Review of Medicare Part B Reimbursement of Hospital Beds (A-06-91-00080)

TO
William Toby, Jr.
Acting Administrator
Health Care Financing Administration

Attached is the final report on our review of Medicare Part B reimbursement for hospital beds. Our review shows that, in establishing Medicare reimbursement fees for hospital beds used in the home, the useful life of these beds and the many times that a bed can be rented should be considered. Based on current Medicare fees, a supplier can recover the wholesale price of a bed 7 times during its useful service life of 5 years. From an analysis of Medicare beneficiaries in Texas, we estimate that changing the reimbursement methodology to reflect the life and rental cycle of these beds would result in annual Medicare savings of $6.2 to $7.8 million and beneficiary savings of $1.6 to $2.0 million in Texas alone.

Our audit work focused on the use of hospital beds by a sample of beneficiaries in Texas during Calendar Year 1989. We further evaluated reimbursement to suppliers based on 1993 levels of Medicare reimbursement. We are recommending that the Health Care Financing Administration (HCFA) explore a new reimbursement methodology for hospital beds. This methodology should consider a hospital bed's useful life and the many times a bed can customarily be rented.

In developing a new reimbursement methodology, the following options should be considered by HCFA:

- Lower the monthly rental payments, but extend the rental reimbursement period and eliminate the purchase option.
- Separate the equipment costs from other costs and profit in determining the monthly Medicare rental payment.
- Consider using a competitive bidding process in paying suppliers for hospital bed use.
The HCFA generally did not concur with our recommendations. The HCFA stated that (a) Texas was not a representative example, in that the Texas fee schedule values for hospital beds were above the national average; (b) provisions in the Omnibus Budget Reconciliation Act (OBRA) of 1990 will reduce the extent of variation in nationwide payments; (c) the Office of Inspector General (OIG) neither identified a reasonable level of payment nor quantified overhead and indirect costs; (d) the OIG should conduct a more comprehensive study of hospital beds within the broader context of payments for all durable medical equipment (DME), with a more representative sample, after the OBRA 1990 provisions have been fully implemented; and (e) competitive bidding authority was requested in the Fiscal Year 1993 budget, but, that it would not single out hospital beds to apply that authority.

Based on HCFA's comments to the draft report, we revised our computations to reflect the 1993 fee schedule values in effect as of March 1993. The 1993 fee schedule values represent full implementation of the OBRA 1990 provisions designed to reduce variation in payments across the country. Since Texas is already at the fee schedule ceiling for three of the four types of beds covered in this audit, any future adjustments should be relatively insignificant. The savings cited in this report, when rounded to the nearest $100,000, were unchanged by the revision to the 1993 fee schedule data and implementation of the OBRA 1990 provisions. The savings may increase slightly when the 1993 fee schedule is corrected by HCFA.

While we respond to each of HCFA's comments in this report, we believe that HCFA has not fully acknowledged the real issue in this report. The issue is that HCFA's current methodology for Medicare reimbursement to suppliers does not adequately reflect the useful life of these beds and the many times that a bed can be rented, resulting in substantial profits for DME suppliers. We continue to believe that a change in the reimbursement methodology which addresses this issue will result in significant annual Medicare savings.

Please advise us, within 60 days, on actions taken or planned on our recommendations. If you have any questions, call me or have your staff contact George M. Reeb, Assistant Inspector General for Health Care Financing Audits at (410) 966-7104. Copies of this report are being sent to other interested Department officials.

Attachment
Department of Health and Human Services
OFFICE OF
INSPECTOR GENERAL

REVIEW OF MEDICARE PART B
REIMBURSEMENT OF HOSPITAL BEDS

MAY 1993    A-06-91-00080
SUMMARY

This report provides the results of our review of Medicare payments for hospital beds used in the home. The allowable Medicare charges for hospital beds during Calendar Year (CY) 1989 totaled almost $13 million in Texas alone and $188 million nationwide.

We found that the present durable medical equipment (DME) reimbursement methodology does not adequately reflect the useful life of hospital beds and the many times that a bed can be rented. Adjusting the current method of reimbursement to reflect the useful life of hospital beds would result in a more equitable payment system and would produce significant program and beneficiary savings. From an analysis of Medicare beneficiaries' utilization of hospital beds in Texas, we estimate that annual Medicare savings of $6.2 to $7.8 million and beneficiary savings of $1.6 to $2.0 million are available in Texas alone.

Our audit work focused on the use of hospital beds by a random sample of beneficiaries in Texas during CY 1989. For the beneficiaries in our sample, the current Medicare reimbursement policy allows the supplier of a common type of hospital bed, a fully electric model, to recover the bed's wholesale cost in as little as 5 months, and up to 8 months for the most expensive bed we identified. The majority of rental periods in our sample were less than 6 months. Therefore, a supplier may recover the approximate wholesale cost of a bed with a single rental. The useful life of a hospital bed is 5 years, which allows a bed to be rented many times. Under these conditions, a supplier can recover the wholesale cost of a bed 7 times or more over its useful life.

Our analysis of the use of hospital beds by 100 randomly selected beneficiaries in Texas, covering 110 bed rentals, showed that 43 percent used hospital beds for 3 months or less. A majority (55 percent) of the rentals were for less than 6 months, and 64 percent of the rentals were for less than 10 months.

With these short periods of actual use, suppliers are able to rent the same bed several times. Therefore, the revenue available from the rental of a fully electric bed over its useful life could be $7,600 or more. This is a return of at least 4.5 times the amount of the current Medicare allowed retail price in Texas and 7 times the wholesale cost of the bed.
A supplier's indirect costs, overhead, and profit pertaining to an individual item of equipment are difficult to quantify. However, our analysis shows that between 86 and 94 percent of Medicare payments for the use of hospital beds is allocated to a supplier's indirect costs, overhead, and profit, rather than the acquisition cost of the bed.

We are recommending that the Health Care Financing Administration (HCFA) develop a new reimbursement methodology for hospital beds. This methodology should consider a hospital bed's useful life and the many times a bed can customarily be rented. In developing a new reimbursement methodology, HCFA should consider the following options for changing the current reimbursement method for hospital beds:

- Lower rates by extending the current monthly limits on the length of a rental and eliminating the beneficiary's option to purchase the bed.

- Separate the acquisition cost of the hospital bed from all other costs incurred by the supplier. One part of the Medicare reimbursement would be solely to cover the cost of the hospital bed and necessary accessories, as this data is readily available. The second part would reimburse the supplier for indirect costs, overhead, and profit. This second component of the reimbursement could be negotiated by HCFA or based on fixed price contracts that would be fair to the Medicare program and suppliers.

- Use competitive bidding to select suppliers of beds. If competitive bidding were to become a permanent Medicare policy, we believe that it could generate significant long-term savings by rewarding increased efficiency in the rental and distribution of these beds.

We are also recommending that HCFA initiate action, including a legislative change, to implement a new reimbursement methodology for hospital beds.

The HCFA generally did not concur with our recommendations. The HCFA stated that (a) Texas was not a representative example, in that the Texas fee schedule values for hospital beds were above the national average; (b) provisions in the Omnibus Budget Reconciliation Act (OBRA) of 1990 will reduce the extent of variation in nationwide payments; (c) the Office of Inspector General (OIG) neither identified a reasonable level of payment nor quantified overhead and indirect costs; (d) the OIG should conduct a more comprehensive study of hospital beds within the broader context of payments for all DME, with a more representative sample, after
the OBRA 1990 provisions have been fully implemented; and (e) competitive bidding authority was requested in the Fiscal Year (FY) 1993 budget, but that it would not single out hospital beds to apply that authority.

Based on HCFA’s comments to the draft report, we revised our computations to reflect the 1993 fee schedule values in effect as of March 1993. The 1993 fee schedule values represent full implementation of the OBRA 1990 provisions designed to reduce variation in payments across the country. Since Texas is already at the fee schedule ceiling for three of the four types of beds covered in this audit, any future adjustments should be relatively insignificant. The savings cited in this report, when rounded to the nearest $100,000, were unchanged by the revision to the 1993 fee schedule data and implementation of the OBRA 1990 provisions. The savings may increase slightly when the 1993 fee schedule is corrected by HCFA.

While we respond to each of HCFA’s comments in this report, we believe that HCFA has not fully acknowledged the real issue in this report. The issue is that HCFA’s current methodology for Medicare reimbursement to suppliers does not adequately reflect the useful life of these beds and the many times that a bed can be rented, resulting in substantial profits for DME suppliers. We continue to believe that a change in the reimbursement methodology which addresses this issue will result in significant annual Medicare savings.
# TABLE OF CONTENTS

**Introduction** .................................................. 1

**Background** .................................................. 1

**Scope** .................................................................. 3

**Results of Review** .............................................. 6

Beneficiaries Use Hospital Beds for Short Periods of Time .......... 7

Useful Life of a Hospital Bed ........................................... 8

Hospital Beds Can Be Used More Than Once ............................. 8

Medicare Reimbursement for Hospital Beds ............................. 9

  Medicare Pays Retail Several Times Over for Most Beds .......... 9

  Medicare Reimbursement is Many Times the Wholesale Bed Cost .... 11

The Cost of a Hospital Bed is Only a Small Part of Medicare's Reimbursement to DME Suppliers ................................. 11

  Suppliers' Indirect Costs, Overhead and Profit are Difficult to Determine .......... 11

  Payment for Indirect Costs, Overhead and Profit is a High Percentage of Medicare's Reimbursement ............................ 13

**HCFA Should Reconsider its Reimbursement Methodology** ............ 14

  OPTION 1: Lower the Monthly Rental Rates, Extend the Rental Reimbursement Period and Eliminate the Purchase Option .......... 15

  OPTION 2: Separate the Suppliers' Equipment Costs from Other Costs and Profits ...................................................... 16

  OPTION 3: Require Suppliers to Submit Competitive Bids .............. 17
Recommendations .................................................. 18
HCFA's Comments and OIG's Response ....................... 18

Appendix A
Savings Produced by Extension of Rental Reimbursement Period

Appendix B
Elimination of the Purchase Option

Appendix C
Schedule of Procedure Codes for Hospital Beds

Appendix D
Text of HCFA's Comments
INTRODUCTION

The overall objective of our review was to evaluate the Medicare Part B reimbursement to suppliers for hospital beds used by Medicare patients in their homes. To make this evaluation, we analyzed a random sample of Medicare beneficiaries in Texas for which hospital bed rental payments were made during CY 1989. We further evaluated reimbursement to suppliers based on 1993 levels of Medicare reimbursement.

We selected CY 1989 for a detailed review for two reasons. It was the first full CY reflecting beneficiary bed rental histories under new Medicare legislation passed in 1987. Also, at the time of our field work, it was the most current CY for which sufficient beneficiary rental history was available for analysis.

BACKGROUND

Part B of the Medicare provisions in title XVIII of the Social Security Act allows for the reimbursement of a hospital bed used by a Medicare beneficiary in the home when the bed is prescribed by a physician. To qualify for Medicare payments for a hospital bed, a beneficiary must have a condition that requires positioning of the body (e.g., to alleviate pain, promote good body alignment, prevent contracture, or avoid respiratory infections) in ways not feasible in an ordinary bed. The type of hospital bed cited in this report is not the heavier-duty type of bed commonly used in hospital or other institutional settings. Instead, we are addressing a lighter-duty type of special bed used in a home environment, including the frame, mattress, side rails, and where applicable, various mechanical and electronic accessories.

Generally, the Medicare program requires beneficiaries to pay 20 percent of the allowed charges for items and services rendered by providers, plus an annual deductible. This sharing in the cost of medical services is known as coinsurance or co-payment. The combination of Medicare payments and the beneficiary's share make up 100 percent of the charges defined by Medicare as allowable. The comparisons and related information that follow in this report are presented in terms of Medicare's total allowable amounts.

In implementing the Medicare program, HCFA has primarily contracted with private companies (carriers) to review and process the claims submitted by suppliers of
hospital beds and other items of DME. The HCFA provides policy and guidance to
 carriers concerning the reimbursement of these items provided to Medicare
 beneficiaries.

Figure 1 identifies the total services and payments allowed for hospital beds by a
 major carrier, Blue Cross and Blue Shield of Texas, Inc. (Texas carrier) and all
 carriers nationally during CY 1989. We have presented this information by type of
 bed to illustrate the beds most commonly prescribed for Medicare beneficiaries.

<table>
<thead>
<tr>
<th>Type of Bed</th>
<th>Texas Allowed Services</th>
<th>Texas Amounts Allowed</th>
<th>National Allowed Services</th>
<th>National Amounts Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Height*</td>
<td>18,104</td>
<td>$1,358,599</td>
<td>184,306</td>
<td>$16,411,804</td>
</tr>
<tr>
<td>Fixed Height w/o Mattress</td>
<td>85</td>
<td>1,558</td>
<td>2,843</td>
<td>209,120</td>
</tr>
<tr>
<td>Fixed Height w/o Side Rails</td>
<td>1,158</td>
<td>51,742</td>
<td>6,493</td>
<td>453,724</td>
</tr>
<tr>
<td>Variable Height*</td>
<td>20,155</td>
<td>2,445,200</td>
<td>480,579</td>
<td>524,485,591</td>
</tr>
<tr>
<td>Semi-Electric*</td>
<td>15,900</td>
<td>2,309,120</td>
<td>442,554</td>
<td>654,017,779</td>
</tr>
<tr>
<td>Fully Electric*</td>
<td>40,544</td>
<td>6,638,199</td>
<td>331,574</td>
<td>525,134,465</td>
</tr>
<tr>
<td>Fully Electric w/o Mattress</td>
<td>344</td>
<td>13,899</td>
<td>7,830</td>
<td>1,042,758</td>
</tr>
<tr>
<td>Total</td>
<td>96,298</td>
<td>$12,878,307</td>
<td>1,456,279</td>
<td>$188,571,241</td>
</tr>
</tbody>
</table>

*These bed types were covered in our sample and our detailed review.

When the Medicare program was first established, under the Social Security
Amendments of 1965, Part B reimbursed suppliers for hospital bed use on the
basis of rental payments. However, starting in 1967, the Social Security Act also
allowed as an option the direct purchase of hospital beds.

Section 4062(b) of OBRA 1987 (P.L. 100-203) added section 1834 to the Social
Security Act, which provided for six separate categories of DME, orthotics, and
prosthetics. One of these categories is known as capped rental items, which
includes hospital beds provided by DME suppliers for home use.

Section 1834 provided that, effective June 1, 1989, Medicare payments for capped
rental items would be for rental only and limited to the lower of the provider’s actual
charge or an amount based on a fee schedule established by the carrier. The fee
schedule approach was established by OBRA 1987 and represents an allowed
charge upon which monthly rental payments are calculated.
Currently, for each beneficiary's bed use, suppliers can receive reimbursement from Medicare up to 120 percent of the allowed fee schedule amount over a maximum period of 15 months.

If rental continues beyond 15 months, OBRA 1987 allows a supplier to receive an amount equal to 1 month's rental payment (10 percent of the fee schedule) for each 6 additional months of rental to cover repairs and maintenance to the bed.

Recent legislation, OBRA 1990, allows the beneficiary the option of deciding in the 10th month of continuous rental whether to purchase the hospital bed. If the beneficiary selects the purchase option, monthly reimbursements to the supplier must continue through the 13th month, at which time title to the bed passes to the beneficiary.

SCOPE

The primary purpose of our review was to evaluate the reasonableness of Medicare reimbursement for hospital beds used in the home. To perform our review, we focused on five objectives.

- The first objective was to determine the period of time that randomly selected beneficiaries used hospital beds. To make this determination, we identified a universe of Medicare beneficiaries from data provided by the Texas carrier. We then selected a sample of 100 beneficiaries for which at least 1 hospital bed rental payment was made during CY 1989. Ten of these beneficiaries used beds for months which were not always consecutive. Thus, our analysis resulted in 110 hospital bed rentals.

  For the purpose of our analysis, we defined a rental as a period of one or more continuous months of hospital bed use by a Medicare beneficiary until either the medical need ended or Medicare coverage ceased. For this review, unless the beneficiary's need for the bed stopped for at least 60 days, we presumed that there was a continuing medical need for the bed.

  We examined the Medicare claims histories of the sampled beneficiaries and researched their rental of beds over the full period of each use. Therefore, portions of the beneficiaries' rental histories considered for this review occurred during CYs before or after 1989.

- Our second objective was to identify the useful life of hospital beds. To obtain this information, we reviewed numerous publications and interviewed hospital and DME supply officials.
• Our third objective was to compare the actual use of these beds to their useful life. To make this comparison, we analyzed the sampled beneficiaries' use of hospital beds and the useful life of the beds, as identified above.

• Our fourth objective was to compare Medicare reimbursements to suppliers' costs. We applied the results of beneficiary bed use to HCFA-approved 1993 fee schedules as of March 1993 for Texas to illustrate the current allowable reimbursements to DME suppliers over 15 months and also over the useful life of these beds. We then compared these revenues with the suppliers costs for the beds, as obtained from manufacturers' price lists.

As to the fee schedules which we used, the 1993 fee schedules reflect full implementation of the OBRA 1990 provisions which were designed to reduce variation in payments across the country. Since Texas is already at the fee schedule ceiling for three of the four types of beds covered in this audit, any future adjustments should be relatively insignificant.

• Our fifth objective was to determine the service costs and other costs incurred by suppliers who rent hospital beds to Medicare beneficiaries. We reviewed various sources of information addressing the direct and indirect costs of hospital bed suppliers. We further reviewed reports prepared for, or contracted by, the DME industry.

We also reviewed past and current legislation and regulations pertaining to the Medicare reimbursement of DME, particularly hospital beds. We interviewed hospital, DME supply, and trade association officials. In addition, we reviewed General Accounting Office (GAO) reports, industry trade association and Government sponsored studies, sales catalogs, and historical data on the use of hospital beds by Medicare beneficiaries.

As identified in the Background section, we focused on four of the seven types of hospital beds. These four types represented 98.4 percent and 98.8 percent of the Medicare hospital bed services incurred during 1989 for, respectively, the beneficiaries in Texas and the beneficiaries nationally.

Our review was conducted in accordance with generally accepted government auditing standards. We did not review the carriers' systems of internal control related to the reimbursement of Medicare claims, since such a review was not necessary to accomplish the audit objectives.
At the Texas carrier, we found no instance of noncompliance with applicable laws and regulations. With respect to those items not tested, nothing came to our attention to cause us to believe that untested items were not in compliance with applicable laws and regulations. Our field work was performed during the period September 4, 1991 through March 20, 1992. We gathered data from a variety of national sources and from the Texas carrier; our analyses were developed at the Texas carrier in Dallas, Texas.
RESULTS OF REVIEW

Medicare payments to DME suppliers for the use of hospital beds in the home do not adequately reflect the useful life of these beds and the many times that a bed can be rented. An adjustment in these payments is needed. This action would also produce savings. From an analysis of Medicare beneficiaries in Texas, we estimate that annual Medicare savings of $6.2 to $7.8 million and beneficiary savings of $1.6 to $2.0 million are available in Texas alone.

For the beneficiaries in our sample, the current Medicare reimbursement policy allows the supplier of a common type of hospital bed, a fully electric model, to recover the bed's wholesale cost in as few as 5 months, and up to 8 months for the most expensive bed we identified. The majority of rental periods in our sample were for less than 6 months. Therefore, a supplier may recover the approximate wholesale cost of a bed with a single rental. The useful life of a hospital bed is 5 years. Under these conditions, a supplier can recover the wholesale cost of a bed seven times or more over its useful life. If Medicare policy based the reimbursement rate on the cost of the bed as pro-rated over a longer period or its full useful life, the combined Medicare and beneficiary savings would be substantial. The allowable Medicare charges for hospital beds during CY 1989 totaled almost $13 million in Texas alone and $188 million nationwide.

We are recommending that HCFA propose legislation for a new reimbursement methodology for hospital beds which more fully considers a bed's useful life and the many times that a bed can be rented. We have identified three options for establishing reimbursement amounts for hospital beds.

- Lower the monthly rental rates and extend the rental reimbursement period from the present maximum of 15 months to a longer period.

- Separate the acquisition cost of the hospital bed from all other costs of the supplier.

- Select suppliers through a competitive bidding process to ensure the lowest possible cost.
BENEFICIARIES USE HOSPITAL BEDS FOR SHORT PERIODS OF TIME

Medicare beneficiaries who require hospital beds need them for relatively short periods of time. Based on our review of the Texas carrier's data, the majority of Medicare beneficiaries in Texas need a hospital bed for 6 months or less. Figure 2 illustrates the period of use for 110 hospital bed rentals.

![Graph illustrating the period of hospital bed use in Texas.](image)

The graph shows that there were 110 bed rentals analyzed, but only 1 rental lasted for 40 months. Forty-three percent of the rentals in our sample were for 3 months or less. By the end of the sixth month, 55 percent of the rentals had been terminated. The main reason for the short term use of beds was that, in 34 percent of the cases, the beneficiary recovered from his or her illness. In another 30 percent of the cases, the beneficiary died during the rental period. For this group of deceased beneficiaries, the average length of use was 4.2 months.
USEFUL LIFE OF A HOSPITAL BED

Current Medicare reimbursement methodology, based on a maximum rental payment period of 15 months, does not adequately consider that a hospital bed rented for home use will typically last 5 years and can be rented many times over that period.

During this audit, we reviewed numerous documents addressing Medicare reimbursement practices for DME. These documents included GAO reports and industry trade association studies and other Government sponsored studies. When discussing specific DME items, these sources recognized that 5 years is the useful life for hospital beds. Our discussions with DME supply officials confirmed that, when used in the home care environment, a hospital bed will typically last 5 years. For the purposes of this review, we considered 5 years of useful life to represent 60 months of actual rental. The life of the product will be prolonged during periods of nonuse.

HOSPITAL BEDS CAN BE USED MORE THAN ONCE

Given the short period that the average beneficiary needs a hospital bed and the 5-year useful life of the bed, a hospital bed typically can be rented for 7.5 to 10\(\frac{1}{2}\) times over its useful life. In most cases, the suppliers could rent a bed to many beneficiaries during the bed’s useful life. We analyzed the actual bed use by beneficiaries in our sample and determined the number of times each type of bed could be rented. This is illustrated in Figure 3.

---

1 For the fixed height, semi-electric, and fully electric beds in our sample, the majority of beneficiaries stopped using the beds within 8 months. Over the 60-month useful life of a bed, most of these types of beds could be rented for 7.5 times (60 divided by 8). For a variable height bed, the majority of beneficiaries stopped using the beds within 6 months, which would make it possible to rent them 10 times (60 divided by 6) over their useful life.
MEDICARE REIMBURSEMENT FOR HOSPITAL BEDS

Current Medicare policy limits supplier reimbursement to 15 months for each rental of a hospital bed. While this limit or cap prevents Medicare payments to suppliers for indefinite periods, this policy results in high monthly payments to suppliers.

The basis for Medicare's hospital bed reimbursement methodology has varied between purchase and rental philosophies. The carriers' allowable purchase price or monthly rental payments were originally based on reasonable charges submitted by suppliers. The OBRA 1987 changed the policy by eliminating purchases of hospital beds and requiring monthly rentals, not to exceed 15 months. Later, OBRA 1990 amended earlier legislation to allow the beneficiary the option to purchase the bed.

Currently, Medicare rentals for hospital beds are, in effect, high monthly payments to suppliers for the purchase of the bed. Although OBRA 1990 legislation resulted in reductions in the Texas carrier's fee schedule for hospital beds, the total amount of periodic installments which the Texas carrier pays over a 15-month reimbursement period, still closely approximates the retail price recommended by wholesale dealers. For example, a comparison between the Texas carrier's maximum reimbursement for a rental and the retail price cited in a 1991 catalog of a hospital bed manufacturer in Missouri is shown in Figure 4.

<table>
<thead>
<tr>
<th>Type of Hospital Bed</th>
<th>Texas Carrier's Reimbursement Over 15 Months</th>
<th>1991 Retail Price</th>
<th>Variance From Retail Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Height</td>
<td>$988</td>
<td>$976</td>
<td>+ 1.2%</td>
</tr>
<tr>
<td>Variable Height</td>
<td>$1,215</td>
<td>$1,298</td>
<td>- 6.4%</td>
</tr>
<tr>
<td>Semi-Electric</td>
<td>$1,698</td>
<td>$1,854</td>
<td>- 8.4%</td>
</tr>
<tr>
<td>Fully Electric</td>
<td>$2,028</td>
<td>$2,211</td>
<td>- 8.3%</td>
</tr>
</tbody>
</table>

The Medicare reimbursements shown above are based on the Texas carrier's 1993 allowable amounts for the types of hospital beds identified in our sample.

Medicare Pays Retail Several Times Over For Most Beds

A fee schedule reimbursement approach was established by OBRA 1987. The fee schedule represents an allowed charge upon which monthly rental payments are calculated. Under provisions of OBRA 1990, suppliers can receive payments for each beneficiary bed use up to a maximum period of 15 months, and up to
120 percent of the allowed fee schedule amount. The carriers' monthly allowance for hospital beds is the lesser of the supplier's claim or a percent of the fee schedule amount, as shown in Figure 5.

<table>
<thead>
<tr>
<th>Rental Month</th>
<th>Percent of Fee Schedule</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>2</td>
<td>10.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>3</td>
<td>10.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>4</td>
<td>7.5%</td>
<td>37.5%</td>
</tr>
<tr>
<td>5</td>
<td>7.5%</td>
<td>45.0%</td>
</tr>
<tr>
<td>6</td>
<td>7.5%</td>
<td>52.5%</td>
</tr>
<tr>
<td>7</td>
<td>7.5%</td>
<td>60.0%</td>
</tr>
<tr>
<td>8</td>
<td>7.5%</td>
<td>67.5%</td>
</tr>
<tr>
<td>9</td>
<td>7.5%</td>
<td>75.0%</td>
</tr>
<tr>
<td>10</td>
<td>7.5%</td>
<td>82.5%</td>
</tr>
<tr>
<td>11</td>
<td>7.5%</td>
<td>90.0%</td>
</tr>
<tr>
<td>12</td>
<td>7.5%</td>
<td>97.5%</td>
</tr>
<tr>
<td>13</td>
<td>7.5%</td>
<td>105.0%</td>
</tr>
<tr>
<td>14</td>
<td>7.5%</td>
<td>112.5%</td>
</tr>
<tr>
<td>15</td>
<td>7.5%</td>
<td>120.0%</td>
</tr>
</tbody>
</table>

Figure 5

In 64 percent of the sample cases we reviewed, beneficiaries required a bed for less than 10 months. In these situations, the DME supplier can continue to rent the same bed to other beneficiaries throughout the bed's useful life, and no limit on the number of months for reimbursement would be reached. Consequently, the potential amount allowed by Medicare for a fully electric hospital bed, as one example, which is used in succession by six beneficiaries for periods of 10 months each would total $7,603 during the bed's useful life. This is a return 4.5 times greater than the amount of the Texas carrier's allowed fee schedule.

The period that most beneficiaries need a bed is less than 6 months. In those cases when beds undergo short cycles of use, the return to the supplier could be even greater. This is because reimbursement to the supplier is higher during the first 3 months of use.

Using the Texas 1993 fee schedule price of $1,689.60 times the cumulative percentage of reimbursement (a maximum of 75 percent) times 6 rentals over the bed's economic life equals a total potential reimbursement of $7,603. This is 4.5 times the Texas carrier's allowed fee schedule ($7,603 divided by $1,689.60).
Medicare Reimbursement Is Many Times The Wholesale Bed Cost

The wholesale price charged to DME suppliers by manufacturers is approximately 55 percent of the maximum reimbursement allowed by the Texas carrier, based on one 15 month rental. For example, a fully electric hospital bed is listed in a catalog as costing a supplier $1,106. Given this cost and the same scenario presented above, in 64 percent of the sample cases, a DME supplier could recover its cost of the hospital bed 7 times or more during the hospital bed’s useful life.

We found that other manufacturers were selling a fully electric bed for much less, which would offer a supplier an even greater cost recovery multiple. Furthermore, according to our discussions with industry and DME supply officials as well as GAO, businesses receive discount incentives from manufacturers for reasons such as volume purchasing and early payment. Any discounts will increase the rate of cost recovery represented by the combined Medicare and beneficiary payments.

THE COST OF A HOSPITAL BED IS ONLY A SMALL PART OF MEDICARE’S REIMBURSEMENT TO DME SUPPLIERS

As stated earlier, in 64 percent of the cases in our sample, beneficiaries used hospital beds for less than 10 months. In these cases, only a small portion, ranging from 6 percent to 15 percent, of Medicare’s monthly reimbursement to suppliers contributed to the suppliers’ direct cost of the beds. We estimate that between 86 percent and 94 percent of Medicare’s payments for hospital bed use pays for indirect costs, overhead, and profit rather than the supplier’s purchase cost of the bed.

Suppliers’ Indirect Costs, Overhead, And Profit Are Difficult To Determine

In our analysis, we separated the equipment acquisition (direct) costs from other cost components such as indirect costs, overhead, and profit. Examples of indirect costs are equipment delivery and set up in the patient’s home, repair and maintenance, and retrieval of the equipment when it is no longer needed. Another indirect cost is the refurbishment of the bed after each rental, to prepare it for the next rental. Industry representatives in Texas informed us that this consists of cleaning and disinfecting the bed, checking its operation, and making any needed repairs. Examples of overhead costs are marketing, office space, accounting, interest, and utilities.

---

3 The potential reimbursement of $7,603 [see Footnote 2] divided by the $1,106 wholesale cost equals a recovery of 7 times the wholesale cost over the life of the bed.
We reviewed a number of reports prepared by Government agencies as well as other reports prepared by or for the DME industry. Each of these reports differed in defining indirect and administrative (overhead) costs. However, they generally agreed that the amount for overhead and indirect costs varies from supplier to supplier. Two reports summarized this issue; one by GAO, the other by the Health Industry Distributors Association (HIDA) Educational Foundation.

In the November 1991 GAO report, "Effect of Durable Medical Equipment Fee Schedules on Six Suppliers' Profits" (GAO/HRD-92-22), GAO reported that it attempted to determine whether DME suppliers maintained accounting records that would identify per item costs and revenues for DME items sold or rented to Medicare and non-Medicare patients. The GAO visited 12 suppliers in 8 States. According to GAO, none of the 12 suppliers had accounting records that included the per-item cost of DME items. Further, GAO stated that suppliers did not maintain their cost records in a manner that would allow them to readily calculate a per-item cost.

The HIDA Educational Foundation issued a report dated December 17, 1987, entitled "From Producer to Patient: Valuing Distribution in the Home Health Care Market." This report, prepared by Ernst & Whinney, explored the DME supplier's role in home health care and provided a framework for analysis of the cost and value of dealer services. The HIDA Educational Foundation cautions that the report is useful as a guide, but is not a definitive example of a typical DME supplier because, according to the Foundation, there is no typical supplier. However, the report states that acquisition costs often represent less than 20 percent of the total cost of providing medical equipment to the home care patient.

The HIDA also has produced information concerning profit margins and product planning to assist suppliers. However, profit information is presented as an industry-wide profit margin rather than for a specific product.

Like GAO, we were unable to readily quantify the overhead and indirect costs which would broadly and accurately represent those costs incurred by DME suppliers in providing the types of hospital beds included in our review.

We suggest that HCFA, in its efforts to establish an improved reimbursement methodology for hospital beds, initially focus on direct costs. Equipment costs are more easily quantified and are relatively more consistent among suppliers than indirect costs, overhead, and profits. With this in mind, we analyzed the cost of hospital beds charged to DME suppliers by several manufacturers and compared this information to Medicare's overall costs for the hospital beds used by beneficiaries, as discussed in the following section of this report.
Payment For Indirect Costs, Overhead, And Profit
Is A High Percentage Of Medicare's Reimbursement

In theory, if Medicare were to reimburse a DME supplier over the useful life of a single bed, which is 60 months, and if the supplier moved the bed from beneficiary to beneficiary, the supplier's rental revenue should include a monthly amortization of 1/60th of the bed's wholesale cost. The remaining amount paid by Medicare would represent payment for the supplier's overhead, indirect costs, and profit margin.

We compared this theoretical monthly amortization to a supplier's actual revenue for renting a bed, based on the Texas carrier's 1993 fee schedule. The difference represents the monthly revenue that a supplier would receive to cover overhead, indirect costs, and profit. We then computed percentages for these costs and profit to Medicare's allowable amount and found them to be approximately the same for each of the four types of beds included in our sample.

Figure 6 illustrates that analysis for a popular model of a fully electric bed. The manufacturer's wholesale price was $1,106, described as "Net After Trade Discount," but before any other discounts for volume buying or early payment. These other discounts could further reduce the supplier's cost.

<table>
<thead>
<tr>
<th>Monthly Rate of Reimbursement</th>
<th>Monthly Supplier Revenue</th>
<th>Payment on Cost of Equipment</th>
<th>Percent of Revenue for Equipment</th>
<th>Percent of Revenue for Other Costs and Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>$168.96</td>
<td>$18.43</td>
<td>10.9%</td>
<td>89.1%</td>
</tr>
<tr>
<td>7.5%</td>
<td>$126.72</td>
<td>$18.43</td>
<td>14.5%</td>
<td>85.5%</td>
</tr>
</tbody>
</table>

Column b: Revenue = Monthly amount allowed by the Texas carrier.
Column c: Equipment = $1,106 purchase cost divided by 60 = $18.43.
Column d: Percentage = Column c divided by Column b.
Column e: Percentage = 100% less Column d.

Under the current OBRA 1990 regulations, suppliers are allowed 10 percent of the carrier's fee schedule during the first 3 months of reimbursement and 7.5 percent during the remaining months of reimbursement for each rental. For purposes of our example, reimbursements to suppliers would be for beneficiaries who use the hospital beds for short periods of time, as in our sample. Accordingly, most reimbursements would be at the 10 percent level.
As a second example, Figure 7 presents a similar analysis for a less expensive fully electric bed, priced in a manufacturer’s catalog for $648. This price was slightly discounted from the manufacturer’s usual price of $738. This less expensive bed still falls in the same Medicare payment category as the bed in the previous example.

<table>
<thead>
<tr>
<th>Monthly Rate of Reimbursement</th>
<th>Monthly Supplier Revenue</th>
<th>Payment on Cost of Equipment</th>
<th>Percent of Revenue for Equipment</th>
<th>Percent of Revenue for Other Costs and Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>$168.96</td>
<td>$10.80</td>
<td>6.4%</td>
<td>93.6%</td>
</tr>
<tr>
<td>7.5%</td>
<td>$126.72</td>
<td>$10.80</td>
<td>8.5%</td>
<td>91.5%</td>
</tr>
</tbody>
</table>

Column b: Revenue = Monthly amount allowed by the Texas carrier.
Column c: Equipment = $648 purchase cost divided by 60 = $10.80.
Column d: Percentage = Column c divided by Column b.
Column e: Percentage = 100% less Column d.

In both examples, the reimbursement to suppliers is identical. However, the equipment cost is less in the second example, which results in a higher percentage available for other costs and profit.

These examples illustrate that 86 to 94 percent of the amount that Medicare pays for hospital beds can be for the suppliers’ indirect costs, overhead, and profit. These high percentages occur in those cases when beneficiaries use beds for short periods of time, which was the typical case in our random sample.

We believe that a new reimbursement methodology which addresses these relationships, more fully considering the typically short period of use and the 5-year life of the hospital bed, could result in a reasonable level of reimbursement to suppliers while still providing significant savings to the Medicare program.

**HCFA SHOULD RECONSIDER ITS REIMBURSEMENT METHODOLOGY**

Medicare’s current reimbursement methodology allows a rapid recovery of purchase costs by a supplier. It also can allow multiple recoveries of the cost of DME equipment. We believe that the reimbursement methodology should be based on a more traditional rental concept. If the levels of reimbursement were determined after more fully considering that (1) the majority of beds are used by beneficiaries for relatively short periods of time; (2) hospital beds have a useful life...
of 5 years; and (3) the beds can be rented many times over their useful life, then significant savings to the Medicare program could result.

We have identified three options for changing the Medicare reimbursement practice.

OPTION 1: LOWER THE MONTHLY RENTAL RATES, EXTEND THE RENTAL REIMBURSEMENT PERIOD, AND ELIMINATE THE PURCHASE OPTION

A new reimbursement methodology should more fully consider the actual useful life of a hospital bed. It should provide for a longer acquisition cost recovery period for the supplier and rental over a period much longer than the 15 months currently allowed by OBRA 1990. This would lower Medicare and beneficiary costs and still provide a fair reimbursement to the supplier.

Advantages

- Revenue will be better matched to costs over the useful life of the hospital bed.

- Suppliers will still recover their acquisition costs, indirect costs, overhead, and profit, but over a longer period of time.

- Beneficiaries will experience lower monthly coinsurance payments as a result of the reduced reimbursements to suppliers.

Since beneficiaries are responsible for 20 percent of the allowed charges for hospital beds, the monthly coinsurance costs would be reduced. This feature would be especially helpful to the majority of beneficiaries who use beds for shorter periods of time.

- We estimate that annual Medicare savings of $6.2 million and beneficiary savings of $1.6 million would be realized in Texas alone if recovery of the fee schedule amount was pro-rated over just 36 months. If the full 5-year useful life of these beds was used as the period for recovery of the fee schedule amount, the estimated annual Medicare savings in Texas would be

- 15 -
about $7.8 million; beneficiary savings would be about $2.0 million. This national policy change would also produce national savings.

Disadvantages

- Suppliers' indirect costs and overhead are hard to quantify. This makes computation of a reasonable reimbursement rate difficult.

  We believe that HCFA could deal with this problem by requiring DME suppliers to provide documentation which supports their costs for providing a hospital bed.

- Carriers and suppliers may incur more administrative costs to account for rentals over longer periods of time.

Elimination Of The Purchase Option Would Lower Suppliers' Costs

As a part of this first option, if beneficiaries were not routinely allowed to buy hospital beds, suppliers would not incur the additional costs of replacing these beds in their inventory. Furthermore, the Medicare program and beneficiaries could also save as a result of lower monthly rental payments and coinsurance.

To evaluate the significance of the purchase option, we applied the findings regarding our sample of 110 rentals to the amounts actually allowed by Medicare for CY 1989. We determined that if the purchase option had been exercised by all eligible beneficiaries under the provisions of OBRA 1990, then suppliers would have incurred additional costs amounting to $3.2 million to replace beds in their inventory.

Additional discussion regarding this matter and the related impact on the Medicare program can be found in Appendix B of this report.

OPTION 2: SEPARATE THE SUPPLIERS' EQUIPMENT COSTS FROM OTHER COSTS AND PROFITS

The Medicare rental payment could be split into two components. One part of the reimbursement would be solely to cover the cost of the hospital bed and necessary accessories. This information is
readily available. The second part would reimburse the supplier for indirect costs, overhead, and profit. Since this data is not readily available, this second component could be negotiated by HCFA or based on fixed price contracts that would serve both the Medicare program and suppliers fairly.

Advantages

The cost of the equipment is easy to determine. In addition, we believe that any change in the wholesale cost of a hospital bed attributable to inflation, material, technology, or other causes could be easily identified and evaluated. Furthermore, regional differences concerning costs for transportation or administrative matters can be incorporated into the price structure for hospital bed reimbursements.

Disadvantages

While the cost of equipment is easily identified, other costs such as indirect costs, overhead, and profit are difficult to determine. Some method of reporting these more difficult costs by suppliers may be necessary. This additional reporting requirement would result in an administrative burden on the suppliers.

OPTION 3: REQUIRE SUPPLIERS TO SUBMIT COMPETITIVE BIDS

We believe that maximum competition is desirable from a public policy perspective. Competition helps ensure the timely delivery of quality products and services at the most reasonable cost. Accordingly, HCFA could request qualified providers to submit bids, in compliance with criteria prescribed by HCFA, and then contract with successful bidders to supply hospital beds to Medicare beneficiaries in selected markets.

Advantages

Competitive bidding is, in our opinion, a reasonable and logical option for HCFA to use in obtaining hospital beds for Medicare beneficiaries. Since contracts are awarded based in large part on the bidder’s price, providers will have an incentive to reduce costs and accept reduced profits to obtain Medicare business.

Competitive bidding will reward efficient, low cost suppliers. At the same time, it will help ensure that Medicare is not supporting
inefficient, high cost suppliers. We believe that competition would generate immediate savings for the Medicare program.

This option will coincide with HCFA's legislative initiative to use competitive bidding for oxygen and certain other services.

Disadvantages

Competitive bidding may not be practical in areas with few suppliers of hospital beds. We believe that this problem, however, will affect only a small portion of Medicare beneficiaries. Also, HCFA could use the knowledge gained from the competitive bid process to refine the fee schedules used for areas not considered suitable for competitive bidding.

RECOMMENDATIONS

We recommend that HCFA initiate action, including a legislative proposal, to implement a new reimbursement methodology for hospital beds. The new methodology should more fully reflect a bed's useful life and the many times that the bed can be rented over its life. In developing a new reimbursement methodology, we recommend that HCFA consider implementing, individually or in combination, the three options identified in this report.

HCFA'S COMMENTS AND OIG'S RESPONSE

The HCFA generally did not concur with our recommendations. Each of HCFA's comments is presented below, along with our response. The full text of HCFA's comments is attached as Appendix D.

While we respond to each of HCFA's comments in the following sections, we believe that HCFA has not fully acknowledged the real issue in this report. The issue is that HCFA's current methodology for Medicare reimbursement to suppliers does not adequately reflect the useful life of these beds and the many times that a bed can be rented, resulting in substantial profits for DME suppliers. We continue to believe that a change in the methodology which addresses these factors will result in significant annual Medicare savings.
HCFA's Comment

The 1992 fee schedule values for hospital beds in Texas are above the national weighted average. Therefore, the State of Texas is not a representative entity.

The OBRA 1990 provides for national ceilings and floors to be phased in over 3 years for a variety of DME items, including hospital beds. The phase-in will be complete in 1993, and there will then be less variation in nationwide payments. The HCFA further stated that a change in payment policy for hospital beds may be unnecessary after the full implementation of the OBRA 1990 provisions.

OIG's Response

The OIG chose Texas, a State having a large volume of Medicare claims, to illustrate the significant impact of the current reimbursement methodology on the Medicare program. During CY 1989, the total allowed charges for hospital beds by the Texas carrier was the third highest of all carriers nationally. While Texas' hospital bed fee schedule rates are above the national weighted average, so are the fee schedules for half of all carriers in the nation. Using 1993 fee schedule data, we noted that 26 of the 48 other carriers had higher schedule amounts than Texas for hospital bed code E0250, 24 carriers had a schedule amount equal to Texas for hospital bed code E0255, 25 carriers had an amount equal to Texas for hospital bed code E0260, and 26 carriers had an amount equal to Texas for hospital bed code E0265. These were the four types of beds covered in our review.

Our draft report which HCFA commented on was based on 1992 fee schedule values. After HCFA expressed concern that the OBRA 1990 legislation would change those values and reduce the extent of variation among carriers across the country, we revised the report to incorporate the 1993 fee schedule values in effect as of March 1993. The 1993 fee schedule values reflect full implementation of the OBRA 1990 provisions designed to reduce variation in payments across the country. Since Texas is already at the fee schedule ceiling for three of the four types of beds covered in this audit, any future adjustments should be relatively insignificant.

As this report demonstrates, the problem of excessive reimbursement to DME suppliers still exists. Our estimated savings from changing the Medicare reimbursement methodology, when rounded to the nearest $100,000, was unaffected by this revision to the 1993 fee schedule data.
HCFA’s Comment

The HCFA pointed out that the GAO and various industry sources were unable to quantify supplier overhead and indirect costs on a per-item basis. However, implementation of the OIG’s first and second suggested options would require HCFA to do so. The HCFA suggested that the OIG study how these costs should be allocated. The HCFA stated that the issue of what is a reasonable total payment over the life of a hospital bed to a DME supplier for the rental of a bed is never addressed in the report.

OIG’s Response

The scope of our audit was limited to reviewing prepared reports addressing the direct and indirect costs of hospital bed suppliers. Our report identifies a number of efforts by other agencies which have closely studied the industry in an attempt to define and allocate overhead and indirect costs. Based on that work, we were unable to quantify the overhead and indirect costs associated with providing the types of hospital beds included in our review. Performing a comprehensive study to determine ways for suppliers to allocate these costs was beyond the scope of our review.

Our suggested options for changing the reimbursement methodology do not necessarily require HCFA to precisely define these costs. One option calls for negotiation of these costs; another option calls for competitive bidding. However, HCFA could contract with a consultant or its Medicare carriers to study these costs further as needed. Alternatively, HCFA could require suppliers to start reporting comprehensive cost data to their Medicare carrier.

HCFA’s Comment

The HCFA requested competitive bidding authority in the President’s FY 1993 budget. However, HCFA stated that it will not commit to singling out hospital beds to apply a competitive bidding authority, if enacted.

OIG’s Response

The nationwide Medicare reimbursement for hospital beds in CY 1989 exceeded $188 million. Medicare costs for hospital beds, out of all DME, were second only to the costs for oxygen services. According to the FY 1993 legislative proposals, HCFA has already committed to singling out oxygen services for competitive bidding authority. We believe that this report demonstrates a similar need for the competitive bidding of hospital bed rentals.
HCFA's Comment

The HCFA suggests that the OIG conduct a more comprehensive study of hospital beds within the broader context of payments for all DME.

OIG's Response

To date, the OIG has chosen to report on selected major segments of DME. That approach allows us to gather and present more specific facts about the use and reimbursement of a given category of DME.

HCFA's Technical Comment

The savings figures cited should not include savings that will be generated by the implementation of OBRA 1990. The savings figures also do not take into account the time when a hospital bed is not being rented and is being held in inventory.

OIG's Response

The savings figures presented illustrate the impact of the current reimbursement methodology on the Medicare program. Based on HCFA's comments to our draft report, we recalculated the savings estimates using the 1993 fee schedule data as of March 1993. By using the 1993 fee schedules, our estimate of savings did not duplicate the savings resulting from OBRA 1990.

Our analysis of a bed's useful life is based on 5 years of actual rental, and savings must come from periods of actual rental. We do not believe that a bed would wear out to any significant degree while being stored between rentals.

HCFA's Technical Comment

The HCFA stated that no information is presented in the OIG's report to indicate if the sampled beds were of the lowest or highest quality that could be provided, or whether they were of a medium quality. The higher the quality of the bed, the longer it would take to realize the profits suggested in the report.

OIG's Response

There are several references in the report to the type of bed used for our analyses. Generally, we considered the most common type of hospital bed to be a fully electric model, which is the most expensive of the four types of beds included in our review. With this category, we presented analyses for a popular, fully electric bed costing $1,106 and another one costing $648. We believe that either analysis will bring the reader to the same overall conclusion. However, to estimate savings, we
conservatively used the more expensive $1,106 bed. Suppliers with less expensive beds could realize greater profits, since the current reimbursement methodology does not recognize different levels of quality and purchase cost.

HCFA's Technical Comment

From Figure 2 in the report, HCFA concluded that approximately 30 percent of the beneficiaries sampled were using a hospital bed for 15 continuous months or longer. The HCFA pointed out that a DME supplier would not be reimbursed for rentals after the 15th month. The HCFA stated that it was not clear whether this continued use by a beneficiary and the lack of payment during this period were taken into account by the OIG.

OIG's Response

From the data used to develop Figure 2, we found that only 23 of the 110 rentals, or 21 percent, represented rentals longer than 15 months. More significantly, only 7 rentals, or 6 percent, lasted beyond 22 months. A supplier can recover 183 percent of the cost of the $1,106 bed over the first 15 months of rental, and 313 percent of the cost of the $648 bed over that time. In addition, a supplier can receive a maintenance and service fee once every 6 months after the 15-month rental period. During this period, the supplier would not be incurring some administrative costs such as the monthly billing.
SAVINGS PRODUCED BY EXTENSION OF RENTAL REIMBURSEMENT PERIOD

During CY 1989, the Texas carrier allowed over $12 million for the use of hospital beds by Medicare beneficiaries. If the Medicare reimbursement methodology was changed to more fully consider the typical short-term use of hospital beds and their 5-year useful life, we estimate that the Medicare program in Texas alone could save from $6.2 to $7.8 million annually, based on 1993 payment levels. Beneficiaries could save from $1.6 to $2.0 million. During CY 1989, 55 carriers nationwide allowed over $188 million for use of hospital beds by Medicare beneficiaries.

A new reimbursement methodology based on the actual useful life of a hospital bed should provide for Medicare rental over a period much longer than the 15 months currently allowed by OBRA 1990. Since suppliers could continue to collect rentals for longer periods of time, the suppliers could consequently accept a lower monthly reimbursement.

For example, if the maximum period for reimbursement of a continuous rental was extended to the period in which 99 percent of our sampled beneficiaries fell (36 months), then Medicare costs for hospital beds could be reduced by 61 percent as follows.

Based on the Texas carrier's 1993 allowable fee schedule and our sample of 110 rentals, the analysis in Figure 8 illustrates the amounts that the Texas carrier would have allowed as reimbursement to suppliers. We compared this data to the amounts that would be reimbursed to suppliers using lower rates over longer periods of reimbursement. As stated earlier, OBRA 1990 regulations allow DME suppliers a higher reimbursement rate during the first 3 months of continuous bed use. However, our comparison assumes that all monthly reimbursements over the longer periods of time are based on the same monthly rate.
## COMPARISON OF MEDICARE REIMBURSEMENT FOR 110 HOSPITAL BEDS USED BY PATIENTS IN OUR SAMPLE

<table>
<thead>
<tr>
<th>Type of Bed</th>
<th>Total Reimbursement Over 15 Months Per Carrier Fee Schedule</th>
<th>Reimbursement Over Longer Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>24 Months</td>
</tr>
<tr>
<td>Fixed Height</td>
<td>$4,300</td>
<td>$2,332</td>
</tr>
<tr>
<td>Variable Height</td>
<td>7,677</td>
<td>5,067</td>
</tr>
<tr>
<td>Semi-Electric</td>
<td>19,179</td>
<td>10,734</td>
</tr>
<tr>
<td>Fully Electric</td>
<td>61,924</td>
<td>36,259</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$99,170</strong></td>
<td><strong>$57,002</strong></td>
</tr>
</tbody>
</table>

| Percentage Savings Over OBRA 1990 Method | 42.5% | 60.8% | 76.1% |

### Figure 8

The above comparison represents a postponement in the DME supplier's recovery of the acquisition cost of a hospital bed. For example, our computations for reimbursement over 36 months would allow the supplier to recover its acquisition cost of the hospital bed from 14 to 24 months, instead of 5 to 8 months as identified earlier in this report. We believe that a longer rate of return, such as 36 to 60 months, is more appropriate for the typical hospital bed with a useful life of 5 years.

Even though the longer periods of reimbursement illustrated above are much less than the useful life of the hospital beds, significant savings can still result. For example, if we applied the percentages of savings indicated above to the actual amounts allowed by the Texas carrier during CY 1989, the savings illustrated in Figure 9 would have occurred.

## MEDICARE AND BENEFICIARY SAVINGS FOR HOSPITAL BED RENTALS IN TEXAS BASED ON AMOUNTS ALLOWED DURING CY 1989

<table>
<thead>
<tr>
<th>Type of Bed</th>
<th>Savings Over Longer Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24 Months</td>
</tr>
<tr>
<td>Fixed Height</td>
<td>$621,831</td>
</tr>
<tr>
<td>Variable Height</td>
<td>1,081,756</td>
</tr>
<tr>
<td>Semi-Electric</td>
<td>1,043,124</td>
</tr>
<tr>
<td>Fully Electric</td>
<td>2,751,533</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$5,498,244</strong></td>
</tr>
</tbody>
</table>

### Figure 9
If HCFA was to reimburse DME suppliers over longer periods of time as presented above, the suppliers would receive reduced monthly reimbursements. However, the financial impact on DME suppliers from such reductions could be minimized by elimination of the purchase option. As discussed in APPENDIX B, if no purchase option was available to the beneficiaries, then suppliers would retain title and not have to replace the beds to maintain the same bed inventory. This would be a savings to the supplier, and the supplier could continue to rent a bed until its useful life expired. Such savings could partially offset the suppliers' reduced income resulting from lower monthly Medicare payments.
ELIMINATION OF THE PURCHASE OPTION

The purchase option increases the cost of hospital beds to suppliers. Using our sample of beneficiaries, we can illustrate the impact of the OBRA 1990 purchase option on the typical business activity of a single DME supplier. For this analysis, we considered both the timing of the medical need for the 110 rentals in our sample and the availability of the specific types of beds as used by those beneficiaries.

If all beds were rented (no purchase option) throughout the beneficiaries' terms of medical need, only 50 beds would be needed for our sample of 110 rentals. The use of these beds would span a maximum period of approximately 57 months.

In contrast, 88 hospital beds would be needed for the same 110 rentals if all eligible beneficiaries were allowed to exercise the purchase option in the current OBRA 1990 legislation.

Figure 10 illustrates the number of hospital beds required for the 110 rentals in our sample, depending on whether beneficiaries exercised their option to purchase a bed.

<table>
<thead>
<tr>
<th>NO. OF BEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIXED HEIGHT BED</td>
</tr>
<tr>
<td>VARIABLE HEIGHT BED</td>
</tr>
<tr>
<td>SEMI-ELECTRIC BED</td>
</tr>
<tr>
<td>FULLY ELECTRIC BED</td>
</tr>
</tbody>
</table>

Figure 10
Our analysis shows that 38 more beds would be needed if all beneficiaries chose to purchase their beds. Suppliers would have to replace each bed sold to have another bed available for a subsequent beneficiary. This would result in an additional cost to the supplier.

If the purchase option were not available to the beneficiary, the DME supplier would not have to replace 43 percent of the beds, resulting in cost savings to the supplier.

We believe that this potential savings to DME suppliers, from discontinuing the purchase option, can be translated into savings to the Medicare program. To further evaluate the significance of the purchase option, we applied our findings to the amounts allowed by Medicare for actual CY 1989 rentals for Texas beneficiaries. We determined that if the purchase option was exercised by all eligible beneficiaries, following provisions of OBRA 1990, then suppliers would have incurred additional costs amounting to as much as $3.2 million for Texas beneficiaries.

Our analysis assumes that all eligible beneficiaries would elect the purchase option in the tenth month of continuous need for a hospital bed. However, since the option became available as recently as June 1, 1991, there is insufficient data to determine the number of beneficiaries who would make this choice.

We realize that due to some beneficiaries' long-term health conditions, the purchase of a hospital bed can be in the best interest of the beneficiary and the Medicare program. Accordingly, our recommendation to eliminate the purchase option should be qualified to permit the purchase of a hospital bed in these exceptional circumstances. However, with regard to our random sample of 110 rentals, only 1 bed was required for more than 36 months.

---

1 The 43 percent was computed by dividing the 38 beds not needed by the 88 beds needed under full exercise of the purchase option.

2 Beneficiaries in our sample incurred 986 months of bed use. As part of our purchase scenario, we determined that the additional suppliers' cost incurred as a result of the purchase option would be $35,684. Since all Medicare beneficiaries in Texas incurred 88,055 months of bed use during 1989, we computed the savings of $3.2 million as follows: $35,684 divided by 986 times 88,055 = $3.2 million.
# SCHEDULE OF PROCEDURE CODES FOR HOSPITAL BEDS

<table>
<thead>
<tr>
<th>PROCEDURE CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOSPITAL BEDS INCLUDED IN SAMPLE OF 110 RENTALS</strong></td>
<td></td>
</tr>
<tr>
<td>E0250</td>
<td>Hospital Bed With Side Rails, Fixed Height, With Mattress.</td>
</tr>
<tr>
<td>E0255</td>
<td>Hospital Bed With Side Rails, Variable Height, With Mattress.</td>
</tr>
<tr>
<td>E0260</td>
<td>Hospital Bed With Side Rails, Semi-Electric, With Mattress.</td>
</tr>
<tr>
<td>E0265</td>
<td>Hospital Bed With Side Rails, Fully Electric, With Mattress.</td>
</tr>
<tr>
<td><strong>HOSPITAL BEDS NOT INCLUDED IN SAMPLE OF 110 RENTALS</strong></td>
<td></td>
</tr>
<tr>
<td>E0251</td>
<td>Hospital Bed With Side Rails, Fixed Height, Without Mattress.</td>
</tr>
<tr>
<td>E0252</td>
<td>Hospital Bed, Fixed Height, With Mattress.</td>
</tr>
<tr>
<td>E0266</td>
<td>Hospital Bed With Side Rails, Fully Electric, Without Mattress.</td>
</tr>
</tbody>
</table>
We have reviewed the subject draft audit report on the evaluation of Medicare Part B payment in Texas for hospital beds used in the home. Under current law, hospital beds may be rented or purchased.

OIG found that suppliers who rent hospital beds to Medicare beneficiaries can currently recover the wholesale price of a bed 7.5 times during the bed's useful life of 5 years. In Texas, OIG estimates that if the Medicare Part B payment methodology for hospital beds were changed to take into consideration the useful life of a hospital bed, $6.2 to $7.8 million could be saved by Medicare. OIG also estimates that beneficiary savings of $1.6 to $2 million could be achieved in Texas.

OIG recommends that the Health Care Financing Administration (HCFA) propose legislation for a new reimbursement methodology for hospital beds which more fully considers a bed's useful life and the many times that a bed can be rented. HCFA does not concur with the recommendation. Our specific comments are attached for your consideration.

Thank you for the opportunity to review and comment on this draft audit report. Please advise us if you agree with our position on the report's recommendation at your earliest convenience.

Attachment
OIG Recommendation

OIG recommends that HCFA initiate action, including a legislative proposal, to implement a new reimbursement methodology for hospital beds. The new methodology should more fully reflect a bed's useful life and the many times that the bed can be rented over its life. In developing a new reimbursement methodology, OIG recommends that HCFA consider implementing, individually or in combination, the following options:

- lower the monthly rental rate, extend the reimbursement period, and eliminate the purchase option;
- separate the suppliers' equipment costs from other costs and profits; and
- require suppliers to submit competitive bids.

HCFA Response

HCFA does not concur with the recommendation. We are aware that payment for hospital beds in Texas is out of line with the national average. However, the Omnibus Budget Reconciliation Act of 1990 (OBRA 90) provides for national ceilings and floors to be phased in over 3 years for a variety of durable medical equipment (DME) items, including hospital beds. Next year, the phase-in will be complete, and there will be less of a variation in nationwide payments. The implementation of national ceilings and floors on payments for hospital beds will affect payment rates in the State of Texas. In 1992, the fee schedule values for the codes in question for the State of Texas were above the national weighted average. This information appears to negate the use of the State of Texas as a representative entity. It also draws into question whether a change in payment policy for hospital beds should be considered, or will be necessary, after the full implementation of the OBRA 90 provisions.

In reference to developing a new payment methodology, the report acknowledges that OIG, the General Accounting Office, and a number of industry studies have been unable to quantify overhead and indirect costs down to the per-item level, yet implementation of OIG's first and second bullets would require HCFA to do so. We would suggest that OIG study how these costs should be allocated.
The main issue, what is reasonable total payment over the life of the hospital bed to the DME supplier for the rental of a bed, is never addressed in the report. The report states that between 87 and 94 percent of Medicare payments for the use of hospital beds is allocated to a supplier's indirect costs, overhead, and profit rather than the acquisition cost of the bed.

In regard to the third proposal, HCFA requested the necessary authority in the President's fiscal year 1993 budget. However, without more information, we would not commit to singling out hospital beds to apply a competitive bidding authority, should such authority be enacted.

We suggest that OIG conduct a more comprehensive study of hospital beds within the broader context of payments for all durable medical equipment, with a more representative sample, after the OBRA 90 provisions have been fully implemented. In addition to a study of the allocation of overhead and indirect costs to individual DME items, this study should also include an analysis of how long hospital beds are held in inventory during their 5-year life span. The report assumes that DME suppliers, as a result of beneficiary demand, do not place hospital beds in inventory for any period of time. We are not sure that this is a valid representation of the market for hospital beds.

**Technical Comments**

1. The savings figures should not include savings that will be generated by the implementation of the OBRA 90 provisions. The savings figures also do not take into account the time when a hospital bed is not being rented and is being held in inventory.

2. The OIG savings figures should include the distribution of beds and the rates being paid under each type.

3. No information is presented which would indicate if the sampled beds were of the lowest, highest, or medium quality that could be provided and yet be paid under a given procedure code. The higher the quality of the bed purchased by the DME supplier within a single procedure code the longer it would take to realize the profits suggested in this report.

4. From the data presented in figure 2, approximately 30 percent of the individuals sampled were using the hospital bed for 15 continuous months or longer. For this segment of the sample, the DME supplier would not be reimbursed under Medicare for the provision of the item after the 15th month. It is not clear whether the use of the item and the lack of payment during this period were taken into account by OIG.