MEDICARE REIMBURSEMENT

FOR

AT-HOME OXYGEN CARE

OFFICE OF INSPECTOR GENERAL

DECEMBER 1987
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This Report

This inspection, entitled "Medicare Reimbursement for At-Home Oxygen Care", was conducted to determine how Medicare reimbursement for at-home oxygen compares with the amount paid by non-Medicare payers for the same at-home oxygen services.

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MEDICARE REIMBURSEMENT FOR AT-HOME OXYGEN CARE

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EXECUTIVE SUMMARY

PURPOSE: This national program inspection was conducted to determine how Medicare reimbursement for at-home oxygen compares with the amount paid by non-Medicare payers for the same at-home oxygen services. Information was obtained from Medicare program staff, carriers, and beneficiaries. Non-Medicare sources contacted included Veterans Administration (VA) hospitals, State Medicaid agencies, health maintenance organizations, a national labor union, a national association representing the durable medical equipment (DME) industry, and several individual DME suppliers and manufacturers.

BACKGROUND: In 1985 (the latest year for which national data are available) Medicare spent $530 million for at-home oxygen care.

FINDINGS:

DECREASED ACQUISITION COSTS: Since 1983, acquisition costs to suppliers of concentrators have decreased by 33 percent while Medicare reimbursement levels have remained the same. Consequently, Medicare is not taking advantage of the economies present in the marketplace.

COSTS TO NON-MEDICARE PAYERS: Non-Medicare payers have developed cost-effective reimbursement methods for at-home oxygen which result in monthly payments as much as four times lower than those made by Medicare.

POSSIBLE SUBSTANTIAL MEDICARE SAVINGS: Medicare continues to use the reasonable charge method for reimbursement of at-home oxygen care, resulting in payments that are as much as $250 per month per beneficiary more than those made by non-Medicare payers for the same services.

The Health Care Financing Administration (HCFA) recognized factors relative to carriers' calculation of reasonable charges in its March 1987 Transmittal 1180 guidelines.
WEAKNESSES IN PHYSICIAN CERTIFICATION PROCESS

The current certification process for medical necessity of at-home oxygen undermines HCFA's ability to ensure payment for only those beneficiaries who medically need at-home oxygen care.

SHORTCOMINGS IN CURRENT DATA SYSTEMS

The HCFA Common Procedure Coding System (HCPCS) was designed to collect uniform national payment and utilization data. Current inconsistencies in the data on at-home oxygen prevent its immediate use in effecting change in the reimbursement mechanisms.

POSSIBLE SUBSTANTIAL MEDICAID SAVINGS

At least three Medicaid State agencies use competitive bid procedures in order to obtain significantly reduced costs for at-home oxygen care.

POTENTIAL BENEFICIARY SAVINGS

Beneficiaries are required to make a co-payment equal to 20 percent of any Medicare allowed charges paid for their care. A reduction in Medicare reimbursement levels for at-home oxygen would result in a comparable reduction in co-payments for those Medicare beneficiaries using this therapy. This reduction assumes a prohibition against the DME's passing the Medicare payment reduction onto the beneficiary.

RECOMMENDATIONS:

SHORT TERM

IMPLEMENT MCM 5246.5 GUIDELINES

A precise strategy should be developed by HCFA to ensure the timely and effective implementation of the MCM 5246.5 guidelines. Then HCFA should closely monitor carrier-specific cost savings resulting from implementation of the guidelines.
RECOMMENDATIONS:

LONG TERM

REQUEST SPECIAL PAYMENT LIMITATION
A legislative proposal should be prepared
and submitted by HCFA to request the
authority to extend to at-home oxygen
care a special payment limitation authority
containing specific criteria for establishing
these limitations comparable to those in P.L.
99-509, Section 9333 (Omnibus Budget
Reconciliation Act). This authority should
include a beneficiary safeguard which
prohibits the DME supplier from passing
Medicare payment reductions on to the
beneficiary.

TEST ALTERNATIVE APPROACHES
The HCFA should consider a series of
demonstration projects (such as
competitive bids and interagency agreements
with Veterans Administration hospitals) to
develop both alternative Medicare reimburse-
ment mechanisms for at-home oxygen care, as
well as innovative methods for ensuring
quality patient care.
INTRODUCTION

BACKGROUND

In 1985, an estimated 83,000 Medicare beneficiaries received at-home oxygen care. This use of at-home oxygen is a means to achieve Medicare's goal of maintaining beneficiaries in their homes as long as possible. Physicians prescribe at-home oxygen for patients suffering both long- and short-term ailments. Typically, the method for oxygen delivery to individual beneficiaries is determined by the durable medical equipment (DME) supplier. The choice of method for at-home oxygen delivery (which may be in the form of gas, liquid, or concentrator) ideally is based on the oxygen flow rate, the concentration level, and the need or ability of the patient to be mobile.

In 1985, annual Medicare costs for at-home oxygen exceeded $530 million. Oxygen concentrators represented about $300 million (57 percent) of that total. This inspection focuses on oxygen concentrators, since they represent an increasing percentage of Medicare's oxygen expenditures. This shift to the use of concentrators has resulted from the dramatic reduction in their acquisition costs, their low maintenance requirements, as well as their convenience to both patients and suppliers. In comparison to the liquid and gaseous systems, concentrators do not require the transport, refilling, or overhead of bulky tanks.

HOW IS AT-HOME OXYGEN CARE PROVIDED?

LIQUID SYSTEM  This tank system is used by both ambulatory and bedridden patients. It delivers the highest purity of oxygen, and is usually only prescribed for patients requiring a high flow rate (4 liters per minute or more). This system generally proves to be the most expensive method of providing at-home oxygen care. Use of this system requires frequent refills by the DME supplier.

GASEOUS SYSTEM  This tank system is the most economical system and is typically supplied to patients not requiring a continuous use of oxygen or who require only a low-flow rate (usually about 2 liters per minute). It also requires the transport and refilling of bulky tanks.

CONCENTRATOR  This machine operates electrically to generate oxygen from the atmosphere and is designed for patients requiring continuous oxygen with a flow rate of up to 4 liters per minute and who are house-bound or have minimal portability needs.
How is at-home oxygen obtained under Medicare?

At-home oxygen care must be prescribed by a physician. The determination of which system is to be provided to the patient is almost always made by the DME supplier, who interprets the physician's prescription. The supplier prepares a medical necessity certification form for the physician's signature. Then the signed form is submitted by the DME supplier to the Medicare carrier for payment.

Three vulnerabilities to the Medicare program exist in this system. First, there is a significant absence of physician and Medicare oversight of the determinations made by DME suppliers. Secondly, when signing the certification for medical necessity, most physicians do not compare the data contained on the form with the patient's medical record. Thirdly, the Medicare carriers' determinations of the level of reimbursement to the suppliers vary greatly between carriers nationwide. A more complete description of the current certification process is contained in Appendix A.

Purpose

Objectives of this inspection

This OIG Inspection was designed to:

- document the current at-home oxygen reimbursement practices of Medicare and non-Medicare payers;
- determine the per unit costs of at-home oxygen care systems to Medicare and compare them with the costs to various non-Medicare payers; and
- identify recommendations that would result in significant program savings, savings to beneficiaries, as well as the development of mechanisms to ensure quality of patient care.

Methodology

This inspection included the collection of quantifiable and anecdotal data from Medicare program staff, including Medicare carriers and Medicare beneficiaries. Data were also obtained from non-Medicare sources, including Veterans Administration (VA) hospitals, State Medicaid agencies, Health Maintenance Organizations (HMOs), a national labor union, and several individual DME suppliers and manufacturers. These respondents were asked to provide data on the number of at-home oxygen users, types of systems used, costs of each system, method of payment, and the quality of service provided. The data provided were analyzed by source and compared with the Medicare data.
National Medicare data on the cost of at-home oxygen care were examined on a carrier-specific basis. This information was obtained from HCFA's Part B Medicare Annual Data System (BMAD). The latest data available are from 1985. Supplemental information pertaining to Medicare carrier-specific experiences was requested from each of the carriers.
OXYGEN CONCENTRATORS
DME Suppliers’ Acquisition Costs Decrease...

While Medicare's Proportionate Costs Increase

Monthly Payments as a % of Acquisition Costs
FINDINGS

MEDICARE'S AT-HOME OXYGEN COSTS ARE HIGH AND CONTINUE TO RISE

In recent years, the cost to Medicare of providing at-home oxygen care has increased substantially. This is especially true of the cost related to oxygen concentrators. Payments allowed by Medicare carriers for DME suppliers' charges for at-home oxygen care in 1984 and 1985 were:

TABLE 1

<table>
<thead>
<tr>
<th>TYPE OF OXYGEN SYSTEM</th>
<th>1984</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIQUID</td>
<td>$ 99 M</td>
<td>$137 M</td>
</tr>
<tr>
<td>GASEOUS</td>
<td>$ 51 M</td>
<td>$ 87 M</td>
</tr>
<tr>
<td>CONCENTRATOR</td>
<td>$181 M</td>
<td>$300 M</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$331 M</td>
<td>$524 M</td>
</tr>
</tbody>
</table>

The above data are from HCFA's BMAD system, which is the only national database for Medicare Part B. The 1984 data reflect reports from 44 Medicare carriers. The 1985 data are from 54 Medicare carriers.

As reflected in the above table, oxygen concentrators, the focus of this inspection, constituted the major portion of Medicare's reimbursement for at-home oxygen. Information obtained from several Medicare carriers regarding their 1986 reimbursements for at-home oxygen systems substantiates both a continuing shift to the predominant use of oxygen concentrators as well as an increase in their total payments.

In sharp contrast to Medicare's steadily increasing costs for oxygen concentrators is the concurrent decrease in DME suppliers' acquisition costs for this equipment. Chart A depicts the changes in these costs from 1983 to 1987. Published results of a 1984 Medicare carrier survey showed that a DME supplier could lease an oxygen concentrator from a manufacturer for $25.00 to $40.00 per month. However, our discussions in 1987 with several manufacturers revealed that the acquisition cost of a concentrator through a 3-year lease purchase arrangement could be as low as $4.00 per month for the initial 6-month period, $24.00 per month for the remaining 30-month period, and then a $1.00 fee to own the equipment outright. While this appears to be the lowest lease-purchase rate available, the more typical price is about $35.00 per month.
Chart B

OXYGEN CONCENTRATORS
Typical Monthly Reimbursement

<table>
<thead>
<tr>
<th>Payer</th>
<th>Monthly Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>$300</td>
</tr>
<tr>
<td>Medicaid (No Bid)</td>
<td>$269</td>
</tr>
<tr>
<td>Medicaid (Bid)</td>
<td>$150</td>
</tr>
<tr>
<td>VA (No Bid)</td>
<td>$169</td>
</tr>
<tr>
<td>VA (Bid)</td>
<td>$82</td>
</tr>
<tr>
<td>6 HMOs</td>
<td>$163</td>
</tr>
<tr>
<td>Labor Union</td>
<td>$180</td>
</tr>
</tbody>
</table>

Dollars

-$0$ $100$ $200$ $300$ $400$

Monthly Payment

Acquisition ($35$)

OIG/OAI
MEDICARE'S COSTS ARE HIGHER THAN THEY NEED TO BE

Medicare typically reimburses a DME supplier about $300 per month for the rental of an oxygen concentrator. However, non-Medicare payers all pay significantly less for the same equipment. The following table shows the typical monthly rental for concentrators by type of payer. Chart B shows the relationship between each payer's monthly reimbursement level and the DME suppliers' average acquisition cost.

TABLE 2

OXYGEN CONCENTRATORS:
TYPICAL MONTHLY RENTAL PAYMENTS

<table>
<thead>
<tr>
<th>PAYER</th>
<th>REIMBURSEMENT TO SUPPLIER (Per Unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare (23 Medicare Carriers)</td>
<td>$ 270.00</td>
</tr>
<tr>
<td>Medicaid (26 States with no competitive bid contracts)</td>
<td>$ 269.04</td>
</tr>
<tr>
<td>Medicaid (3 States with competitive bid contracts)</td>
<td>$ 150.00</td>
</tr>
<tr>
<td>VA (93 competitive bid contracts)</td>
<td>$ 82.14</td>
</tr>
<tr>
<td>VA (25 Hospitals with no competitive bid contracts)</td>
<td>$ 168.75</td>
</tr>
<tr>
<td>HMOs (6 with competitive contracts)</td>
<td>$ 163.00</td>
</tr>
<tr>
<td>National Labor Union (Rent-purchase)</td>
<td>$ 180.00</td>
</tr>
</tbody>
</table>

COST AND REIMBURSEMENT POLICIES OF NON-MEDICARE PAYERS

Veterans Administration (VA)

During the past 4 years, most Veterans Administration hospitals have provided at-home oxygen systems through the competitive bid process. Of 127 hospitals providing data, 93 (or 73 percent) are operating under a competitive bid contract with a DME supplier. Many of the other VA hospitals now are studying or initiating their own competitive bid process.

All VA hospitals (whether or not they have a competitive bid process) pay less than Medicare for each at-home oxygen system. This is especially true in the case of oxygen concentrators.
Liquid and Gaseous Oxygen
Typical Monthly Reimbursement

Type of System

<table>
<thead>
<tr>
<th></th>
<th>VA (Bid)</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid (/Pound)</td>
<td>$0.82</td>
<td>$1</td>
</tr>
<tr>
<td>Gaseous (/240 cu ft)</td>
<td>$25</td>
<td>$10</td>
</tr>
</tbody>
</table>
Through the competitive bid process, VA hospitals are paying an average of $82.14 a month to rent an oxygen concentrator, which usually includes portable equipment, delivery, and routine maintenance. Medicare typically pays about $300 per month for the same equipment, including delivery and maintenance. Some VA hospitals own their oxygen concentrators and have negotiated contracts with DME suppliers only for the delivery, set-up, and ongoing maintenance of the equipment. In such instances, the contracts call for monthly fees which range from $15 to $35.

Table 3 below shows actual DME supplier charges to VA and Medicare in two different geographic areas for at-home oxygen systems. Since the DME suppliers in both areas were operating under a VA competitive bid process, they were reimbursed the amount they charged to VA. However, the Medicare carriers for both areas reimbursed all DME suppliers in their respective areas at their established prevailing rate. Chart C illustrates the reimbursement differences between VA hospitals and Medicare.

**TABLE 3**

**DIFFERENCES IN CHARGES SUBMITTED TO VA AND MEDICARE BY THE SAME DME SUPPLIER**

**AREA A**

<table>
<thead>
<tr>
<th>OXYGEN SYSTEM</th>
<th>VA</th>
<th>MEDICARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIQUID (PER POUND)</td>
<td>$ .82</td>
<td>$1.00</td>
</tr>
<tr>
<td>GASEOUS (PER 240 CUBIC FEET)</td>
<td>$10.00</td>
<td>$25.00</td>
</tr>
<tr>
<td>CONCENTRATOR (Rental per month)</td>
<td>$78.00</td>
<td>$300.00</td>
</tr>
</tbody>
</table>

**AREA B**

<table>
<thead>
<tr>
<th>OXYGEN SYSTEM</th>
<th>VA</th>
<th>MEDICARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIQUID (PER POUND)</td>
<td>$ .75</td>
<td>$1.75</td>
</tr>
<tr>
<td>GASEOUS (H CYLINDER)</td>
<td>$11.00</td>
<td>$35.00</td>
</tr>
<tr>
<td>CONCENTRATOR (Rental per month)</td>
<td>$90.00</td>
<td>$360.00</td>
</tr>
</tbody>
</table>

Medicare's payments for the rental of oxygen equipment were typically two to four times the amount paid by the VA hospitals using competitive bid contract procedures.

Almost all VA hospitals using competitive bid contracts for oxygen services were complimentary of the quality of products and degree
of maintenance and other services rendered by their contractors. Not only does the VA receive these services more economically than previously, but the VA hospitals stated quality has improved. Many hospital staffs also stated that the same DME vendors have submitted bids in subsequent years, and that these bids frequently continue to show reduced costs.

Most VA hospitals' competitive bid contracts include provisions that ensure a high level of service to VA patients. For example, they usually require that each patient be visited by the contractor's respiratory therapist or respiratory technician once a month. During this visit, the equipment is checked and an assessment is made of the patient's condition. A written report of these items goes to the VA hospital for its records. In addition, many VA hospitals actively participate with their contractors in the development of instructional materials to acquaint the patient and family members with the operation and day-to-day maintenance of the machines. Moreover, many VA hospitals have established monitoring procedures to ensure that their suppliers adhere to the contract quality of care and service provisions.

Medicaid State Agencies

Information on at-home oxygen use and cost was requested from 54 State Medicaid agencies. Of the 29 who responded, most follow the lead of Medicare and use reasonable charge reimbursement practices. However, based on the information provided, all 29 Medicaid agencies pay less for at-home oxygen than Medicare. Over 75 percent of the time, Medicaid pays less than $250 per month per recipient, regardless of the oxygen system used.

Three Medicaid agencies are using the competitive bid process for at-home oxygen, and all three pay less than $150 per month per recipient for the full range of oxygen services, including tanks and concentrators.

The only indication from the Medicaid respondents regarding quality of care or quality of service came from the three agencies using the competitive bid mechanism. Their provisions primarily focus on minimum response times and 24-hour emergency services.

Health Maintenance Organizations (HMOs)

Data were obtained from eight HMOs regarding their methods for providing their patients with at-home oxygen care through the use of an oxygen concentrator. One HMO utilizes a list of discount suppliers, but could provide no statistical information. Another has an arrangement with a single DME supplier and pays a fixed amount regardless of the number of users.
The data for the remaining six HMOs reveal that five have formal rental contracts for oxygen concentrators and one has a formal rent-purchase contract. The average monthly rental cost per patient for these six HMOs is $163. This cost includes delivery of supplies and maintenance and, in some instances, the services of a respiratory therapist. The HMO with the rent-purchase arrangement pays a monthly rental fee only until a total of $1,200 per patient has been paid. Thereafter, while service continues to the patient, the ownership and equipment maintenance costs and responsibilities fall to the DME supplier.

Five of the eight respondents stated that they have quality of care standards in place and that they undertake routine monitoring efforts to ensure that they are met.

The eight HMOs providing data consisted of three national group HMOs, two national Individual Practice Associations (IPAs), one local group, one local IPA, and one HMO demonstration project. Membership in the HMOs ranged from 1,000 to 50,000 people.

National Labor Union

This union serves the medical needs of over 140,000 retirees, many of whom suffer ailments requiring at-home oxygen use. In 1985, its Health and Retirement Funds unit established a DME Cost Management Program whose first phase sought to strengthen its method for ensuring that the medical equipment, oxygen, and oxygen-related equipment it provided was medically necessary and appropriate for each beneficiary's needs.

The objective of the second phase was to make its methods of payment for DME more cost-effective. The union established a "Cooperating Vendor Program," whose participants agreed to specific terms concerning equipment quality, specifications, maintenance and servicing, standard rental/purchase payment amounts, and the application of rental payments toward the purchase price.

The union purchases rather than rents DME whenever it is determined more cost-effective to do so. Purchase/rental decisions are based on a cost-benefit analysis, comparing the purchase price plus projected servicing costs to the projected rental payments for the probable duration of that patient's usage. Purchases are made only after a 6-month rental period in order to ensure that the DME which had been placed was meeting the beneficiary's needs. For new placements, rental payments are made for the first 6 months. Then, if the DME is purchased, the 6 months of rental payments are applied to the purchase price. Existing placements were purchased, with the last 6 months of rental payments applied towards the purchase price.
As a result of these efforts, the union now pays a total of $180 per month for an oxygen concentrator until a maximum of $1,800 has been paid, at which time the union owns the equipment. The union pays a $75 per month maintenance fee to the DME supplier after the $1,800 level has been reached, plus an additional $12 per month for disposable supplies (tubing, face masks).

THERE ARE SEVERAL REASONS WHY MEDICARE PAYS MORE FOR AT-HOME OXYGEN CARE

Weaknesses in the Physician Certification Process (MCM 4105)

All DME must be certified by a physician as medically necessary for a patient's medical condition. A weakness in this process for at-home oxygen gives Medicare little control over the translation of the physician's prescription into the information that is provided on the certification form which is used by the Medicare carrier to determine the amount to be reimbursed to the DME supplier. A patient who needs oxygen receives a prescription which he/she takes to a DME supplier. The DME supplier generally determines what kind of oxygen system is to be provided to the patient. The DME supplier prepares a form, for signature by the patient's physician, which contains information to be used by the carrier to determine the reimbursement level. The DME supplier submits the signed form to the Medicare carrier for payment. In the case of oxygen concentrators, the reimbursement level for each claim is determined based on the oxygen flow rate and number of hours per day stipulated on the certification form. Conversely, the reimbursement level for liquid or gaseous oxygen is based on the actual amount of oxygen consumed.

Shortcomings in the Use of HCPCS

The HCFA Common Procedures Coding System (HCPCS) was designed by HCFA as a uniform system for data collection by the carriers. The individual HCPCS codes for liquid and gaseous oxygen distinguish between the capacity of the equipment and/or the amount of oxygen supplied to the beneficiary. However, in the case of oxygen concentrators these codes only reflect the projected consumption for each beneficiary, since little variance exists in the equipment's ability to produce unlimited amounts of oxygen. In the case of oxygen concentrators, HCPCS provides the carriers a total of 18 codes, plus the option for local modifiers. These codes represent reimbursements which range from a low of $50 per month to the high of over $300 per month, depending on the carrier. About 90 percent of the DME suppliers' claims are for the highest paid code (E1396).

The 18 HCPCS codes for oxygen concentrators do not reflect the actual oxygen need of a patient nor the patient's actual oxygen consumption. Therefore, a single HCPCS code for oxygen concentrators would ensure consistency and enhance data collection.
The primary reason that Medicare pays more for at-home oxygen is its use of the reasonable charge method of reimbursement. Reasonable charge criteria are based on the theory that supplier competition in the open marketplace will result in charges at their lowest competitive level. However, the reasonable charge reimbursement regulations fail to recognize factors that result in reductions in supplier costs due to more efficient operations and decreased acquisition cost. This flaw perpetuates at least a "status quo" in charges and can result in increased charges by continuing to apply an inflation factor to an inflated base. Furthermore, the reasonable charge system could enable a single high volume provider to upwardly distort the prevailing charge in a given geographic area. The prevailing charge is calculated by the carrier based on charges billed by DME suppliers for each instance of service (See Appendix B.) However, even though the amount allowed to a supplier may be set at $300 per month, the supplier may continue to bill at a monthly $500-per-concentrator level. This billed amount will then be used in the carrier's later calculation of the suppliers' or marketplace's prevailing charge, which ultimately impacts on future allowed charges to that supplier.

Even though Medicare is the largest purchaser of at-home oxygen care, this inspection found that the current reimbursement procedures do not ensure reimbursement at the lowest price possible. Medicare is paying more for at-home oxygen care than any of the other payers examined during the course of this national inspection. According to the 1985 BMA data, Medicare spent over $300 million dollars on oxygen concentrators alone. Medicare could save at least $100 million per year by adopting new reimbursement procedures (See Appendix C.) Further, the current procedures inhibit financial competition by the industry and foster "price-fixing" type actions.

Non-Medicare payers who, in every instance, pay significantly less than Medicare have used other more innovative reimbursement methods. The two major methods are the competitive bid process and the purchase of equipment. Individual VA hospitals have been highly successful in containing at-home oxygen costs through the use of both of these methods. Furthermore, at least three Medicaid State agencies have contained oxygen costs through the use of the competitive bid mechanism. These same cost-effective results have been achieved by other non-Medicare payers.

THE TIME IS RIPE TO FIX THIS PROBLEM

The problems with Medicare's reimbursement for at-home oxygen have attracted the interest of the Congress, the Office of Inspector General (OIG), and HCFA over the past 8 years. The OIG, HCFA and others have conducted a number of studies regarding a variety of oxygen reimbursement issues (see Appendix D). Data from these
studies outline the high costs to Medicare for at-home oxygen care, especially the amount paid for oxygen concentrators. While these reports included recommendations designed to contain the costs of oxygen reimbursement, changes in reimbursement procedures have been slow in coming.

The HCFA has acknowledged the problems related to reimbursement for at-home oxygen care. Its most recent effort to change the reimbursement system for oxygen was in March 1987. At that time, HCFA issued the MCM 5246.5 guidelines to assist its Medicare carriers in determining inherent reasonableness for reimbursement of Medicare DME charges, particularly oxygen concentrators. According to these non-compulsory guidelines, the customary and prevailing charge data may be influenced by additional factors, such as:

"1) the marketplace is not competitive; 2) Medicare is the primary source for payment; 3) the charges involve the use of new technology for which an extensive charge history does not exist; 4) the charges do not reflect changing technology, increased facility with that technology, or changes in a locality are grossly in excess of prevailing charges in other localities; and 5) charges are grossly in excess of acquisition or production costs."

Through the MCM 5246.5 guidelines, HCFA provided the Medicare carriers with the tools for reducing the cost of at-home oxygen. While the carriers are aware of the discrepancies between the charges to Medicare and non-Medicare payers for at-home oxygen and are eager to rid themselves of the complex methods involved in calculating reasonable charge, they are not eager to create carrier-specific charge levels. They believe that equipment issues such as these should be dealt with nationally and involve an established payment limitation, along with a uniform medical necessity certification form.

Full nationwide implementation by carriers of the MCM 5246.5 guidelines for at-home oxygen care could result in Medicare program savings of over $100 million annually. The application of these guidelines also would place Medicare expenditures for at-home oxygen more in line with non-Medicare payers (See Appendix E.)
RECOMMENDATIONS

SHORT TERM RECOMMENDATIONS

RECOMMENDATION #1 - IMPLEMENT MCM 5246.5 GUIDELINES

FINDING: The issuance of the MCM guidelines by HCFA in March 1987 was a positive effort to reduce the cost to Medicare for oxygen concentrators. The use of reduced acquisition cost as HCFA's basis for a payment reduction for oxygen concentrators under the inherent reasonableness authority is totally compatible with this inspection's findings. Aggressive action by HCFA and its carriers is necessary in order to bring Medicare payments in line with those of non-Medicare payers.

RECOMMENDATION: The HCFA should develop a precise strategy to ensure the timely and effective implementation of the MCM 5246.5 guidelines, and HCFA should closely monitor carrier-specific cost savings resulting from the implementation of these guidelines.

IMPACT: National implementation of the MCM 5246.5 guidelines could result in savings of over $100 million annually.

RECOMMENDATION #2 - REQUIRE PHYSICIAN ATTESTATION

FINDING: The process currently used for completion of the medical necessity certification forms contains vulnerabilities to Medicare. It also fails to ensure that Medicare pays for at-home oxygen care in only those instances in which the beneficiary requires the care at the levels needed. This absence of adequate front-end controls fosters abuse.

RECOMMENDATION: The HCFA should issue immediately a uniform medical necessity certification form. Included on this form should be a strong physician attestation statement. This attestation places the responsibility with the physician for the accuracy of the information contained on the certification form.

IMPACT: Increased physician participation in the medical necessity certification process will ensure that the at-home oxygen care and equipment paid for by Medicare corresponds with each beneficiary's needs.
RECOMMENDATION #3 - INFORM MEDICAID STATE AGENCIES OF POTENTIAL SAVINGS

FINDING: At least three Medicaid State agencies use the competitive bid approach and have been successful in achieving significant reductions in their cost for at-home oxygen care. Over 25 other Medicaid State agencies use the Medicare reasonable charge reimbursement method for at-home oxygen and reimburse at levels comparable to those paid by Medicare carriers.

RECOMMENDATION: The experiences of States currently using the competitive bid process should be distributed by HCFA to all State Medicaid agencies along with strong encouragement for immediate consideration of alternative reimbursement mechanisms.

IMPACT: Alerting Medicaid State agencies to potential cost-effective alternative mechanisms could result in substantial savings for the Medicaid program.

RECOMMENDATION #4 - MODIFY HCPCS OXYGEN CODES

FINDING: The HCFA Common Procedures Coding System (HCPCS) was designed to collect uniform national payment and utilization data. The variety of codes for liquid and gaseous systems have been successful in measuring the amounts of oxygen consumed through these systems. However, the numerous codes for oxygen concentrators have been less useful.

RECOMMENDATION: Continued use of multiple codes to measure consumption levels for liquid and gaseous systems is appropriate. The data system for oxygen concentrators should be changed to contain only one code for oxygen concentrators.

IMPACT: Carrier inconsistencies in the application of concentrator codes would be eliminated. Moreover, the carrier administrative burden would be reduced substantially since the need to calculate equivalency levels would be eliminated.
LONG TERM RECOMMENDATIONS

RECOMMENDATION #5 - REQUEST SPECIAL PAYMENT LIMITATION

FINDING: Medicare's reasonable charge reimbursement mechanism does not take advantage of the reduced acquisition costs to DME suppliers for oxygen concentrators. These low acquisition costs in conjunction with the limited need for supplier maintenance do not substantiate the significant variance in Medicare reimbursement levels among carriers.

RECOMMENDATION: A legislative proposal should be prepared and submitted by HCFA to request the authority to extend to at-home oxygen care a special payment limitation authority containing specific criteria for establishing these limitations comparable to those in P.L. 99-509, Section 9333 (OBRA). This authority should include a beneficiary safeguard which prohibits the DME supplier from passing Medicare payment reductions on to the beneficiary.

IMPACT: Medicare could achieve substantial program savings as well as national consistency in reimbursement levels among carriers. In addition, Medicare beneficiaries would share in these savings through reduced co-payments.

RECOMMENDATION #6 - TEST ALTERNATIVE REIMBURSEMENT MECHANISMS

FINDING: Almost all non-Medicare payers of at-home oxygen care pay significantly less than Medicare. These non-Medicare payers use a variety of reimbursement mechanisms which have been highly successful in achieving significant savings for their programs.

RECOMMENDATION: The HCFA immediately should commence a series of demonstration projects, such as competitive bids and interagency agreements with Veterans Administration Hospitals. These projects should focus on developing alternative Medicare reimbursement mechanisms and innovative methods for ensuring quality of patient care.

IMPACT: In the implementation of its existing demonstration authority, HCFA should make maximum use of the experiences of non-Medicare payers to try a variety of experiments. Full Medicare implementation of methods used by non-Medicare payers, such as competitive bids, could achieve about $200 million annually in Medicare program savings.
AGENCY RESPONSE

The Health Care Financing Administration (HCFA) provided comments on the draft report to the OIG on November 18, 1987. This response included comments on each specific recommendation contained in the draft report as well as a few technical suggestions. All of the technical suggestions were incorporated in the final report. The comments related to the recommendations are:

Comments of Health Care Financing Administration on the OIG Draft Report
Medicare Reimbursement for At-Home Oxygen Care
OAI-04-87-00017

Recommendation No. 1 -

HCFA should develop a precise strategy to ensure the timely and effective implementation of the MCM 5246.5 guidelines and HCFA should closely monitor carrier-specific cost savings resulting from the implementation of these guidelines.

Comments -

We agree with this recommendation. Subsequent to issuance of these instructions, in order to promote national consistency a conference call with all HCFA regional offices was conducted to discuss implementation of these guidelines.

Carrier Manual guidelines instruct carriers to forward to HCFA copies of notices alerting providers of changes in reimbursement through the use of other factors in determining inherent reasonableness. We intend to monitor carrier implementation, including cost savings, via these notices.

Recommendation No. 2 -

HCFA should issue immediately a uniform medical necessity certification form. Included on this form should be a strong physician attestation statement. This attestation places the responsibility with the physician for the accuracy of the information contained on the certification form.

Comments -

We are currently in the process of developing a medical necessity certification form with an attestation statement as recommended by the OIG.
Recommendation No. 3 -

The experiences of States currently using the competitive bid process should be distributed by HCFA to all State Medicaid agencies along with strong encouragement for immediate consideration of alternative reimbursement mechanisms.

Comments -

We agree that there is a potential here to realize Medicaid program savings and will develop an appropriate notification for all Medicaid State agencies.

Recommendation No. 4 -

Continued use of multiple codes to measure consumption levels for liquid and gaseous systems is appropriate. The data system for oxygen concentrators should be changed to contain only one code for oxygen concentrators.

Comments -

The use of HCFA Common Procedures Coding System (HCPCS) codes by carriers was recently revised by Carrier Program Memorandum B-87-13, copy attached. This will create a consistent approach to data collection and we believe it is a preferable alternative to having a single code for all concentrators. This is due to the fact that oxygen concentrators vary in their flow rates and percentage of oxygen delivered.

Recommendation No. 5 -

A legislative proposal should be prepared and submitted by HCFA to request the authority to extend to at-home oxygen care a special payment limitation authority containing specific criteria for establishing these limitations comparable to those in P.L. 99-509, Section 9333 of the Omnibus Budget Reconciliation Act (OBRA).

Comments -

The provisions of section 9333 of OBRA were so cumbersome that they have served to limit the Department's ability to issue specific payment limitations for physician services. In fact, section 312 of the Administration's draft Medicare Amendments of 1987 was proposed to repeal and/or modify some of the OBRA changes. In this instance, however, there is no need for a legislative change. Current statute would allow inherent reasonableness rules to be applied by HCFA to oxygen services. HCFA is effecting implementation by issuing carrier instructions (MCM 5246.5), which were referred to in Recommendation No. 1.
Recommendation No. 6 -

HCFA immediately should commence a series of demonstration projects, such as competitive bids and interagency agreements with Veterans Administration hospitals. These projects should focus on developing alternative Medicare reimbursement mechanisms and innovative methods for ensuring quality of patient care.

Comments -

HCFA has recently completed the design phase of a demonstration to test a competitive bidding approach to reimbursement for durable medical equipment. Oxygen is one of the areas which this demonstration will include. The Veterans Administration's method of selecting a single lowest-bidding supplier is not suitable for our purposes. We must offer a choice of preferred providers in the Medicare program.
APPENDICES
APPENDIX A

MEDICAL NECESSITY CERTIFICATION PROCESS

Based on data obtained during the course of this national program inspection, a significant lack of control exists from the point where the physician's prescription for oxygen becomes the actual basis for determining the amount to be paid by Medicare. For example:

Step 1  The physician writes a prescription to the patient for oxygen to be used at home. The prescription contains the liter flow rate but does not necessarily stipulate the length of time each day that the patient is to use oxygen or the specific equipment to be used. The physician then gives the prescription to the patient.

Step 2  The patient, with advice or information from a physician, hospital discharge staff, respiratory therapist, a nurse, friends, or telephone book, locates a DME supplier to fill the prescription.

Step 3  The DME supplier then translates the prescription to a certification form which specifies the actual liter flow rate and the length of use per day. All elements on the certification form are factors in determining the amount to be reimbursed by Medicare. Therefore, a DME supplier could set the usage per day at a rate equivalent to the maximum reimbursement from Medicare (12 to 14 hours per day). The DME supplier delivers the oxygen equipment to the patient while the certification form is being processed.

Step 4  The DME supplier sends the completed certification to the physician for his/her signature which attests to the validity of the medical necessity of the equipment and amounts needed. Most physicians sign the certification without closely scrutinizing its contents.

Step 5  The DME supplier then transmits the physician's signed certification form to the Medicare carrier for processing and payment.
APPENDIX B

PREVAILING CHARGES FOR HCPCS CODE E1396

<table>
<thead>
<tr>
<th>CARRIER</th>
<th>PREVAILING CHARGE</th>
<th>REASON(S) FOR VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>00520</td>
<td>$300 - $350</td>
<td>Specialty code</td>
</tr>
<tr>
<td>00528</td>
<td>$265 - $274</td>
<td>Locality, specialty code</td>
</tr>
<tr>
<td>00542</td>
<td>$310</td>
<td></td>
</tr>
<tr>
<td>00550</td>
<td>$265 - $275</td>
<td>Internal modifiers</td>
</tr>
<tr>
<td>00630</td>
<td>$301 - $310</td>
<td>Locality</td>
</tr>
<tr>
<td>00640</td>
<td>$207 - $360</td>
<td>Locality</td>
</tr>
<tr>
<td>00650</td>
<td>$290</td>
<td></td>
</tr>
<tr>
<td>00801</td>
<td>$295 - $370</td>
<td>Locality</td>
</tr>
<tr>
<td>00803</td>
<td>$364</td>
<td></td>
</tr>
<tr>
<td>01370</td>
<td>$300 - $385</td>
<td>Locality</td>
</tr>
<tr>
<td>03070</td>
<td>$268 - $384</td>
<td>Locality</td>
</tr>
<tr>
<td>13110</td>
<td>$326</td>
<td></td>
</tr>
<tr>
<td>13310</td>
<td>$350 - $375</td>
<td>Specialty code</td>
</tr>
<tr>
<td>14330</td>
<td>$364</td>
<td></td>
</tr>
<tr>
<td>16360</td>
<td>$225 - $420</td>
<td>Locality</td>
</tr>
<tr>
<td>16510</td>
<td>$275 - $336</td>
<td>Locality</td>
</tr>
</tbody>
</table>

The 1986 prevailing charges shown above are from HCFA's Part B Medicare Annual Data System (BMAD). HCPCS Code E1396 represents a beneficiary's estimated consumption of 1952 cubic feet of oxygen as provided by an oxygen concentrator. The 1985 Medicare expenditures for HCPCS Code E1396 were over $150 million, which represents more than 50 percent of all Medicare expenditures for oxygen concentrators.
APPENDIX C

POTENTIAL MEDICARE SAVINGS ON OXYGEN CONCENTRATORS

The 1985 BMAD data (the most recent available) established that the Medicare carriers paid a total of $300,355,215 in allowed charges for oxygen concentrators. This amount reflects charges for at least 83,432 beneficiaries which is based on an estimated $300 per month concentrator rental charge. Using the above data along with other data contained in MCM 5246.5, several potential options for Medicare savings were calculated. In each instance the alternative projections were subtracted from the amount known to be currently paid by Medicare to DME suppliers ($300,355,215).

BASED ON OIG RECOMMENDATIONS -- SHORT TERM SAVINGS

1. Example 1a of MCM 5246.5 uses an estimate of a supplier's annual direct and indirect costs associated with renting a concentrator. That cost (estimating a 50 percent markup by the supplier) is an annual rental allowance of $1,655 or about $138 per month.

   a. 83,432 beneficiaries X $138 per month X 12 months = $138,163,392

   POTENTIAL SAVINGS = $162,191,000

   b. 100 percent markup or $2,206 annually or $184 monthly
   83,432 beneficiaries X $184 per month X 12 months = $184,217,856

   POTENTIAL SAVINGS = $116,137,000

2. Example 2 of MCM 5246.5 establishes a reasonable monthly charge for purchase by selecting the median of wholesale prices for concentrators (i.e., $840) and increasing it by a markup of 66-2/3 percent for the supplier.

   $840 per month X 167 percent = $1,403
   $1,403 X 83,432 beneficiaries = $117,038,410

   Non-routine maintenance*
   12 months X $31 per month
   X 83,432 beneficiaries = 31,036,704

   Repairs and overhaul (warranty excluded)*
   $360 X 3 divided by 5
   X 83,432 beneficiaries = 18,021,312
   TOTAL $166,096,426

   POTENTIAL SAVINGS = $134,258,000 during first year. Greater savings accrue in later years, since the purchase price was included in year one.

   * See Appendix E
3. Example 3 of MCM 5246.5 establishes a monthly rental rate by determining 10 percent of the purchase price of a concentrator as being inherently reasonable.

10 percent of $1,400 = $140 per month plus maintenance and repairs of $600 per year ($50 per month)

$190 per month x 12 months x 83,432 beneficiaries = $190,224,960

POTENTIAL SAVINGS = $110,130,000

BASED ON OIG RECOMMENDATIONS -- LONG TERM SAVINGS:

1. The average monthly rental for concentrators for VA hospitals with competitive bid contracts is $82.14. Adoption of a similar level for Medicare would result in annual costs of approximately:

$82.14 per month x 12 months x 83,432 beneficiaries = $82,237,254

POTENTIAL SAVINGS = $218,117,000

2. The average monthly rental for concentrators for VA hospitals with no competitive bid contract is $168.75. Medicare's use of a similar level would result in annual costs of approximately:

$168.75 per month x 12 months x 83,432 beneficiaries = $168,949,800

POTENTIAL SAVINGS = $131,405,000

3. Medicaid State agencies with competitive bid contracts pay an average of less than $150 per month for oxygen concentrators. A similar level for Medicare would result in annual costs of approximately:

$150 per month x 12 months x 83,432 beneficiaries = $150,177,600

POTENTIAL SAVINGS = $150,177,000
APPENDIX D

LIST OF PRIOR STUDIES AND REPORTS

1. "Oxygen Concentrator Study" (1-04-9031-10), 9/30/81, HCFA Program Validation Report.


5. "Extending the Lowest Charge Level (LCL) to Additional Non-Physician Procedures", (01-3201), OIG/Audit.


8. "Review of Oxygen Concentrators", 11/82, HCFA, Region II.


10. GAO studies numbered HRD 82-61 (7/23/82), HRD 83-73 (7/8/83), and HRD 84-40 (2/13/84).

11. "Home Oxygen Expenditures", (2R7-A02-111), 8/13/82, Veterans Administration/Audit.

12. Management Implication Reports (MIR) prepared by OIG/OI which address a full range of problems and/or improprieties with at-home oxygen care. The dates of these MIRs are from March 1984 thru July 1986. Specific MIRs are: MIR 84-48, MIR 84-97, MIR 84-114, MIR 85-75, MIR 85-132, MIR 85-171, MIR 86-02, and MIR 86-10, OIG/OI.


15. "Medicare Cataract Implant Surgery" (OAI-09-85-09-046), "Medicare Part B Ambulance Services" (OAI-03-86-00012), "Coronary Artery Bypass Graft (CABG)--Assuring Quality While Controlling Medicare Costs" (OAI-09-86-00076), OIG/OAI.
The examples set forth below were provided to the carriers by HCFA as illustrations on how inherent reasonableness might be applied. The carriers were advised to determine independently the method to be used for deciding how inherent reasonableness will be applied in their respective areas and to solicit comments from appropriate groups. The carriers were cautioned against merely issuing the examples as policy.

### EXAMPLE 1

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing charge for rental</td>
<td>$300 per month</td>
</tr>
<tr>
<td>Prevailing charge for purchase</td>
<td>$3,000</td>
</tr>
<tr>
<td>Acquisition costs</td>
<td>$1,000</td>
</tr>
<tr>
<td>Estimated useful life</td>
<td>5 years</td>
</tr>
<tr>
<td>Technical maintenance</td>
<td>$31 per month</td>
</tr>
<tr>
<td>Average annual repairs and overhaul beyond warranty period</td>
<td>$360</td>
</tr>
</tbody>
</table>

#### RENTAL ESTIMATE

- **Annual Depreciation**: ($1,000 divided by 5 years) = $200
- **Non-routine technical maintenance**: ($31.00 x 12 months) = $372
- **Average annual repairs and overhaul for 5-year period - 2 years under warranty**: ($360 x 3 divided by 5) = $216

#### TOTAL DIRECT COSTS

$788

#### Indirect Costs - space, taxes, insurance, inventory, financing, etc. (40 percent)

$315

#### TOTAL ANNUAL COST

$1103

#### TOTAL MONTHLY COST

$91.92

At a mark-up of 50 percent and 100 percent the annual rental allowances would amount to $1,655 ($138.00 monthly) and $2,206 ($184.00) respectively.
EXAMPLE 2

REASONABLE CHARGE FOR PURCHASE

Reasonable charge for purchase is established by selecting the median of wholesale prices (i.e., $840) and increasing the selected price by the industry standard DME markup of 66-2/3 percent, and establishing that price as the reimbursement for a purchased concentrator with non-routine maintenance and repair charges additional.

\[ \$840 \times 167 \text{ PERCENT.} = \$1,400 \]

EXAMPLE 3

INHERENTLY REASONABLE MONTHLY RENTAL

Establish 10 percent of the purchase price as the inherently reasonable monthly rental allowance for DME. Add a factor to cover maintenance and repair. Use $1,400 as purchase price and $600 for annual maintenance and repairs. The reasonable rental allowance would be $190 per month.

\[ 10 \text{ PERCENT OF } \$1,400 = \$140 + \$600 \text{ DIVIDED BY 12} = \$50.00 \]
\[ \$140 + \$50 = \$190 \]