

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**MEDICARE AND FEHB
PAYMENT RATES
FOR HOME OXYGEN EQUIPMENT**



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OBJECTIVE

To compare Medicare fee schedule allowances and median Federal Employees Health Benefits (FEHB) plans' payment rates for home oxygen equipment in 2002.

BACKGROUND

We released a report entitled *Medicare Payment Rates for Home Oxygen Equipment (OEI-09-03-00160)* in September 2004, which provided CMS with a comparison of Medicare payments with FEHB plan prices. This report, which supersedes the September 2004 report, provides an updated comparison between Medicare fee schedule allowances and median FEHB payment rates for home oxygen equipment and contents.

Medicare covers oxygen equipment and supplies under its durable medical equipment benefit (Part B). Oxygen equipment includes oxygen concentrators (stationary equipment that concentrates the oxygen in room air), stationary liquid and gaseous oxygen systems, and portable liquid and gaseous systems. These five items accounted for 99.9 percent of the \$2.2 billion Medicare allowed for home oxygen equipment in 2002.

To obtain and analyze FEHB payment rates, we requested information concerning home oxygen rates and utilization from the 198 plans that the Office of Personnel Management identified as providing FEHB coverage in 2002. We received responses from 185 plans. For our analysis, we grouped the plans by corporate ownership into 91 consolidated plans. Of the 91 plans, 56 plans provided sufficient information about at least 1 of the 5 home oxygen equipment items to be included in our analysis.

FINDING

FEHB plans' median payment rates are lower than Medicare fee schedule allowances for home oxygen equipment and contents.

FEHB plans' median payment rates are 12.4 percent lower for stationary equipment and 10.8 percent lower for portable equipment. The greatest difference between the median FEHB payment rate and the median Medicare fee schedule allowance is for oxygen concentrators.

CONCLUSION

Section 302(c)(2) of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) requires reductions in payments for oxygen equipment in 2005 based on the Office of Inspector General's (OIG) analysis of median FEHB prices. Subsequent to the issuance of a report we released in September 2004, questions were raised about the inclusion of oxygen contents for stationary and portable equipment in our FEHB payment rates. As a result, we conducted additional work to clarify the data in the September 2004 report. This report provides an updated comparison between Medicare fee schedule allowances and median FEHB payment rates for home oxygen equipment.

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Medicare Coverage, Reimbursement Policy, and Payments

Medicare Part B covers home oxygen equipment and supplies under its durable medical equipment (DME) benefit (Section 1832(a)(2)(G) of the Social Security Act). DME is defined as equipment that can withstand repeated use, is primarily used to serve a medical purpose, and is appropriate for use in a patient's home (42 CFR § 414.202). Oxygen therapy is covered for patients with significant hypoxemia, a shortage of oxygen in the blood, who meet specific medical criteria (CMS Coverage Issues Manual, DME: Home Use of Oxygen, 60-4).

Medicare covers three types of oxygen delivery systems, which are payable for rental only: (1) oxygen concentrators, which are electrically powered, stationary machines that deliver high concentrations of oxygen by extracting it from room air; (2) stationary or portable liquid oxygen systems, which use oxygen stored as a very cold liquid in cylinders and tanks; and (3) stationary or portable gaseous oxygen systems, which administer compressed oxygen directly from cylinders (CMS Coverage Issues Manual, DME: Home Use of Oxygen, 60-4).

Medicare reimburses suppliers for oxygen equipment based on monthly fee schedule allowances that vary by State. These monthly allowances cover the oxygen equipment, oxygen contents including all refills, equipment setup and maintenance, accessories, and patient education. Medicare includes the contents for both stationary and portable equipment in the fee schedule allowances for stationary equipment. Medicare fee schedules for home oxygen equipment are modality-

neutral. That is, in a given State, there is one rate for all stationary systems and one rate for all portable systems.

As shown in Table 1 below, five home oxygen items accounted for 99.9 percent of the \$2.2 billion Medicare allowed for home oxygen equipment in 2002. Oxygen concentrators represented the largest expenditure at \$1.8 billion, or 83.2 percent of Medicare spending.

Table 1. Five Oxygen Items/Codes as a Percentage of Total Medicare Part B Allowance for Oxygen Equipment and Supplies in Calendar Year 2002			
Code	Description	Allowed Amount in 2002	Percentage of Oxygen Spending
E1390	Oxygen concentrator	\$1.8 billion	83.2%
E0431	Portable gaseous oxygen system	\$212 million	9.6%
E0439	Stationary liquid oxygen system	\$128 million	5.8%
E0434	Portable liquid oxygen system	\$26 million	1.2%
E0424	Stationary gaseous system	\$2 million	0.1%
Total		\$2.2 billion	99.9%

Source: Medicare National Claims History 100 percent of DME claims, 2002

Medicare Prescription Drug, Improvement, and Modernization Act (MMA)

Section 302(c)(2) of MMA requires reductions in payments for oxygen equipment in 2005 based on the Office of Inspector General’s (OIG) analysis of median FEHB prices for this equipment. The MMA also freezes payments for home oxygen equipment from 2005 through 2008 and establishes competitive bidding programs for durable medical equipment beginning in 2007.

Prior Inspector General Work

Previous OIG studies have highlighted excessive Medicare spending for DME in general and oxygen equipment specifically. In 2002, OIG compared Medicare payments for 16 DME items, excluding oxygen equipment, to reimbursement by other public and private payers. OIG projected savings ranging from \$84 million to \$958 million for these 16 items, depending on how much Medicare lowered reimbursement.

I N T R O D U C T I O N

In 1991, OIG compared amounts allowed by Medicare for rental of oxygen concentrators to the amounts paid by the Department of Veterans Affairs. OIG found that Medicare-allowed amounts were more than twice the amount that the Department of Veterans Affairs paid for concentrators.

METHODOLOGY

Subsequent to the issuance of the September report, questions were raised about the inclusion of oxygen contents for stationary and portable equipment in the FEHB rates. To ascertain if plans had included contents in their rates, we conducted a followup survey with all of the plans that were included in our original analysis as well as some plans for which information had been unavailable or unusable for the September report. The findings of this report reflect the results of that followup survey. We relied on the home oxygen payment rates provided to us by the FEHB plans.

To compare median FEHB rates to median Medicare fee schedule amounts for the September report, we (1) identified FEHB plans to use in our analysis and sent them a mail survey, (2) determined if we could use the information provided in each plan's survey response for our median comparison, and (3) calculated the plan payment rates for each of the five home oxygen items (oxygen concentrators, stationary liquid systems, portable liquid systems, stationary gaseous systems, and portable gaseous systems).

For the followup survey and analysis, we determined if each plan's rate for stationary equipment included portable and stationary contents and adjusted the plan payment rates accordingly. The following paragraphs describe the process we used for each step.

Initial Identification and Survey of FEHB Plans

The Office of Personnel Management (OPM), which oversees the FEHB program, provided us with a list of 198 health plans participating in the program in 2002. We sent mail surveys to each of these 198 OPM-identified health plans requesting the rates they paid for oxygen concentrators, stationary liquid systems, portable liquid systems, and portable gaseous systems. Pursuant to a request from CMS, we subsequently collected information about stationary gaseous systems.

On reviewing the responses, we discovered that a number of the plans listed separately by OPM were actually owned by common corporate entities. While some of these corporate entities were able to provide

rate information for each of their components, others could provide information only for the corporate entity as a whole. To maintain consistency in our analysis, we consolidated plans under their corporate ownership when they (1) did not have overlapping service areas and (2) either had the same company name and contact information or told us they were part of a larger corporation. When we use the term “plans” in this report, we are referring to the consolidated plans described here, not the OPM-identified health plans.

Determining Usability of Plan Responses

In reviewing the original responses, we found that we had to exclude a number of plans from our analysis because they either could not provide rate information or we could not compare their rates with Medicare. Some, despite being listed by OPM, indicated they did not participate in FEHB in 2002. Others participated, but did not offer a home oxygen benefit. Several plans paid suppliers capitated rates that included home oxygen equipment and supplies. Capitated rates cannot be compared to Medicare’s fee schedule because they are predetermined monthly amounts paid to suppliers for a range of equipment and supplies while Medicare pays suppliers on a per-claim basis. A number of other plans had capped rental policies for their home oxygen benefit, which also are not comparable to Medicare. Plans with capped rental policies cease monthly rental payments once the sum of these payments for a particular member reaches the purchase price of the item. Medicare, on the other hand, continues to make monthly rental payments as long as the item is medically necessary.

Apart from the categorical exclusions described above, a number of other plans provided rate information that seemed comparable to Medicare, but that we could not use for a variety of reasons. For example, some of these plans provided a range of rates they might pay, while others gave “approximate” or “model” rates. We were able to include some of these in the followup survey by obtaining claims information that allowed us to calculate an average monthly payment for at least one item. We did not ask for this information in the original survey. In total, we received usable information for at least 1 home oxygen item from 13 plans that we had not included in the original analysis.

A few plans in the original analysis provided additional information as part of the followup that invalidated the rates previously provided. For example, two plans used in the original analysis told us during the

followup that they were not, in fact, providing benefits to FEHB members in 2002. The rates they had originally provided came from another line of commercial business in one case, and from a Medicaid product in the other. In total, eight plans included in the original study were excluded in the final analysis because of information they provided in the followup. The following table compares the results of our consolidations and exclusions for the September report and this report.

Category	Original Analysis	Followup Analysis
OPM-identified Plans Responding to Survey	184	185
Consolidated Plans Responding to Survey	90	91
<i>Capitated Payments</i>	2	5
<i>No Oxygen Benefit</i>	1	1
<i>Not 2002 FEHB Plan</i>	1	3
<i>Capped Rental</i>	14	15
<i>Other Unusable</i>	21	11
Plans Used for Analysis (for at least 1 item)	51	56

Source: Office of Inspector General analysis of collected information, 2004 and 2005

Calculation of Plan Payment Rates

Having established which rates from which plans were usable, we then calculated the plan payment rate to use in our analysis for each plan and oxygen item. If a plan provided a single rate for an item, we used that rate as the plan payment rate for that item. If a plan provided two or more rates (for example, a different rate in each of three coverage areas), we used the median of distinct rates as the plan payment rate. As mentioned above, some plans could not provide distinct rates for some items, but could provide claims information. In such cases, we used the data provided to calculate the average monthly rental allowance for that plan and item, which we used as the plan payment rate. Specifically, we requested that such plans provide us the total number of rental months for the item in 2002 and the associated allowed amount. We then divided the total allowed amount by the total rental months to arrive at the average monthly rental allowance.

Many plans had usable plan payment rates for some, but not all, of the oxygen items in the study. Therefore, the number of plan payment rates we used to calculate the median FEHB rate for any particular item is always smaller than the total number of plans used in our analysis.

Establishing if Contents Are Included and Adjusting Rates

As part of the followup survey, we asked plans if they included oxygen contents in their payment rates for each of the five items. For stationary equipment, we asked if the rates included contents for both the stationary system itself and any portable systems that were rented simultaneously. If a plan indicated that the rates they provided did not include contents, we then asked for claims information for their stationary oxygen equipment and portable and stationary contents.

For plans that paid separately for contents, we used the data that they provided to determine the average (mean) amount allowed for contents associated with each stationary item. We divided the total contents allowance by the number of rental months for each stationary item. We added this figure to the previously calculated rate to arrive at the total amount allowed for stationary systems plus the contents of the stationary system and any portable systems used concurrently. If a plan did not pay separately for contents for a particular item (i.e., they used Medicare's reimbursement methodology), we did not calculate a contents add-on for that plan and item.

Some plans indicated that they paid separately for oxygen contents, but we were unable to obtain usable claims information from them. In these cases, rather than exclude them from our analysis, we estimated a contents allowance for each item through a process known as imputation. Imputation is a statistical method for reducing the effect of survey nonresponse by assigning estimated values to missing data points. In general, these estimated values are based upon data from respondents with similar characteristics to the nonrespondents. We used the median contents allowance for all plans that paid separately for contents for a particular item to fill in the missing values for those plans that paid separately for contents (for that particular item) but could not provide claims information. We used at least one imputed value for 14 of the 32 plans that paid separately for contents for at least one stationary oxygen item, most commonly for the contents associated with stationary gaseous systems.

Median Calculation

Once we established payment rates for the plans included in our analysis, we calculated the median FEHB payment rate for each oxygen item. We then consolidated these into a single payment rate for stationary equipment and a single payment rate for portable equipment. This enabled us to compare the FEHB payment rates with Medicare's modality-neutral fee schedule allowances. To make the comparison, we calculated, for each modality, the weighted mean of the median FEHB payment rates, where the weights were the total Medicare 2002 allowance per item. We compared this with the median Medicare fee schedule allowance¹ for each modality to determine the percentage difference between Medicare and FEHB payments for home oxygen equipment.

This inspection was conducted in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

¹ To calculate the 2002 median Medicare fee schedule allowance for each modality, we computed the median allowance for all 53 geographic locations (50 States, the District of Columbia, Puerto Rico, and the Virgin Islands).

► FINDING

FEHB plans' median payment rates are lower than Medicare fee schedule allowances for home oxygen equipment and contents

Because Medicare reimbursement for oxygen systems is modality neutral (i.e., one allowance for

stationary systems and one allowance for portable systems), we calculated the difference between FEHB and Medicare payment rates for all stationary systems combined and, separately, the difference between FEHB and Medicare payment rates for the two portable systems combined. Based on the weighted mean of median FEHB payment rates, we determined that Medicare allowances are 12.4 percent higher for stationary systems and 10.8 percent higher for portable systems. (See Table 3.) The greatest individual difference between the median FEHB payment rate and the median Medicare fee schedule allowance is for oxygen concentrators.²

Table 3. Comparison of Median Medicare Allowances and Median FEHB Oxygen Payment Rates for Five Oxygen Codes in 2002

Oxygen Code (N = Number of plans that responded)	Median Medicare Fee Schedule Allowance	Median FEHB Oxygen Price*	Percentage Difference Between Median Medicare and Median FEHB Price	Weighted Mean of Median FEHB Prices	Percentage Difference Between Medicare and FEHB Weighted Mean
Stationary Home Oxygen Equipment					
E1390 (N = 51) Oxygen concentrator	\$230.17	\$201.09	12.6%	\$201.60	12.4%
E0439 (N = 46) Stationary liquid system	\$230.17	\$208.92	9.2%		
E0424 (N = 38) Stationary gaseous system	\$230.17	\$203.14	11.7%		
Portable Home Oxygen Equipment					
E0434 (N = 52) Portable liquid system	\$36.19	\$32.70	9.6%	\$32.27	10.8%
E0431 (N = 52) Portable gaseous system	\$36.19	\$32.22	11.0%		

Source: Office of Inspector General analysis of 2002 median Medicare allowances and median FEHB oxygen payment rates

* Throughout the report we use the terms "price" and "payment rate" interchangeably.

² The mean is weighted based on total 2002 Medicare Part B allowances for each code.

F I N D I N G

Table 3 (on the previous page) provides the data that CMS needs to meet the mandate of the MMA to reduce Medicare fee schedule allowances in 2005 based on median FEHB prices. The third column shows the median prices for the Healthcare Common Procedure Coding System (HCPCS) codes in accordance with the MMA. The fifth and sixth columns show similar information on a modality neutral basis.

► C O N C L U S I O N

Section 302(c)(2) of the MMA requires reductions in payments for oxygen equipment in 2005 based on the OIG's analysis of median FEHB prices. Subsequent to the issuance of a report we released in September 2004, questions were raised about the inclusion of oxygen contents for stationary and portable equipment in our FEHB payment rates. Accordingly, we conducted additional work to clarify the data in the September 2004 report. This report provides an updated comparison between Medicare fee schedule allowances and median FEHB payment rates for home oxygen equipment.



A C K N O W L E D G M E N T S

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