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Report to the Chairman, Committee on Finance, U.S. Senate

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MEDICARE

Home Oxygen Program Warrants Continued HCFA Attention

GAO/HEHS-98-17

United States
General Accounting Office
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Health, Education, and
Human Services Division

B-277568

November 7, 1997

The Honorable William V. Roth, Jr.
Chairman, Committee on Finance
United States Senate

Dear Mr. Chairman:

In fiscal year 1996, almost 480,000 Medicare beneficiaries received supplemental oxygen at home at a cost of about $1.7 billion. For patients that qualify for home oxygen, Medicare pays suppliers a fixed monthly fee that covers a stationary, home-based unit and all related services and supplies, such as tank refills. Medicare also pays a separate fixed monthly fee for a portable unit if one is prescribed. Supplies and services for portable units are covered by the monthly fee for the stationary unit. Medicare's reimbursements for oxygen are called "modality neutral" because they are the same for all types of oxygen delivery systems—compressed gas tanks, liquid oxygen cylinders, and oxygen concentrators.

The amount of the monthly Medicare reimbursement for home oxygen has been the subject of considerable debate since 1994. Therefore, you asked that we undertake an independent review of the appropriateness of Medicare's reimbursement rates. In May 1997, we provided you an interim report comparing Medicare's oxygen fees with the rates paid by the Department of Veterans Affairs (VA).[1] Our analysis showed that even after adding a 30-percent adjustment to VA rates to account for differences between the Medicare and VA programs, Medicare would have saved over $500 million in fiscal year 1996 had it reimbursed oxygen suppliers at the adjusted VA rates. In June 1997, we provided additional information on our comparison of Medicare and VA rates to the Chairman, Subcommittee on Health, House Committee on Ways and Means.[2] Subsequently, the Congress mandated reductions in Medicare reimbursement rates for home oxygen, beginning January 1, 1998, as specified in the Balanced Budget Act of 1997.[3] The act also gives the Secretary of Health and Human Services (HHS) the authority to restructure reimbursement rates in a budget-neutral

[1]Medicare: Comparison of Medicare and VA Payment Rates for Home Oxygen (GAO/HEHS-97-120R, May 15, 1997).

[2]Medicare: Comparative Information on Medicare and VA Patients, Services, and Payment Rates for Home Oxygen (GAO/HEHS-97-151R, June 6, 1997).

[3]P.L. 105-33, Aug. 5, 1997.

manner and requires the Secretary to develop service requirements for Medicare home oxygen suppliers.

This report (1) recaps our comparison of Medicare and VA payment rates, (2) addresses concerns about access to liquid oxygen systems and lightweight portable equipment for patients who are highly active, and (3) discusses standards for the services associated with meeting patients' home oxygen needs.

To address these issues, we reviewed Medicare regulations and VA policies regarding home oxygen benefits. We also obtained information from the Health Care Financing Administration (HCFA), which administers the Medicare program; the VA central office and selected VA medical centers; home oxygen suppliers and industry representatives; and patient advocacy groups, physicians, and respiratory therapists. We reviewed invoices to obtain data on VA payments for home oxygen for the first quarter of fiscal year 1996 for a nationwide sample of about 5,000 VA patients, drawn from 46 of the 162 VA medical centers that have home oxygen contracts. We included at least one medical center from each of VA's 22 Veterans' Integrated Service Networks in our sample to ensure complete geographic coverage. We obtained information on Medicare patients from Medicare claims databases and by reviewing records of home oxygen suppliers for about 550 Medicare patients. We did not evaluate the quality of care provided to Medicare or VA patients or the clinical outcomes of their home oxygen therapy. Neither did we examine the internal and data processing controls of the Medicare claims databases maintained by HCFA's contractors. Otherwise, we performed our work between May 1996 and June 1997 in accordance with generally accepted government auditing standards.

Results in Brief

Medicare's fee schedule allowances for home oxygen exceeded our adjusted estimate of the competitive marketplace rates paid by VA by almost 38 percent.[4] Our analysis of data for the first quarter of fiscal year 1996 showed that Medicare allowances averaged $320 per month for each patient on home oxygen. In contrast, the comparable VA monthly costs averaged $200 per patient, after inflating actual VA payments by 30 percent to account for differences between the Medicare and VA programs. Our analysis was based on the Medicare fee schedule allowances, all VA payments to oxygen suppliers for a nationwide sample of 5,000 VA home

[4]Since VA uses competitive bidding to meet the home oxygen needs of its patients, VA payments can be considered an indicator of competitive marketplace rates.

oxygen patients, and consideration of any factors that could account for differences in the costs of servicing Medicare and VA home oxygen patients.

The rate reductions mandated by the Balanced Budget Act of 1997 will bring Medicare's fee schedule allowances more into line with the competitive marketplace costs for home oxygen. However, concerns have been raised that these reductions could reduce Medicare beneficiaries' access to portable units. Under Medicare's modality-neutral payment system, home-based liquid oxygen systems, which patients can use to refill portable units, do not offer suppliers the attractive profit margins associated with lower-cost oxygen concentrators. Also, lightweight, less cumbersome portable systems, which may increase patient mobility, are more expensive than traditional portable gas cylinders. Our analysis showed that VA patients were receiving more portable units and refills than Medicare patients were, even though VA's payment rate, adjusted for comparability, was lower than Medicare's. Nevertheless, the upcoming reductions in Medicare allowances may lead some suppliers to provide Medicare patients with the least costly systems available, regardless of their patients' needs. HHS could use its authority under the recently enacted legislation to establish separate reimbursement rates for oxygen concentrators, liquid systems, regular portable units, and lightweight portable units, as long as the impact on overall Medicare costs is budget neutral. However, the evolution in the technology and costs of oxygen delivery systems—and the clinical indications for initiating and terminating the use of more expensive, lightweight portable units—warrant further examination by HHS and HCFA before deciding whether Medicare's reimbursement system should be restructured.

HCFA has not established standards to ensure that home oxygen suppliers provide Medicare patients even basic support services. Home oxygen equipment requires more support and maintenance than most other types of home medical equipment. However, oxygen suppliers who serve Medicare patients need only comply with the basic registration and business requirements associated with obtaining a Medicare supplier number. In contrast, VA encourages its medical centers to contract with suppliers who are accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) or comply with its standards. Further, VA contracts typically require suppliers to comply with specific patient support and equipment maintenance requirements. Our analysis of VA contracts and our review of Medicare and VA patient records showed that VA patients typically received more frequent service visits than Medicare

patients did. The Balanced Budget Act of 1997 requires HHS to establish service standards for Medicare home oxygen suppliers. Since HCFA is already developing oxygen supplier standards for a competitive pricing demonstration project, we believe prompt compliance with this congressional mandate is possible and warranted.

Background

Many individuals suffering from advanced chronic obstructive pulmonary disease or certain other respiratory and cardiac conditions are unable to meet their bodies' oxygen needs through normal breathing. Supplemental oxygen has been clinically shown to assist many of these patients. Medicare's eligibility criteria for the home oxygen benefit are quite specific. Patients must have (1) an appropriate diagnosis, such as chronic obstructive pulmonary disease; (2) clinical tests documenting reduced levels of oxygen in the blood; and (3) a certificate of medical necessity, signed by a physician, prescribing the volume of supplemental oxygen required in liters per minute and documenting whether the patient needs a portable unit in addition to a home-based stationary unit.

Physicians can prescribe a specific type of oxygen system on the certificate of medical necessity, or they can allow the oxygen supplier to decide which type of system best meets a patient's needs. Currently, there are three methods, or modalities, through which patients can obtain supplemental oxygen:

- compressed gas, which is available in various sized tanks, from large stationary cylinders to small portable cylinders;
- oxygen concentrators, which are electrically operated machines about the size of a dehumidifier that extract oxygen from room air; and
- liquid oxygen, which is available in large stationary reservoirs and portable units.

For most patients, each of the three modalities—compressed gas, liquid oxygen, and oxygen concentrator—is clinically equally effective for use as a stationary unit. However, liquid oxygen is most often prescribed for the small proportion of patients that require a very high oxygen liter flow. As shown in table 1, over the past 10 years the use of oxygen concentrators has increased substantially, and the use of compressed gas as the primary, home-based unit is now negligible.

Table 1: Types of Stationary Oxygen Systems Used by Medicare Beneficiaries, 1986 and 1996

	Percentage of Medicare oxygen users	
Stationary system	1986	1996
Oxygen concentrator	66	85
Liquid oxygen	12	14
Compressed gas	22	1

At the time of our review, the monthly Medicare fee schedule allowance for a stationary oxygen system was about $285, and it is currently about $300.[5] Medicare pays 80 percent of the allowance, and the patient is responsible for the remaining 20 percent. The Medicare allowance covers use of the equipment; all refills of gas or liquid oxygen; supplies such as tubing; a backup unit, if provided, for patients using a concentrator;[6] and services such as patient assessments, equipment setup, training for patients and caregivers, periodic maintenance, and repairs.

In addition to a stationary unit for use in the home, about 75 percent of Medicare home oxygen patients have portable units that allow them to perform activities away from their stationary unit and outside the home.[7] The most common portable unit is a compressed gas tank set on a small cart that can be pulled by the user. Highly active individuals who spend a great deal of time outside the home may use a portable liquid oxygen cylinder or a lightweight gas cylinder, both of which can be carried in a backpack or shoulder bag. These units may be used with an oxygen conserving device to increase the amount of time a single cylinder can be used. The Medicare monthly allowance for portable equipment is currently about $48, regardless of the type of unit. For the period we reviewed, the allowance was about $45.[8]

[5]The monthly Medicare allowance for oxygen varies by state. During the first quarter of fiscal year 1996, the allowance ranged from $262.40 to $308.71. For our analysis, we used the midpoint: $285. As of Jan. 1, 1997, the allowance ranged from $277.84 to $326.87. The allowance can be increased by 50 percent for those beneficiaries whose prescribed liter flow is over 4 liters per minute and decreased by 50 percent for patients whose prescribed liter flow is less than 1 liter per minute. Our analysis of Medicare claims showed that the monthly allowance was adjusted for liter flow for less than 2 percent of the claims for each type of stationary system.

[6]Since oxygen concentrators are electrically operated, suppliers should provide backup tanks for use in the event of a power failure.

[7]Stationary units usually come with about 50 feet of tubing to allow some mobility within the home.

[8]The monthly allowance for a portable unit varies by state. During the first quarter of fiscal year 1996, the allowance ranged from $41.23 to $48.51. For our analysis, we used the midpoint: $45. Beginning Jan. 1, 1997, the fee ranged from $43.66 to $51.37.

The Balanced Budget Act of 1997 reduced Medicare reimbursement rates for home oxygen by 25 percent effective January 1, 1998, and by an additional 5 percent effective January 1, 1999. Thereafter, the Medicare rates are to be frozen through 2002. The act also requires the Secretary of HHS to undertake a 3-year competitive bidding demonstration project for home oxygen, to be completed by December 31, 2002.

Medicare Pays Much Higher Than Marketplace Rates for Home Oxygen

Medicare's monthly fee schedule allowances for home oxygen are much higher than the rates VA pays.[9] As shown in table 2, during the first quarter of fiscal year 1996, Medicare's monthly fee schedule allowance averaged $320 per patient, including an allowance for a portable unit for the 75 percent of Medicare patients that obtain portables. VA's average monthly payment, based on all costs for a sample of 5,000 VA patients, was $155. After adding a 30-percent adjustment to VA payments to account for the higher costs associated with servicing Medicare patients, the average VA monthly payment was $200, or almost 38 percent less than Medicare's allowance of $320.

[9]The appendix discusses the reasons we compared Medicare payments with VA's rates rather than with those of other insurers or third-party payers.

Table 2: Comparison of Average Monthly Medicare and VA Payments for Home Oxygen Supplies and Services, First Quarter, Fiscal Year 1996

Cost category	Monthly payment per patient
Medicare	
Basic fee schedule allowance[a]	$285
Additional allowance for portable unit[b]	35
Total Medicare allowance	**320**
VA	
Average monthly payment[c]	155
Plus adjustment for comparability with Medicare[d]	45
Total adjusted VA monthly payment	**200**
Difference between Medicare and adjusted VA payments	**$120**

[a]The Medicare basic monthly fee schedule allowance for oxygen varies by geographic area. During the first quarter of fiscal year 1996, the fee was subject to a floor of $262.40 and a ceiling of $308.71. This analysis uses $285, the approximate midpoint between the floor and ceiling.

[b]The Medicare monthly fee schedule allowance for a portable unit also varies by geographic area. During the first quarter of fiscal year 1996, the fee was subject to a floor of $41.23 and a ceiling of $48.51. We determined that Medicare paid for portable units for about 75 percent of oxygen patients; therefore, we adjusted the per-patient allowance for portable units to $35, or about 75 percent of the approximate midpoint between the floor and ceiling.

[c]VA payment rates are based on VA competitive contracts with oxygen suppliers. The average monthly payment used in this analysis is a "bundled" rate, including all supplies, services, oxygen contents, and portable units provided to a sample of 5,000 patients. The average VA monthly payment for patients using oxygen concentrators was about $125, and the average monthly payment for patients using liquid oxygen systems was about $315. The combined average, weighted by the number of patients using each type of system, was $155.

[d]This is the estimated additional cost that a VA supplier would incur to provide home oxygen to a Medicare patient. This estimate includes the cost of oxygen supplies and services provided to new patients subsequently determined not to be medically eligible; the administrative costs associated with preparing and processing claims, including obtaining a physician's certificate of medical necessity; the administrative costs associated with collecting the Medicare copayment; and the lack of a guaranteed patient pool.

In comparing Medicare and VA payments, we carefully considered all factors that could account for differences in the costs of servicing the two patient groups. Such factors could include clinical characteristics of each patient population as well as differences in how the two programs are administered. Regarding clinical differences, Medicare and VA patients with pulmonary insufficiency must meet the same medical eligibility criteria for home oxygen, and clinical experts and suppliers told us that the home oxygen needs of the two patient groups are essentially the same. We excluded from our analysis the small number of VA patients who were receiving home oxygen for conditions other than pulmonary insufficiency, such as cluster headaches. Utilization patterns for stationary equipment

were remarkably similar.[10] Of the 5,000 VA patients in our nationwide sample, about 84 percent used an oxygen concentrator, and 16 percent used stationary liquid oxygen systems. Among Medicare beneficiaries nationwide, 86 percent used oxygen concentrators. In contrast, program differences do affect the costs suppliers incur when serving VA patients, and our analysis included an adjustment to reflect those factors before we compared VA and Medicare's payment rates.

Access to Portable Equipment and Refills Warrants HCFA Monitoring

The upcoming reductions in the modality-neutral Medicare payment rates have raised concerns that Medicare patients will have less access to (1) stationary liquid systems, from which patients can refill portables; (2) refills of gas or liquid portable units for patients that have concentrators; and (3) new lightweight, but more expensive, portable systems. In response to these concerns, some groups have proposed changes to Medicare's modality-neutral payment system.

Access to Stationary Liquid Systems

Although stationary liquid oxygen systems are more expensive than concentrators, they enable highly mobile patients to refill their portable liquid units from their stationary reservoirs. This provides these patients greater autonomy and requires suppliers to make fewer deliveries of replacement tanks than are needed for patients using concentrators along with portable compressed gas tanks. The Medicare fee schedule allowance is the same for both stationary liquid systems and concentrators—about $285 per month during the first quarter of fiscal year 1996. During the same period, monthly VA payments averaged about $125 for patients with concentrators and $315 for patients with stationary liquid systems.[11] Yet about 15 percent of both Medicare and VA patients had liquid stationary systems, an indication that the Medicare modality-neutral rates then in effect did not restrict patient access to liquid systems.

The upcoming reduction in Medicare payment rates, however, could lead some suppliers to shore up their profits by offering only oxygen concentrators for stationary systems, which would also reduce access to liquid portable refills from stationary units. Most Medicare suppliers now provide relatively few stationary liquid systems or none at all. Of about 6,500 Medicare home oxygen suppliers, about 82 percent obtained

[10]We excluded from both patient groups the relatively small number of patients using compressed gas as their stationary oxygen system.

[11]The average VA payments are based on all supplier charges, including charges for portable units and refills.

5 percent or less of their Medicare revenues from stationary liquid oxygen systems. Furthermore, almost 25 percent of oxygen suppliers received virtually all of their Medicare revenue from oxygen concentrators. Providing only concentrators allows these suppliers to maximize their profits by avoiding the higher costs associated with stationary liquid as well as with portable units. (Medicare considers the monthly fee for the stationary unit to cover supplies and services for portable units, so providing portable units costs suppliers more.)

Since VA acquires home oxygen services under a fee-for-service payment system, VA can ensure that its patients have access to stationary liquid oxygen systems by paying more for them. In addition, VA doctors prescribe the type of system that they feel is most appropriate for their patients. Physicians with Medicare patients can help ensure that they obtain access to the type of oxygen delivery system they need by specifying on the certificate of medical necessity the oxygen delivery system that should be supplied. However, some physicians allow the supplier to decide.

Access to Portable Units and Refills

Our study included an analysis of the number of Medicare and VA patients that were provided portable units. Even though Medicare paid higher monthly fees to oxygen suppliers than VA, only about 75 percent of Medicare beneficiaries using home oxygen had portable units, while about 97 percent of the VA patients in our sample had portable units. About 1,500 suppliers, or almost 25 percent of all Medicare home oxygen suppliers, provided portable units to no more than 10 percent of their Medicare patients—far below the portable utilization rate of about 75 percent among all Medicare home oxygen beneficiaries. Among patients using compressed gas portable systems, VA patients in our sample obtained about four cylinders per month, while Medicare beneficiaries whose records we reviewed received about two cylinders per month. On the basis of these data, we determined that the lower VA payment rates did not result in less access to portable units or refills.

Access to Lightweight Portable Equipment

Pulmonary specialists frequently recommend that their patients get as much exercise as possible. Clinicians point out that an overall respiratory therapy regime that includes exercise may slow the deterioration associated with pulmonary insufficiency. According to some experts, an effective exercise program requires portable systems that are lighter and less cumbersome—but more expensive—than the common compressed gas E tanks that are pulled on a small cart. Currently available alternatives

are portable liquid oxygen units, which can be refilled from stationary reservoirs at home, or lightweight aluminum gas cylinders, both of which may be used with an oxygen conserving device. Both of these portable systems are small and light enough to be carried in a backpack or shoulder bag, but they are more expensive than the traditional cart-mounted E tanks.

Medicare claims data show that of the 363,000 Medicare patients with portable oxygen units in fiscal year 1996, almost 75,000, or about 21 percent, had portable liquid oxygen cylinders. Medicare claims do not identify how many patients with portable gas systems had the traditional E tank or the smaller, lightweight cylinders. Our review of about 550 Medicare patient records indicated that only about 8 percent had lightweight tanks.

Some Groups Have Proposed Restructuring Medicare's Modality-Neutral Payment

The National Association for Medical Direction of Respiratory Care has proposed retaining Medicare's modality-neutral payment for stationary systems but establishing two reimbursement rates for portable units—a lower rate for traditional E tanks and a higher rate for lightweight portable cylinders, which the Association describes as an ambulatory system.[12] The Association proposes that prescribing physicians decide which type of portable system is most suitable for their patients. This approach has also been endorsed by the American Thoracic Society and the American Lung Association.

In contrast, others have noted that Medicare's modality-neutral rate is designed to meet the needs of the entire home oxygen population: Some patients are more expensive to service than others, but the rate is designed so suppliers will make a profit overall. These supporters of the modality-neutral rate also believe that the lack of clinical criteria for deciding which patients need a lightweight ambulatory unit means far more patients will obtain such ambulatory units than will benefit from them. Also, once a patient obtains an ambulatory unit, a lack of adequate controls in the Medicare program could lead to continued payment for the more costly unit when it is no longer needed. Since chronic obstructive pulmonary disease is progressive, a patient's activity level and the need for a portable or ambulatory system can be expected to eventually decline. However, in our case record reviews, we could not identify any cases

[12]The National Association for Medical Direction of Respiratory Care defines an ambulatory system as one that weighs less than 10 pounds and allows the individual to remain apart from the stationary oxygen system for at least 4 hours at a liter flow of 2 liters per minute.

where monthly Medicare payments for a portable unit were discontinued for a patient receiving home oxygen.

The Balanced Budget Act of 1997 allows HHS to establish separate payment rates and categories for different types of home oxygen equipment, as long as the adjustments are budget neutral. This provides HHS the flexibility to restructure reimbursements to ensure patient access to the equipment and services they need and to reflect market changes and new oxygen delivery technology, which continues to evolve. However, some suppliers, industry experts, and HCFA officials have expressed reservations about abandoning modality-neutral payments, citing the administrative complexity and oversupply of more expensive services that motivated creation of the modality-neutral system.

HCFA Has Not Developed Service Standards for Home Oxygen Suppliers

Although Medicare payments for home oxygen include reimbursement for services, HCFA has not specified the type or frequency of services it expects home oxygen suppliers to provide. In contrast, VA encourages its medical centers to contract with suppliers that are accredited by JCAHO or comply with its standards. Even though VA's reimbursements are less generous than Medicare's, VA patients received more frequent service visits than the Medicare patients whose records we reviewed.

To qualify as a Medicare home oxygen supplier, a company must obtain a supplier number from Medicare's National Supplier Clearinghouse and follow basic business practices, such as filling orders, delivering goods, honoring warranties, maintaining equipment, disclosing requested information, and accepting returns of substandard or inappropriate items from beneficiaries. Other than these requirements, Medicare has no standards specific to the needs of home oxygen patients.

In contrast, VA has both broad accreditation standards and specific contract terms that often define the specific type and frequency of services VA home oxygen patients should receive. VA contracts frequently specify company and personnel qualifications; requirements for staff training, patient education, and development of a patient plan of care; the type and number of patient service visits necessary; required response time for emergencies; and procedures for addressing patient concerns. Many VA contracts also identify the type of equipment to be used, often specifying brand names or equivalents, and equipment repair requirements. To ensure that suppliers comply with the terms of the contract, VA schedules

random home visits by VA staff for a minimum of 10 percent of VA patients receiving home oxygen each year.

Records we reviewed at oxygen suppliers for about 550 Medicare patients showed that 49 percent of the patients had clinical assessments during a 3-month period, and 30 percent had visits to check and maintain equipment. For the remaining 20 percent, there was no evidence in the suppliers' records that the patient had been visited within the 3-month period for either a clinical assessment or an equipment check. Similarly, in 1994, the HHS Office of the Inspector General (OIG) reported on the services provided to Medicare home oxygen patients using oxygen concentrators.[13] The OIG found that 17.5 percent of these Medicare patients did not receive an equipment check within a 3-month period, and over 60 percent did not receive any other patient services, such as a clinical assessment.

In contrast, we found that 43 of the 46 VA medical centers in our review required the supplier to perform a clinical assessment, an equipment check, or both at least once every 3 months. Of these 43 medical centers, 36 required monthly clinical assessments or equipment checks, and 24 specified that these visits be conducted by respiratory therapists.[14] The remaining three medical centers required that visits be conducted in accordance with oxygen equipment manufacturers' specifications or in compliance with standards established by JCAHO. VA officials stated that each of these three medical centers had assessments and checks conducted at least once every 3 months.

The Balanced Budget Act of 1997 mandates that the Secretary of HHS establish service standards for home oxygen "as soon as practicable." The act also requires that peer review organizations evaluate access to, and quality of, home oxygen equipment provided to Medicare beneficiaries. Because no definitive national guidelines exist for the most appropriate level of patient support and equipment monitoring services, it is important that HCFA consult with the medical community and equipment manufacturers when developing standards to help ensure that those standards are based on the best available information.

[13]HHS, OIG, Oxygen Concentrator Services, OEI-03-91-01710 (Washington, D.C.: HHS, Nov. 1994).

[14]Respiratory therapists are licensed to perform respiratory care under medical direction in a variety of settings, including the home. They educate patients in the proper use of their equipment and periodically review patients' understanding of their therapy. A physician's authorization is necessary for any diagnostic or therapeutic services. During a clinical assessment visit, a respiratory therapist will typically review a patient's overall health status, assess respiratory symptoms such as lung sounds and respiration rates, perform equipment checks, monitor patient compliance, and discuss therapeutic goals and progress with the patient and family.

Conclusions

Medicare's reimbursement rates for home oxygen exceed the competitive marketplace rates paid by VA, even after inflating rates by 30 percent to adjust for differences between the two programs. Yet the higher monthly rates Medicare pays appear to purchase the same home oxygen benefits as VA's lower rates—or even fewer oxygen benefits. About 15 percent of both VA and Medicare patients received the more expensive stationary liquid oxygen systems, rather than concentrators. About 97 percent of VA patients received portable oxygen units, compared with about 75 percent of the Medicare patients. VA patients also received more refills of portable gas tanks and more frequent service visits. And, unlike Medicare patients, VA home oxygen patients benefit from specific home oxygen supplier standards to help ensure that they receive the equipment and services they need.

The Balanced Budget Act of 1997 includes provisions that will bring Medicare's reimbursement rates more into line with the competitive marketplace rates paid by VA. The act also requires HHS to develop specific service standards for home oxygen suppliers that service Medicare patients as well as to monitor patient access to home oxygen equipment. Finally, the act gives HHS the flexibility to restructure the modality-neutral payment, if warranted, to ensure that Medicare patients obtain access to the equipment and services appropriate to their needs.

Recommendations

We recommend that the Administrator of HCFA do the following:

- monitor trends in Medicare beneficiaries' use of and access to stationary liquid oxygen systems and liquid and gas portables;
- monitor the availability and costs of new and evolving oxygen delivery systems, including lightweight portable systems and oxygen conserving devices, and work with the medical community to (1) evaluate the clinical benefits associated with the use of such equipment, (2) identify the patient populations most likely to benefit from the use of such equipment, and (3) educate prescribing physicians about existing options in oxygen delivery systems and their right to prescribe the system that best meets their patients' needs;
- advise the Secretary of HHS whether a budget-neutral restructuring of the Medicare reimbursement system for home oxygen is needed to provide patient access to the more expensive home oxygen systems, and whether Medicare controls can be implemented to ensure that the use of such systems is limited to patients that can benefit from their use; and

- work with the medical community, the oxygen industry, patient advocacy groups, accreditation organizations, and VA officials to promptly finalize service standards for Medicare home oxygen suppliers.

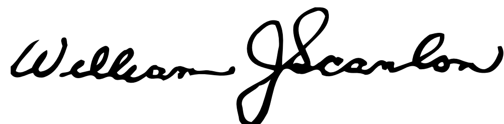
Agency Comments and Our Evaluation

We provided a draft of this report to the Administrator of HCFA and the Secretary of VA. VA and HCFA officials suggested some technical changes, and we modified the text to reflect their comments. HCFA officials said that they are forming a work group that includes representatives of peer review organizations, the oxygen and health care industries, Medicare contractors, patient advocacy groups, and VA. This work group will develop the protocols for the peer review organizations to follow in their evaluation of access to, and quality of, home oxygen equipment. HCFA officials also stated that it would not be appropriate to establish a separate, higher reimbursement for a specific type of oxygen system, such as liquid portables, unless there were clear clinical criteria defining the medical need for such a system.

As agreed with your office, unless you release its contents earlier, we plan no further distribution of this report for 2 days. At that time we will make copies available to other congressional committees and Members of Congress with an interest in this matter, the Secretary of Health and Human Services, and the Secretary of Veterans Affairs.

This report was prepared by Frank Putallaz and Suzanne Rubins, under the direction of William Reis, Assistant Director. Please call Mr. Reis at (617) 565-7488 or me at (202) 512-7114 if you or your staff have any questions about the information in this report.

Sincerely yours,



William J. Scanlon
Director, Health Financing and
Systems Issues

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Abbreviations

HCFA	Health Care Financing Administration
HHS	Department of Health and Human Services
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
OIG	Office of the Inspector General
VA	Department of Veterans Affairs

Basis for Comparison of Medicare and VA Reimbursement Rates

To evaluate the appropriateness of Medicare's reimbursement rates for home oxygen, we considered comparing Medicare's rates to those paid by Medicaid, private insurance companies, managed care plans, and the Department of Veterans Affairs (VA). All such comparisons have some inherent limitations. After evaluating the alternatives, we decided to use VA's competitive contracting rates, with some adjustments, for our rate comparisons.

Why We Compared Medicare's Rates With VA's Rates

We did not use Medicaid payment rates for our comparisons because each state has wide latitude in determining the benefits it covers and its reimbursement rates. Also, since Medicare is the largest single payer of home oxygen benefits, many states base their payment levels on Medicare's fee schedule.

Similarly, we found that private insurance companies use a wide range of methods to establish payment rates. Some firms base their fees on Medicare's reimbursement levels, while others pay submitted charges or negotiate rates on a case-by-case basis. We found that some private insurers pay more than Medicare and others pay less. We were not able to identify any insurance company with a large number of beneficiaries on long-term home oxygen therapy whose rates could serve as the basis for a nationwide comparison with Medicare's rates. Nor could we identify any private insurer that had done a study to determine the appropriate reimbursement level for home oxygen services. Furthermore, the coverage criteria for home oxygen varied both from company to company and within the same company depending on the type of coverage purchased by an individual or a group health plan.

Medicare managed care plans that we contacted were unwilling to provide us information on the rates they negotiate with oxygen suppliers because they consider that information to be proprietary. However, during our patient file reviews at oxygen suppliers, we identified two Medicare managed care plans that pay about $200 a month for services comparable to those provided to fee-for-service Medicare beneficiaries. Because the availability of these data was very limited, we could not use them for our analysis.

We concluded that the VA home oxygen program was the best available source of rates for comparison with Medicare reimbursement rates. Both are federally funded, nationwide programs with a significant patient population on home oxygen. In fiscal year 1995, VA provided oxygen

benefits to 23,000 patients at a cost of almost $26.5 million. VA's medical criteria for using supplemental oxygen to treat pulmonary insufficiency are the same as Medicare's. Further, clinical experts and suppliers told us that the home oxygen service needs of VA and Medicare patients with pulmonary insufficiency are essentially the same.

Information Used for Our Comparisons

We analyzed claims and charge data compiled by the four Durable Medical Equipment Regional Carriers and the Statistical Analysis Durable Medical Equipment Regional Carrier.[15] These data provided information on how the Medicare home oxygen benefit has grown and how suppliers structure their Medicare billing for the different types of home oxygen systems. The Statistical Analysis Durable Medical Equipment Regional Carrier began compiling national claims data for home oxygen in 1994, so we concentrated on data from the past 2 fiscal years. We supplemented the national Medicare claims data with information from home oxygen suppliers' records for about 550 Medicare patients.

We obtained data on VA payments for home oxygen from original contractor invoices for a nationwide sample of about 5,000 VA patients, drawn from 46 of the 162 VA medical centers that have home oxygen contracts. These 46 VA medical centers included at least one VA medical center from each of VA's 22 Veterans' Integrated Service Networks. Since each contract differs, we reviewed the contracts at each of the medical centers in our sample. The invoices we used were for October, November, and December 1995, and they included the cost of equipment rental; oxygen refills; supplies; and services, including the cost of any portable systems and contents provided to the patient.

After excluding the relatively small number of patients using stationary gas systems from both patient groups, we found that about 84 percent of VA patients in our study used an oxygen concentrator, and 16 percent used a stationary liquid oxygen system. Among Medicare beneficiaries nationwide, 86 percent used concentrators, and 14 percent used stationary liquid oxygen systems.

Many centers pay flat monthly rates that cover equipment rental, setup and service visits, and supplies, and they pay separately for gas and liquid

[15]The Durable Medical Equipment Regional Carriers process Medicare claims for durable medical equipment, orthotics, prosthetics, and supplies within designated geographic areas for the Health Care Financing Administration (HCFA). The Statistical Analysis Durable Medical Equipment Regional Carrier performs a variety of statistical reporting and analysis functions relating to Medicare's durable medical equipment benefit under contract with HCFA.

oxygen refills on the basis of patient use. Other medical centers may incur additional charges for setup and service visits, for example, or for various types of supplies. Since Medicare pays one fee for everything, we "rebundled" the costs incurred by each VA center to compare the total per-patient cost with Medicare reimbursement rates.

We excluded from our analysis cases in which VA medical centers provided the supplier with the equipment to be used and only paid the supplier a fee to maintain VA equipment. Further, we did not include the small number of VA patients in our analysis who used only compressed gas because this modality was likely to be used by patients to relieve cluster headaches, a condition not covered by Medicare's home oxygen benefit. Included in our sample were VA patients who were using an oxygen concentrator or a stationary liquid oxygen system for the treatment of pulmonary insufficiency and who were required to meet the same medical criteria as Medicare patients on home oxygen.

To determine if there were any significant geographic differences in costs, we grouped the VA medical centers by the geographic areas served by each of Medicare's four Durable Medical Equipment Regional Carriers. We found that the average weighted cost for home oxygen for VA medical centers in three of the four geographic areas was within 10 percent of the $155 nationwide average. The average weighted cost for the VA medical centers in the fourth geographic area was 17 percent higher than the nationwide average. This region also had the highest percentage of patients on liquid oxygen, while the region with the lowest average cost had the highest percentage of patients on concentrators. We concluded that the modality mix within a region affected the average price more than geography did.

Differences Between the Medicare and VA Programs

Significant differences between the Medicare and VA programs may account for some of the variation in home oxygen payment rates between VA and Medicare. Most significantly, VA competitively procures oxygen supplies and services, and Medicare does not. Other differences between the programs can place a greater administrative burden on suppliers who service Medicare patients. For example, VA preapproves each patient for home oxygen services, while Medicare requires that oxygen suppliers furnish a certificate of medical necessity completed by a physician before paying the suppliers' claims. Also, VA patients are not responsible for any copayment; therefore, VA suppliers do not have to bill VA patients for copayments as they do for Medicare patients.

In our meetings with home oxygen suppliers and industry representatives, we solicited their views and any data they could provide to quantify the differences in costs between serving VA and Medicare patients. One 1995 industry study estimated that the administrative requirements of Medicare could be accounted for by adding a 15-percent cost differential to the rates VA pays.[16] In other words, the industry study estimated that the rates obtained by VA for home oxygen should be increased by 15 percent before they are compared with Medicare's rates. However, on the basis of our analysis of the differences between VA and Medicare programs, which are further discussed below, we concluded that a 30-percent adjustment to VA's payment rates more adequately reflects the higher costs suppliers incur when servicing Medicare beneficiaries.

VA's Use of Competitive Contracting and Specific Supplier Requirements

Each VA medical center is responsible for procuring its home oxygen through the competitive bidding process. VA central office policy encourages the medical centers to contract with a supplier that is either accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) or complies with its standards. Within certain guidelines, each center can structure its contract to reflect its own operating philosophy relating to financial management and patient care as well as the local market for home oxygen. Most of the contracts we reviewed were very specific regarding the services they required and even the type of equipment to be provided the patients. The competitive process allows each VA medical center to procure services from the supplier that can deliver the services required at the lowest cost to that medical center.

VA's competitive contracting process is attractive to some suppliers because the volume of patients it can ensure allows for economies of scale. Suppliers have said there are other advantages associated with the local VA contract. For example, winning a VA contract enhances a firm's reputation and visibility in the local market. In addition, some firms hope to retain their VA patients if they become eligible for Medicare.

By contrast, Medicare reimburses all qualifying suppliers for oxygen equipment provided to beneficiaries—it does not directly contract with suppliers; therefore, it cannot guarantee a fixed number of patients to any supplier.

[16]Home Oxygen Services Coalition, "HME Industry Findings: The Health Care Financing Administration's Initiative on Medicare Payment for Home Oxygen" (Washington, D.C.: Home Oxygen Services Coalition, Sept. 7, 1995).

VA's Preapproval Process

When a supplier under a VA contract is told by a VA medical center to provide home oxygen for a patient, the supplier knows that it will be paid for those services. For Medicare patients, the supplier is told by the prescribing doctor to provide oxygen services, generally arranged upon discharge from the hospital. However, it is only after the service is provided that the supplier knows for sure whether Medicare will pay for this service. The industry study noted above quantifies this risk as adding 5 percent to the cost of the VA rate in order for the VA program to serve a Medicare beneficiary.

Our analysis of Medicare claims data showed that 18.7 percent of home oxygen claims in the first quarter of fiscal year 1996 were denied. However, most of these denials were for administrative reasons, such as duplicate claims or missing information. The actual denial rate for medical ineligibility was 2 percent. Medicare's criteria for eligibility are specific and clear cut, and suppliers told us they know if patients are going to qualify for coverage.

We concluded that the risk of medically based claims denial is not a major factor in explaining the cost differential between VA and Medicare. However, because this factor results from the different ways home oxygen is authorized in the two programs, we considered it as part of our overall adjustment of VA payment rates.

VA's Less Cumbersome Administrative Process

Industry representatives stated that the administrative burden of complying with Medicare requirements accounts for a major portion of the difference between VA and Medicare payment rates. One major burden they cited is the certificate of medical necessity, which must be completed by the prescribing physician before the claim can be submitted to Medicare for payment. Every supplier we interviewed complained about the difficulty in quickly obtaining this document. The industry study estimated that documenting patient eligibility represents 4 percent of the difference between VA and Medicare payment rates.

HCFA officials acknowledged the suppliers' dilemma. They realize that a supplier provides services to patients immediately upon referral by a doctor, and there may be a significant delay between the start of service and the completion of the certificate of medical necessity. However, they pointed out that the establishment of eligibility for the home oxygen benefit usually results in continuous Medicare coverage of this benefit for the life of the patient. HCFA officials believe that the documentation

requirements for this expensive, often lifelong benefit should be fairly stringent. Recent changes have reduced the administrative burden by allowing many patients to receive lifetime certification. Also, HCFA recently issued a draft revision of the certificate of medical necessity in an attempt to simplify the form and make it easier for doctors to complete. For example, the revised certificate no longer requires doctors to justify the portable unit.

Our review of patient case records showed that, while most certificates are completed within 30 days of service setup, there is documentary support for the suppliers' contention that there are significant problems with this process. We found several examples of long delays and one case in which a patient died and the doctor refused to fill out the certificate, so the firm was not paid at all for its services. Most suppliers we talked with had developed strategies to facilitate the completion of these certificates. These strategies involved extra staff time and costs: for example, sending a representative to doctors' offices to request the certificate in person. For the records we reviewed, we found that 64 percent of the certificates were completed within 30 days of the supplier's starting service and 88 percent were done within 90 days.

While obtaining the certificate of medical necessity represents a major start-up cost, the impact on the difference between the monthly VA and Medicare payment rates is less when that cost is amortized over the length of time that the certificate is valid. For most patients, eligibility must be renewed after the first year.[17] At that time, the doctor may certify the patient for lifetime eligibility, and the patient never has to be recertified again. Once a patient's eligibility is established, Medicare billing is usually electronic and fairly straightforward. One VA contractor we visited noted that the electronic billing process for Medicare is far less cumbersome than submitting paper invoices each month to the local VA medical center. This indicates that the VA system is not entirely without processing costs, although when the medical eligibility documentation is included, Medicare's overall administrative burden on suppliers is greater.

We concluded that the administrative burden for documenting medical eligibility and obtaining Medicare reimbursement is significantly greater than that associated with providing services under a VA medical center contract. Therefore, an adjustment to the VA rate is appropriate for comparison with the Medicare rate.

[17]Those patients whose partial pressure of oxygen in the arteries is between 56 and 59 as measured in millimeters of mercury must be recertified within 90 days in order to maintain eligibility.

VA's Lack of a Copayment Requirement

The Medicare home oxygen benefit requires that beneficiaries pay an annual deductible and 20 percent of the allowed reimbursement amount every month. Industry representatives contend that the cost of billing and collecting this copayment adds to the cost of providing services to Medicare beneficiaries. In addition, they point out that a portion of the copayment owed to them may never be collected. The VA program, in contrast, pays 100 percent of the contract price. The industry estimate states that this accounts for 6 percent of the difference between the cost of the VA program and Medicare.

Noncollection of copayments does represent a cost differential between VA and Medicare but can only justify a small amount of the difference in payment rates. Our review of case records at the suppliers we visited showed that 86 percent of the Medicare beneficiaries whose records we saw either had supplemental insurance or were covered by Medicaid.[18] Of the 14 percent of beneficiaries with neither private supplemental insurance nor Medicaid coverage, we found that only 3 percent had financial hardship waivers in their records. Even if suppliers were not able to collect copayments from three times the number of patients with hardship waivers, the uncollected amount would represent only 2 percent of the total revenue suppliers receive for Medicare home oxygen.

[18]While some state Medicaid programs, such as Oregon's, do not cover the Medicare copayment for their clients on home oxygen, many do.

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