

MEDICARE REIMBURSEMENT

FOR

AT-HOME OXYGEN CARE



OFFICE OF INSPECTOR GENERAL

OFFICE OF ANALYSIS AND INSPECTIONS

DECEMBER 1987

MEDICARE REIMBURSEMENT FOR AT-HOME OXYGEN CARE

**RICHARD P. KUSSEROW
INSPECTOR GENERAL**

December 1987

OAI-04-87-00017

TABLE OF CONTENTS

	PAGE
EXECUTIVE SUMMARY	1
INTRODUCTION	1
Background	1
Purpose	2
Methodology	2
FINDINGS	4
Medicare's At-Home Oxygen Costs are High and Continue to Rise	4
Medicare's Costs are Higher Than They Need To Be.	5
There are Several Reasons Why Medicare Pays More for At-Home Oxygen Care	9
The Time is Ripe to Fix This Problem	10
RECOMMENDATIONS	12
AGENCY RESPONSE	15
APPENDIX	18
A. Medical Necessity Certification Process	19
B. Prevailing Charges for HCPCS Code E1396	20
C. Potential Medicare Savings on Oxygen Concentrators	21
D. List of Prior Studies and Reports	23
E. Medicare Carriers Manual 5246.5 Computation Examples	25

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.

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.

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

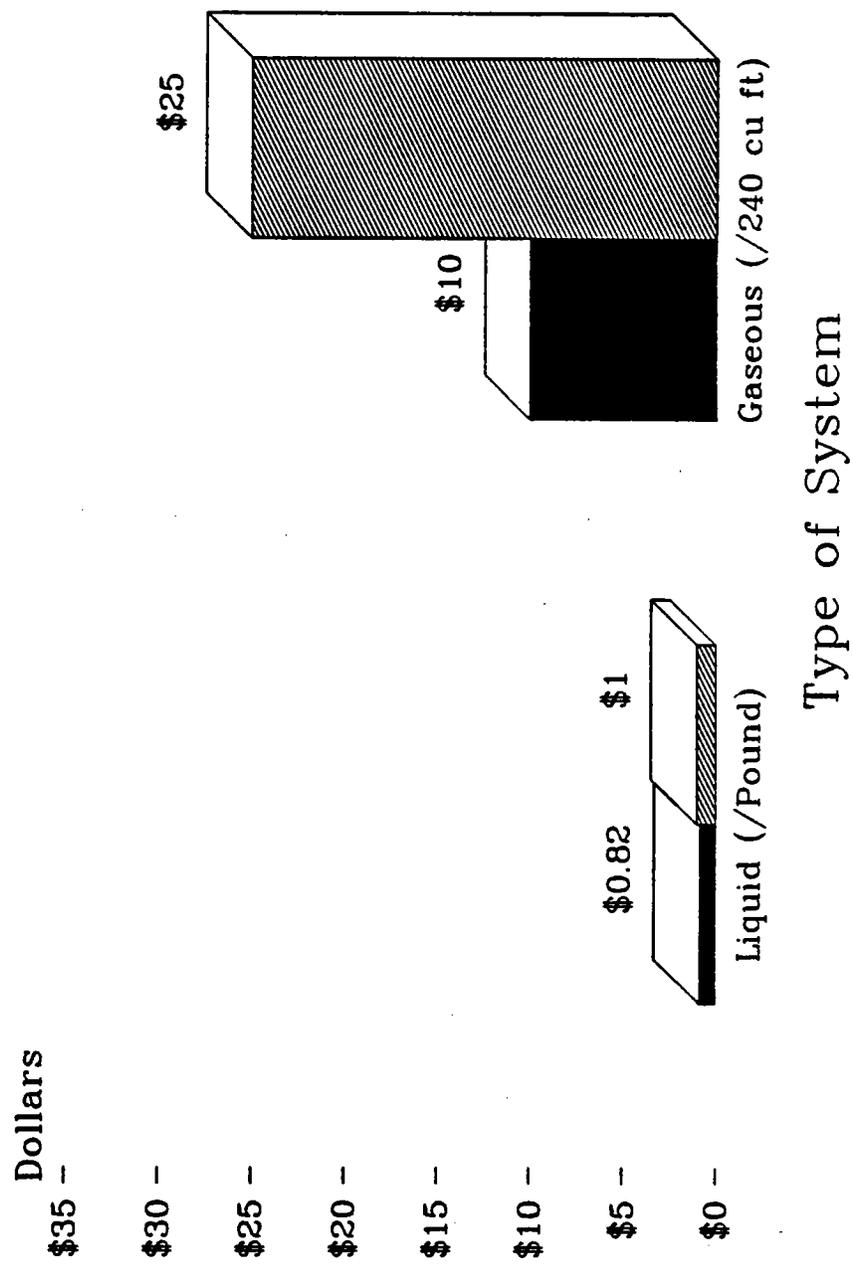
<u>TYPE OF OXYGEN SYSTEM</u>	<u>1984</u>	<u>1985</u>
LIQUID	\$ 99 M	\$137 M
GASEOUS	\$ 51 M	\$ 87 M
CONCENTRATOR	\$181 M	\$300 M
TOTAL	\$331 M	\$524 M

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.

Liquid and Gaseous Oxygen Typical Monthly Reimbursement



■ VA (Bid) ▨ Medicare

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

<u>OXYGEN SYSTEM</u>	<u>VA</u>	<u>MEDICARE</u>
LIQUID (PER POUND)	\$.82	\$1.00
GASEOUS (PER 240 CUBIC FEET)	\$10.00	\$25.00
CONCENTRATOR (Rental per month)	\$78.00	\$300.00

AREA B

<u>OXYGEN SYSTEM</u>	<u>VA</u>	<u>MEDICARE</u>
LIQUID (PER POUND)	\$.75	\$1.75
GASEOUS (H CYLINDER)	\$11.00	\$35.00
CONCENTRATOR (Rental per month)	\$90.00	\$360.00

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

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.

Flaws in the Reasonable Charge Method (MCM 5246.5)

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 BMAD 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

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.

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 bid, could achieve about \$200 million annually in Medicare program savings.

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.

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 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

APPENDIX D

LIST OF PRIOR STUDIES AND REPORTS

1. "Oxygen Concentrator Study" (1-04-9031-10), 9/30/81, HCFA Program Validation Report.
2. Annual Management Report, 11/13/84, The Equitable Study (Medicare Carrier for Tennessee).
3. "Review of Cost Containment through Expansion of the Lowest Charge Level Limitation", (1-02-005-19) 12/15/81, HCFA/BQC.
4. "Evaluation of the Impact of the Lowest Charge Level", 4/6/82, HCFA Bureau of Program Policy.
5. "Extending the Lowest Charge Level (LCL) to Additional Non-Physician Procedures", (01-32011), OIG/Audit.
6. "Priority Inspection Report (PIR) on Medicare Payments for Oxygen Concentrators", 8/18/83, OIG/OHFI.
7. "Priority Inspection Report--Liquid Oxygen and Portable Pressurized Gas Systems", 5/84, OIG/OHFI, Region II.
8. "Review of Oxygen Concentrators", 11/82, HCFA, Region II.
9. "Durable Medical Equipment--Competitive Bidding Demonstration-Market Case Studies", 8/21/86, HCFA Contract to Abt Associates.
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.

APPENDIX E

MEDICARE CARRIERS MANUAL 5246.5 COMPUTATION EXAMPLES

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

Prevailing charge for rental	-	\$300 per month
Prevailing charge for purchase	-	\$3,000
Acquisition costs	-	\$1,000
Estimated useful life	-	5 years
Technical maintenance	-	\$31 per month
Average annual repairs and overhaul beyond warranty period	-	\$360

RENTAL ESTIMATE

Annual Depreciation ($\$1,000$ divided by 5 years)	\$200
--	-------

Non-routine technical maintenance ($\$31.00 \times 12$ months)	\$372
--	-------

Average annual repairs and overhaul for 5-year period - 2 years under warranty ($\$360 \times 3$ 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