-based SNFs, unlike their freestanding counterparts, did not respond to the incentives in the PPS by reducing costs: compared to 1997, hospital-based SNFs’ costs in 1999 were higher by $29 per day.\(^3\) By contrast, freestanding SNFs reduced costs by $49 per day. As a result, per diem costs continued to be substantially higher in hospital-based facilities than in freestanding SNFs—more than twice as high in 1999.


Differences in Services and Accounting Practices May Contribute to Cost Differences between Hospital-Based and Freestanding SNFs

Some differences in costs between hospital-based and freestanding SNFs may also reflect differences in services in the two settings. Although patients in hospital-based SNFs had received less therapy as of their initial Medicare assessment than patients in freestanding SNFs (and slightly more as of their second assessment), they were more likely to receive other kinds of services, including IV medications, oxygen therapy, and transfusions. Hospital-based SNFs also gave significantly more nursing care, as measured by the ratio of nurses to patients. However, when patients’ resource needs were measured by RUGs, patients in the two

\(^3\)Nearly one-quarter of hospital-based SNFs closed after the implementation of the PPS. These closures accounted for 4 percent of all Medicare-covered SNF days in 1997 and 22 percent of Medicare-covered SNF days provided by hospital-based SNFs. Hospital-based SNFs that opened after 1995 were more likely to close than those that had been in business longer.

\(^{33}\)SNFs document the amount of therapy a patient has received in the last 7 days at an initial assessment (often called the 5-day assessment) and again at a second assessment (often called the 14-day assessment). The amount of therapy documented includes only therapies provided in the SNF; if the initial assessment occurs on the fifth or sixth day, then only 5 or 6 days of therapy are documented. Therapy includes physical, occupational, and speech therapy.
settings appeared identical, suggesting that their service needs should be comparable. Consequently, the observed differences in the treatments that patients received may suggest that the RUGs do not fully measure differences in patients’ conditions and could account for part of the cost difference between hospital-based and freestanding SNFs.\(^{34}\) (See table 9.)

\(^{34}\)A study by Abt Associates found that hospital-based SNFs have significantly higher per-patient costs than freestanding SNFs after controlling for various factors, but could not explain why. Abt Associates, Inc., Why Are Hospital-Based Nursing Homes So Expensive? The Relative Importance of Acuity and Treatment Setting, Health Services and Evaluation (HSRE) Working Paper No. 3 (Cambridge, Massachusetts: February 2001).
Table 9: Therapies, Special Treatments, and Nursing in Hospital-Based and Freestanding SNFs, 1999

<table>
<thead>
<tr>
<th></th>
<th>Hospital-based</th>
<th>Freestanding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average therapy per patient, minutes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measured at initial Medicare assessment</td>
<td>337</td>
<td>369</td>
</tr>
<tr>
<td>Measured at second Medicare assessment</td>
<td>446</td>
<td>440</td>
</tr>
<tr>
<td><strong>Patients receiving special treatments, percentage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV medication</td>
<td>57</td>
<td>37</td>
</tr>
<tr>
<td>Intake/output</td>
<td>70</td>
<td>53</td>
</tr>
<tr>
<td>Monitoring acute medical condition</td>
<td>62</td>
<td>57</td>
</tr>
<tr>
<td>Ostomy care</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Oxygen therapy</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>Suctioning</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Tracheotomy care</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Transfusions</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td><strong>Average nurse staffing ratio</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average registered nurse (RN) hours per patient day</td>
<td>1.81</td>
<td>0.37</td>
</tr>
<tr>
<td>Average total nurse hours (RN, licensed practical nurse, aide) per patient day</td>
<td>5.57</td>
<td>3.12</td>
</tr>
</tbody>
</table>

Source: GAO analysis of MDS data and OSCAR data.

Note: Entries are not adjusted for differences in patients’ clinical conditions between hospital-based and freestanding SNFs. Their RUG scores are similar.

*SNFs document the amount of therapy a patient has received in the last 7 days at an initial assessment (often called the 5-day assessment) and again at a second assessment (often called the 14-day assessment). The amount of therapy documented includes only therapies provided in the SNF; if the initial assessment occurs on the fifth or sixth day, then only 5 or 6 days of therapy are documented. Therapy includes physical, occupational, and speech therapy. Patients who were receiving chemotherapy, dialysis, IV medications, oxygen therapy, radiation, or ventilator or respiratory care were excluded from the analysis of therapy.

**Based on the initial Medicare assessment. Similar results were obtained using the second assessment.

***These staffing ratios are based on SNFs’ overall direct nursing care staff and the total number of patients. These ratios are facility-wide rather than ratios specific to Medicare patients.

Part of the cost differential between hospital-based and freestanding SNFs may reflect accounting practices that increase reported costs for individual units of the hospital, such as SNFs, that had been paid on the basis of these reported costs. MedPAC "believe[s] a significant portion of the negative [hospital-based] SNF margin reflects the allocation of hospital
overhead costs to cost-reimbursed units.\footnote{See Medicare Payment Advisory Commission, \textit{Report to the Congress: Medicare Payment Policy} (Washington, D.C.: March 2001), p. 67.} Prior to the SNF PPS, but after Medicare had implemented its per case PPS for acute inpatient hospital care, hospitals had an incentive to allocate administrative and capital costs to cost-reimbursed units, including SNFs, potentially raising reported costs for these units. (Capital as a share of Medicare per diem costs for hospital-based SNFs was about 96 percent higher than it was for freestanding SNFs in 1999.) Now that SNFs are paid a fixed rate, this incentive no longer exists—but neither is there an incentive to change historical cost allocations. In fact, capital as a share of Medicare costs for hospital-based SNFs has changed little since before PPS. In light of these accounting issues, reported costs of hospital-based SNFs, as well as margins calculated from these costs, should be treated cautiously.\footnote{In addition to the differences in per diem cost, the average length of stay in hospital-based SNFs was less than half that in freestanding facilities. It is uncertain whether the difference in length of stay resulted from differences in patients, effectiveness of treatment, or other factors. For analysis of selected differences in outcomes, see DataPRO Team, \textit{Skilled Nursing Facilities Prospective Payment System, Findings from Rehospitalization Transfer within 30 Days Analysis: Summary and Selected Results}, Ad Hoc Report E (Washington, D.C.: June 2002).}

### Concluding Observations

Our analysis shows that the Medicare PPS generally pays SNFs adequately for the services that beneficiaries receive. Freestanding SNFs, which treat most Medicare SNF patients, generally received Medicare payments that exceeded their costs, often by considerable amounts. Most hospital-based SNFs reported costs that were greatly in excess of Medicare payments, but these hospital-based SNFs did not respond to the incentives in the PPS by reducing costs. Some of their high costs may also be due to differences in patients that lead to higher resource use and that are not captured by the payment system. This problem could be addressed through refinements to the patient classification system, which CMS is currently studying.

Concerns about the financial conditions of some nursing homes have led to interest in using Medicare payment policy to offset current or anticipated financial difficulties. Whatever the merits of the case for aiding these facilities, an across-the-board increase in Medicare payments, such as the restoration of the expired temporary increases, would be particularly inefficient. An across-the-board increase would go to all providers of Medicare SNF care, even those for which Medicare's current
payments already greatly exceed costs and which are not experiencing any financial difficulty. Such an increase could also not take account of differences in the adequacy of revenues from other payers, especially the state Medicaid programs. Moreover, over 2000 nursing homes would not get any increase, because they do not participate in Medicare.

Agency and Other Comments and Our Evaluation

We received written comments on a draft of this report from CMS (see app. III) and oral comments from the American Association of Homes and Services for the Aging (AAHSA), which represents not-for-profit nursing facilities; the American Health Care Association (AHCA), which represents for-profit and not-for-profit nursing facilities; and the American Hospital Association (AHA), which represents hospitals. We incorporated their comments as appropriate. Industry representatives agreed with our basic findings concerning SNF margins and several stated that it was a good report.

CMS

CMS noted that our findings are consistent with a recent analysis conducted by MedPAC and other analyses of Medicare margins. CMS stated that the report supports its position that Medicare SNF payment rates are more than adequate to cover the cost of services provided to Medicare beneficiaries.

Industry Associations

Representatives of AHCA and AAHSA who reviewed the draft report were concerned that the report does not address the issue of Medicaid payments being too low and the role they play in SNFs' financial viability. AHCA also objected to the prominence given to differences in payments by type of ownership, which they believe is a less important factor than occupancy and Medicare percentage of total SNF days in explaining SNF total margins. They characterized as misleading the 30 percent annual growth rate in Medicare SNF expenditures that we reported for 1985 through 1997, stating that spending growth was driven by growth in utilization.

Both the AHCA and AHA representatives commented on our findings concerning the differences between freestanding and hospital-based SNFs. AHCA stated that any differences in services between hospital-based and freestanding SNFs are due to differences in patients' clinical conditions. The AHA representatives objected to our statement that the higher per diem costs of hospital-based SNFs could be partly due to the historical patterns of allocating overhead and other costs to the SNF. They stated...
that hospital cost accounting systems are constantly changing as hospitals
add and drop services, and that the cost allocation issue in general is an
artifact of the 15 years of operation of Medicare's inpatient PPS. According
to AHA, hospitals were already operating at an efficient level when the
SNF PPS was implemented and therefore had fewer excess costs to trim.
The AHA representatives also noted the shorter average length of stay of
hospital-based SNFs and suggested that reporting costs on a per case
basis, which reflects this shorter length of stay, rather than on a per diem
basis, would show that hospital-based SNFs are less costly than
freestanding SNFs.

Both AAHSA and AHA addressed possible changes to the PPS. The AAHSA
representative stressed that Medicare payments are inadequate for
patients who need medically complex nonrehabilitation ancillary services.
She stated that the report should include language suggesting that the
patient classification system should be changed to better reflect patient
characteristics. Regarding our concluding observations, AHA inferred
from our discussion of across-the-board increases in payment rates that
we would favor targeted increases.

Our Response

Regarding payments, we accounted for Medicaid payments in our analysis
of total margins but were unable to conduct a separate analysis of
Medicaid payment adequacy for nursing homes because of the lack of
suitable data. Isolating the impact of Medicaid payments was not possible
because the Medicare cost reports do not report Medicaid payments or
costs separately and because there is no source of Medicaid financial data
collected on a consistent and ongoing basis across all facilities and states.
Although occupancy and Medicare percentage of total SNF days were
important factors in explaining differences in total margins, we found that
after accounting for these factors, type of ownership remained a
significant factor. We agree that utilization growth was a key factor in the
rise in Medicare SNF spending, as this report states. Nonetheless, the rapid
growth in spending, which we characterized correctly, provided the
impetus for enactment of the SNF PPS.

With regard to differences between freestanding and hospital-based SNFs,
our analyses reported in the draft show that the average RUG score, a
measure of patients' clinical conditions, is nearly the same for both. We
acknowledged, moreover, that the RUG system may not adequately
account for differences across patients. As we stated in the draft, the
higher costs of hospital-based SNFs are consistent with historical patterns
of allocating overhead costs to SNF units. Whatever changes are occurring
in hospital cost accounting, hospitals have had no incentive to change their historical cost allocations since the implementation of the SNF PPS. Moreover, we found no evidence to suggest that they had done so. For example, as we stated in the draft, capital costs expressed as a share of Medicare per diem costs have not changed. Although AHA representatives said that hospitals were more efficient and consequently had less flexibility to reduce costs after the implementation of the SNF PPS, they did not offer evidence to reconcile this view with hospital-based SNFs' higher costs. Hospitals' efficiency may have improved on the inpatient side as a result of the hospital PPS, but this would not necessarily improve the efficiency of hospital-based SNFs. Although we agree that hospital-based SNFs are less costly than freestanding SNFs on a per case basis, we did not present this measure because payments under the SNF PPS are not made on a per case basis.

Regarding possible changes in the PPS, we have previously acknowledged that the current patient classification system may not adequately recognize the greater resource needs of some patients.37 We support CMS's sponsorship of research to investigate improvements in the system. Our analysis does not support an increase in Medicare payment rates. Instead, it would be preferable to refine the patient classification system underlying the SNF PPS, if necessary redistributing money to ensure that payments vary appropriately to reflect patient resource needs.

We are sending copies of this report to the Administrator of CMS, appropriate congressional committees, and other interested parties. We will also provide copies to others upon request. In addition, the report is available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staffs have any questions, please call me at (202) 512-7114. Other GAO contacts and staff acknowledgements are listed in appendix IV.

Laura A. Dummit
Director, Health Care—Medicare Payment Issues
## Appendix I: Methodology for Calculating and Analyzing SNF Margins

This appendix describes the data and methods used to calculate margins for SNFs as well as the analyses of factors affecting margins.

### Data and Methods Used in Calculating Margins

In general, a SNF margin is the difference between its payments and its costs, divided by payments; this ratio is expressed as a percentage. Using this definition, a total margin for a SNF is based on the difference between its total payments—derived from all payers—and its total costs. A Medicare margin for a SNF is based on the difference between its Medicare payments and its reported costs of serving Medicare patients.\(^1\)

We report the median margins for freestanding and hospital-based SNFs, as well as for subgroups (for example, not-for-profit freestanding SNFs).\(^2\)

We computed Medicare and total margins for freestanding and hospital-based SNFs using methods similar to those developed by MedPAC and CMS's Office of the Actuary (OACT). Our primary data sources for SNF payments and costs used in calculating Medicare and total margins were the 1997 through 2000 Medicare SNF cost report files maintained by CMS.\(^3\) Our methods differed slightly from those used by MedPAC and OACT with respect to the definition of outliers and the application of an adjustment to Medicare costs.

**Definition of outliers.** The data for some SNFs must be excluded from the analysis because they result in outliers—implausibly high or low margins that suggest data error. To identify outliers, MedPAC uses a method based on percentiles. We used a standard statistical distribution (lognormal) and removed SNFs where margins were plus or minus 3 standard deviations or more from the mean. We used this method because it improved our ability to detect and eliminate extreme values.

**Application of cost adjustment.** MedPAC adjusted 1999 cost data for freestanding SNFs that, after the implementation of the SNF PPS, changed

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1. The definition of Medicare costs excludes nonallowable costs such as patients' telephones and personal laundry services.
2. MedPAC primarily reports revenue-weighted, or aggregate, margins. These are calculated by summing the revenues of all providers in a group (for example, freestanding SNFs) and separately summing these providers' costs. Using these sums, a margin is calculated for the group. Reporting revenue-weighted margins is consistent with MedPAC's focus on the adequacy of Medicare's aggregate payments for SNF care.
3. Each annual cost report file contains data for SNFs' cost reporting periods beginning on or after the start date of the relevant federal fiscal year.
from certifying a portion of their beds for use by Medicare patients to certifying all or most their beds for Medicare patients. This increase in certified beds resulted in the average cost per day reflecting the cost experience of a broader range of patients, many of whom may not have received skilled care. The adjustment made data more comparable over time by making costs for 1999 more similar to costs in 1997 and 1998, which were based on a larger share of patients needing a SNF level of care.

To better ensure comparability of cost data across time, we made an adjustment similar to MedPAC’s. Following MedPAC’s approach, we identified freestanding SNFs for which this adjustment should be made by examining the change between years in the number of Medicare-certified beds. If the number of certified beds increased 50 percent or more, over 90 percent of the SNF’s beds were Medicare-certified, and certain other conditions were met, MedPAC adjusted the SNF’s routine costs. We used similar criteria: If a SNF had over 90 percent of its beds certified as Medicare and if, in addition, this percentage had changed by more than 30 percentage points from 1998, we adjusted the SNF’s routine costs. The adjustment raised or lowered routine costs based on the pre-PPS ratio of Medicare SNF routine costs per day to the entire facility’s routine costs per day. We applied this adjustment in both 1999 and 2000. We found that our criteria identified about 10 percent of SNFs in 1999 and 18 percent in 2000 for which the adjustment was appropriate. Without the adjustment, the median Medicare margin for freestanding SNFs in 1999 would have been 10.2 percent rather than 8.4 percent, and the median Medicare margin in 2000 would have been 21.7 percent rather than 18.9 percent.

### Refining the Measurement of Medicare Costs

A more refined measure of the routine costs attributable to Medicare patients in all SNFs would reflect the difference in nursing needs between Medicare patients and other patients in the facility. To test the impact of such an adjustment, we used patient-specific data on services from CMS’s nursing home minimum data set (MDS) to approximate the difference in nursing needs between Medicare patients and other patients for each SNF. Using this estimate, we adjusted the portion of total facility routine costs attributable to employee wages and benefits, which we used as a proxy for nursing costs. Based on this analysis, we estimate that using a more refined measure of Medicare costs would likely have reduced the median Medicare margin we reported for freestanding SNFs by between 0.6 and 1.6 percentage points. This adjustment would not affect SNF total costs or total margins.
Appendix I: Methodology for Calculating and Analyzing SNF Margins

Characteristics of the Files Used to Calculate Margins

The SNF cost report files we used to calculate 1999 and 2000 Medicare margins were the most current files as of May 2, 2002. The 1999 and 2000 files differed with respect to their completeness. The 1999 file was over 97 percent complete, while the 2000 file was 80 percent complete. After excluding freestanding SNFs that had outliers or lacked key data, including data necessary to adjust routine costs, 7,805 facilities were available for analysis in 1999 and 6,975 facilities in 2000. After exclusions, 1,506 hospital-based SNFs were available for analysis in 1999. The 2000 file contained very few records for hospital-based SNFs; as a result, we could not reliably calculate and report 2000 margins for these providers. Table 10 shows that the distribution of freestanding SNFs is similar in both years for type of ownership, location (urban versus rural), and census region. Compared to the 1999 file, the 2000 file has more SNFs that provide 4,000 or more days of care to Medicare beneficiaries and correspondingly fewer that provide less than 1,500 days of care.

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4A large proportion of these cost reports—36 percent in 1999 and 63 percent in 2000—are "as submitted," meaning that, although they have passed initial automated checks and edits, final payment has not been made.
### Table 10: Distribution of Freestanding SNFs for Which Margins Were Calculated, 1999 and 2000

<table>
<thead>
<tr>
<th>Numbers in percent</th>
<th>Year*</th>
<th>1999*</th>
<th>2000*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of ownership</td>
<td>For-profit</td>
<td>79</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Not-for-profit</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Location</td>
<td>Urban</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Census region</td>
<td>Northeast</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>South</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Midwest</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>West</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Medicare days</td>
<td>Under 1,500</td>
<td>32</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>1,500 – 2,499</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>2,500 – 3,999</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>4,000 or more</td>
<td>23</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Medicare cost report data.

*Year refers to each SNF's cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

*Based on 7,805 facilities, after excluding SNFs that lacked key data or were outliers.

*Based on 6,975 facilities, after excluding SNFs that lacked key data or were outliers.

### Methods for Analysis of Factors Affecting SNF Margins

To account quantitatively for factors that potentially influence SNF margins, we analyzed SNF margins using multiple regression. This statistical technique accounts for variation in margins by estimating the separate contribution of each of several explanatory factors included in the analysis, while controlling for the effect of all other included factors. For freestanding SNFs, we estimated separate regressions for Medicare margins and for total margins. Each regression included contextual factors, such as the number of SNFs in a geographic area and the state in which the SNF was located, and individual factors, such as each SNF's proportion of Medicaid patients, its occupancy rate, and whether it was for-profit. We report only results that are statistically significant.
Appendix II: Medicare Margins of Freestanding SNFs by Selected Characteristics, 1999 and 2000

<table>
<thead>
<tr>
<th>Numbers in percent</th>
<th>Year²</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1999*</td>
<td>2000*</td>
<td></td>
</tr>
<tr>
<td>Type of ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For-profit</td>
<td>11.7</td>
<td>20.4</td>
<td></td>
</tr>
<tr>
<td>Not-for-profit</td>
<td>-1.4</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>Government</td>
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Source: GAO analysis of Medicare cost report data.

*Year refers to each SNF’s cost reporting year, which corresponds to its fiscal year that begins during the federal fiscal year.

²Based on 7,805 facilities, after excluding SNFs that lacked key data or were outliers.

³Based on 6,975 facilities, after excluding SNFs that lacked key data or were outliers.
Appendix III: Comments from the Centers for Medicare & Medicaid Services

To: Laura A. Dummit  
Director, Health Care—Medicare Payment Issues  
General Accounting Office

From: Thomas A. Scully  
Administrator  
Centers for Medicare & Medicaid Services


The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to comment on the report entitled, "Skilled Nursing Facilities: Medicare Payments Exceed Costs for Most But Not All Facilities." After carefully reviewing this report, we believe the findings to be consistent with the recent analysis conducted by the Medicare Payment Advisory Commission and other analysis of Medicare margins. The study provides support to GAO's and CMS's position that the skilled nursing facility payment rates are more than adequate to compensate providers for the services provided to Medicare beneficiaries.

We look forward to working with GAO on this and other issues.
Appendix IV: GAO Contacts and Staff
Acknowledgments

GAO Contacts
Jonathan Ratner, (202) 512-7107
Phyllis Thorburn, (202) 512-7012

Acknowledgments
Contributors to this report were Dae Park and Eric Wedum.
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