Conference Report

Problems in Prescribing and Supplying Oxygen for Medicare Patients

(Summary of a Conference on Home Oxygen Therapy held in Denver, February 28 and March 1, 1986).

Introduction

The benefit of long-term home oxygen for selected patients with advanced COPD and hypoxemia is now established. Life is prolonged in proportion to the number of hours per day that oxygen is used. Brian function and ability to ambulate and thus carry out activities of daily living are also better with the continuous use of home oxygen. Similar benefits can be attained in patients with other hypoxemic disease states such as in cystic fibrosis and interstitial lung diseases.

New technologies offer options in oxygen delivery systems. Paralleling both the knowledge and technological advances of the past decade are new requirements in oxygen prescribing as essential prerequisites for third party reimbursement. Social and economic forces are demanding improved methods of oxygen administration and its conservation. Proposals to control or limit the amount of oxygen used or possibly the method by which it can be administered are under consideration. The field is in transition. Accordingly, experts with established credentials and experience in oxygen studies were convened in Denver, Colorado to consider these issues in the context of the totality of comprehensive care of the patient with chronic respiratory insufficiency.

Inconsistencies in interpretation among third party payers and so-called "cost containment" initiatives have already resulted in coverage and reimbursement policies that may place patients with a need for home O_2 therapy at a significant medical risk, and is not consistent with optimum patient care. Before such initiatives are implemented, we believe it important that competent medical input be received by those charged with third party reimbursement.

This report summarizes the essence of the discussions of the special conference developed and conducted by the Webb-Waring Lung Institute in Denver on February 28 and March 1, 1986. Succinct answers to major questions and considerations in the broad field of home oxygen therapy are stated in this report.

Comments on Oxygen Prescribing Guidelines

The group was in general agreement with HCFA's prescribing requirements as set forth in the Federal Register. However, it was felt that a few clarifications are in order, and several recommendations were offered:

(A.) Regulation Cla, Column 3, Page 13748 which states, "The patient has appropriately tried other treatment measures without success," represents a misstatement of medical intent and practice and is inappropriate.

RECOMMENDATION 1: There is *no substitute* for oxygen therapy. It is appropriate that each patient should receive optimum therapy *before* long-term home oxygen therapy is ordered. This term "optimum therapy" will depend on the overall condition of the patient as viewed by the prescribing physician. Furthermore, "optimum therapy" will remain a part of the patient's total treatment even while receiving oxygen therapy.

(B.) In general, except for oxygen therapy given primarily for hypoxemia during sleep and exercise, arterial blood gas measurements, rather than oxygen saturation measurements made with an ear or pulse oximeter, should be used for the initiation of long-term oxygen therapy. An arterial oxygen tension (PO_2) of 55 (mmHg whenever cited) or less has been used as a selection criterion for long-term home oxygen for chronic stable patients. A PO_2 of 55 corresponds to an oxygen saturation of 88% under normal circumstances. If a patient's oxygen saturation is less than 85% as stated in the present regulations, it is virtually certain that the PO_2 is also *less* than 55. Conversely, under some clinical circumstances, which can occur in patients with chronic lung diseases, a PO_2 of 55 may be associated with an oxygen saturation of greater than 88%.

(C.) It is important to emphasize the exercise occasioned by ambula for all daily activities, both in and of the home, is a major compone the standard care and rehabilitatic patients with advanced chronic lung eases. To clarify, the term "exercis not intended to limit a patient's amb tion to a specific activity. It is inte to allow for ambulation in and ou of the home.

RECOMMENDATION 2: In patients arterial PO_2's - 55 at rest, it is dee medically necessary that a portable tem be provided to facilitate ambula in addition to a stationary oxygen d ery system. Similarly, in patients den strated to develop hypoxemia (Pa_{O_2} only during exertion, a portable sy should be approved for ambulatio

RECOMMENDATION 3: The requirer to demonstrate "clinical improveme the patient's condition, as evidence an *increase* in the patient's ability tc ercise or perform various activi should be removed. That exert induced hypoxemia occurs is suffic evidence of the need for oxygen the during exercise. Data from carefully ducted clinical trials clearly documen long-term benefits of oxygen therap hypoxemic chronic lung disease patie

(D.) Many of the current Medi reimbursement policies and guidel are based on the premise that "oxy is oxygen." Current carrier initiat which equate reimbursement for delivery system with another, or wh equate oxygen utilization with reimbu ment, fail to recognize that different tems have different capabilities and quire different support services. It m be stressed that the clinical condition quiring oxygen vary greatly among tients. All of these factors impact u the appropriateness of the syst prescribed for the individual patients. tient factors which substantially fluence the selection of an oxygen de ery system, include but are not limi to the following: general strength

dexterity, ability to ambulate, alertness and comprehension, compliance, the mechanism and degree of hypoxemia and accessibility to the oxygen supplier.

RECOMMENDATION 4: It should be recognized that the cost of various systems and accompanying support services may vary considerably. The physician's considered judgment regarding the type of system to be provided is based on physical, psychological, social, and regional factors as well as cost. Therefore, cost considerations should not be used to overrule the medical necessity of a particular method of providing oxygen.

(E.) There are certain advantages to each of the oxygen delivery systems available today, but the most important consideration for prescribing or supplying an oxygen delivery system relates to the medical necessity for either a stationary system or for a system which provides portability.

RECOMMENDATION 5: Where ambulation in and outside of the home is judged to be part of the therapeutic regimen, a portable system will be necessary. When oxygen concentrators are provided as the sole means of oxygen delivery, a supplemental oxygen system is medically necessary because of unpredictable power failures or electrical malfunctions. The current regulations require that the physician indicate the concentration of oxygen to be used. If the delivery system provides greater than 85% oxygen at the liter flow prescribed, then the requirement for a statement of the concentration is unnecessary. For purposes of these regulations, oxygen levels of 85% or greater are therapeutically equivalent to 100% oxygen.

RECOMMENDATION 6: Consideration should be given to developing a standardized prescription form for use by suppliers and carriers. Such a form would facilitate compliance by physicians in providing the data required by the regulations.

RECOMMENDATION 7: HCFA should urge carriers to obtain consultants who are expert in the nuances of oxygen therapy to advise them on unusual prescriptions for home oxygen therapy, as set forth in regulations 4 and 5, Page 13746, Federal Register. In addition, HCFA itself should solicit the comments of experts in the field as part of the policy-making process.

(G.) The cost of treatment with continuous oxygen therapy has inspired the search for oxygen conserving devices and procedures. The basic premise behind all of these devices and procedures is that the less oxygen used to produce adequate patient oxygenation, the less it will cost. For the oxygen concentrator, lower oxygen use would allow the production of smaller, portable concentrators. Recent advances in this area have occurred in three major categories: (*1*) transtracheal oxygen delivery, (*2*) intermittent inspiratory flow devices, and (*3*) expiratory storages devices. All systems claim reductions in oxygen usage ranging from 10–75% with speculations on savings and costs. All three modalities offer promise for the future in terms of conservation of oxygen use. None have been adequately studied for long-term home use as judged by full length publications in refered journals.

RECOMMENDATION 8: It is not possible to offer a recommendation at present concerning the clinical use of oxygen conserving devices. Long-term studies are sorely needed.

(H.) The Conference recognized that many physicians who are prescribing home oxygen therapy are not sufficiently knowledgeable in this area.

RECOMMENDATION 9: An educational effort needs to be mounted to better educate the profession in the principles and practice of home and ambulatory oxygen therapy. The appropriate professional bodies should be contacted to begin planning such an effort.

(I.) The members of the Conference were struck by the poor communication between carriers and suppliers.

RECOMMENDATION 10: A small workshop of 20–30 persons should be convened to explore areas of concern between suppliers and carriers, with representatives of HCFA and the medical profession serving as resource personnel. The emphasis in this workshop should be on making recommendations for resolving differences and establishing open lines of communication between carriers and suppliers. Ideally, this workshop should be convened under the auspices of the Department of Health and Human Services, with cosponsorship by professional organizations such as the American Thoracic Society, the American Association for Respiratory Care and other interested organizations.

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