HOME RESPIRATORY CARE PROGRAM

1. REASON FOR ISSUE: This VHA Handbook updates Department of Veterans Affairs (VA) Veterans Health Administration (VHA) procedures for administering the Home Respiratory Care Program for veteran beneficiaries.

2. SUMMARY OF CHANGES: This VHA Handbook updates on current procedures in administering the Home Respiratory Care Program.

3. RELATED ISSUES: VHA Directive 1173, and VHA Handbooks 1173.1 through 1173.15.

4. RESPONSIBLE OFFICE: The Chief Consultant, Prosthetic and Sensory Aids Service Strategic Healthcare Group (113), is responsible for the contents of this VHA Handbook. Questions may be referred to 202-273-8515.

5. RESCISSIONS: VHA Manual M-2, Part IX, Chapter 9 is rescinded.

6. RECERTIFICATION: This document is scheduled for recertification on or before the last working day of July 2005.

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HOME RESPIRATORY CARE PROGRAM

1. PURPOSE

This Veterans Health Administration (VHA) Handbook establishes uniform and consistent national procedures in administering the Home Respiratory Care Program to veteran beneficiaries.

2. SCOPE

a. The term “home respiratory care” pertains to the provision of home oxygen/respiratory care services necessary to assist the eligible person with home respiratory care. The program uses an interdisciplinary approach, involving members of Medical Service, Pharmacy Service, Prosthetic and Sensory Aids Service (PSAS), Acquisition and Materiel Management Service (A&MMS), Nursing Service, Health Administration Service, and contractors who comply with the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards.

b. There are three primary methods for providing oxygen therapy in the home:

(1) Compressed gas,

(2) Oxygen concentrators, and

(3) Liquid oxygen.

c. The most efficient and medically appropriate system for providing oxygen will be determined by the prescribing physician based upon the flow rate (per minute) desired, the daily period of usage, the patient’s physical condition and daily activities. For instance, an ambulatory patient may need a more portable oxygen system than a bed-confined or homebound patient.

3. DEFINITIONS

a. Concentrator. A concentrator is an electrical device used to deliver oxygen therapy in the home.

b. Liquid Stationary System. A liquid stationary system is a device used to store and dispense liquid oxygen therapy.

c. Liquid Oxygen. Liquid oxygen is medical oxygen dispensed by the pound.

d. Oxygen Tanks. An oxygen tank is where medical oxygen is stored; it is dispensed in a gaseous state in cylinders made of steel, light steel, and aluminum; it is known as compressed gas.

e. Intermediate Positive Pressure Breathing (IPPB) Machine. An IPPB machine is a device used to deliver air under pressure into a patient’s lungs.

f. Ventilators or Bi-Pap. A ventilator or Bi-pap is a device used for the continuous mechanical ventilation of a patient.
g. **Continuous Positive Air Pressure (C-PAP).** C-PAP is a device used to provide continuous positive air pressure for breathing.

h. **Suction machine.** A suction machine is a device used to evacuate a patient’s lungs.

i. **Nebulizers.** A nebulizer is a device used to dispense medication with the use of an electrically operated compressor.

### 4. GUIDELINES FOR ISSUING RESPIRATORY EQUIPMENT

a. Home oxygen services will be provided as medically needed to all eligible beneficiaries accepted for care within the Department of Veterans Affairs (VA).

(1) Oxygen is provided in a large cylinder under a compressed gas system. For those who require portability, a small tank with a cart is provided. This particular system requires a regulator to adjust the flow rate, a stand to secure the large cylinder, and in some cases, a humidifier to moisten the air. This oxygen system is normally furnished to patients who do not need continuous oxygen or were prescribed a low flow rate. When this particular system is provided, preset oxygen flow regulators should be provided unless the physician indicates otherwise.

(2) The oxygen concentrator delivery system provides an economical method of therapy when patients need continuous oxygen, and are relatively housebound or have minimal portability needs. The furnishing of a separate “E” cylinder or other appropriate size of compressed gas cylinder is necessary for emergency needs or to meet temporary portability needs as they may occur.

(3) The liquid oxygen system includes a reservoir canister and a portable device which can be filled from the reservoir. This method is prescribed for ambulatory patients who can use an extensive amount of oxygen from portable sources.

(4) Home oxygen should be provided by the most cost-effective means. The cost-effectiveness of using a concentrator versus compressed gas depends on local vendor charges. Local contracts for both delivery systems should be analyzed. The contract prices together with the patient’s prognosis and projected liter flow rate will be the determining factors in choosing the most economical delivery system in each case. The Chief, A&MMS, in coordination with the Chief, PSAS; Chief, Health Administration Service; and Respiratory Therapy should periodically complete a market analysis in their geographical area to determine the availability of the different types of home oxygen systems, and the contractors capable of providing the required services prior to issuing formal solicitations. The solicitations should be written in such a manner as to foster competition. In some areas it may be necessary to issue separate solicitations for each system. This is dependent upon the level of competition. The quoted prices, together with the patient’s prognosis and projected usage, will be used to determine the most cost-effective method in the local area for the delivery of home oxygen systems. Contract price quotations should be documented and considered in the cost analysis of the various systems. The most economical method will be used in determining purchase versus rental of equipment.
(5) All patients placed on a home oxygen therapy program should be reevaluated and the need for oxygen therapy documented every 6 months for the first year. Thereafter, the need for continuing oxygen must be documented at least annually.

5. PROCEDURES FOR VETERANS ON VENTILATORS

a. Ventilators which are required for the continuous mechanical ventilation of a patient will be furnished when prescribed only after the patient has been evaluated by the VA Respiratory Therapy Service.

b. Whenever a patient is totally dependent on a ventilator for continuous mechanical ventilation, a spare ventilator with accessories will always be furnished.

c. The veteran and family care takers will be thoroughly trained in the function and use of the ventilator and its accessories prior to discharging the patient.

d. All ventilators will be furnished in accordance with VA policies and procedures.

NOTE: A backup ventilator will be provided when the patient is discharged to the patient’s home.

e. IPPB machines

(1) IPPB machines, which are used to deliver air under pressure into the patients lungs for periods of time, will be furnished when prescribed by a physician specializing in pulmonary disease.

(2) This equipment is used to treat patients with acute pulmonary edema and chronic obstructive pulmonary disease.

(3) Physicians should only consider an IPPB machine for medication administration after patients have had a trial with one or more of the types of devices with unsatisfactory results as determined by the physician and respiratory therapy personnel.

f. Rocking Beds

(1) Rocking beds which are specially designed to control respiration of a patient will be furnished when prescribed by a physician specializing in pulmonary medicine.

(2) Rocking beds may be rented if duration of use is expected to be short or, as an interim measure to permit discharge from an inpatient facility pending receipt of a rocking bed ordered for a patient.

(3) Rocking beds will only be installed by personnel familiar with their function, i.e., biomedical engineer, engineering staff accompanied by a respiratory therapist or the JCAHO accredited personnel of a commercial contractor who specializes in respiratory equipment. This is essential as the rate of respiration is controlled by the frequency of the rock and inspiration and expiration is controlled by the angle of the rock.
g. Phrenic nerve stimulators which are designed to initiate breathing through stimulation of the diaphragm via the phrenic nerve will be furnished, including batteries, when prescribed by the appropriate medical personnel. **NOTE:** Batteries to power phrenic nerve stimulators will be provided by Prosthetic Service.

h. Other less expensive, less complicated, and usually effective types of equipment are available for routine aerosolization of medications. These include cartridge inhalers, handheld nebulizers, and portable compressor nebulizers.

i. Other items of respiratory equipment may be purchased, when prescribed, in accordance with VA policy and procedures.

6. RESPONSIBILITIES

a. **The Chief of Staff at the local VA Medical Center.** The Chief of Staff at the local VA medical center is responsible for:

   (1) Coordinating the efforts of all medical disciplines required for treatment of patients who require home respiratory care.

   (2) Selecting a home respiratory care team (HRCT) comprised of the involved medical disciplines and designating the chairman of the team. The team will normally consist of a physician responsible for respiratory care as the Chairman, a prosthetic representative as the coordinator and a VHA Respiratory Care Practitioner. The team may also include representatives of Pharmacy Service, Nursing Service, Health Administration Service, Quality Management, and the contractor’s respiratory care practitioner as dictated by local needs.

   (3) Reviewing the program on a quarterly basis and advising the HRCT as to any necessary adjustment of team composition or quality assurance initiative changes that may be necessary from time to time.

b. **Prescribing Clinician.** The Prescribing Clinician will be responsible for:

   (1) Determining the need for home respiratory care based on the patient's prognosis, medical history, results of 1) arterial blood gases (ABG's) or pulse oximetry, according to the Guidelines for home oxygen in the Department of Defense/VHA Clinical Practice Guidelines for Asthma/COPD,** 2) sleep study, 3) effective ventilator settings, or 4) effectiveness of other interventions.

   (2) Assure the prescription/consult includes the following general information: a) home oxygen: method of delivery, liter flow F_{\text{O}_2} (continuously, on exertion, at night), method of delivery, and duration. b) Airway pressure: mask type, settings, spacers, other associated devices. c) Ventilator: settings, F_{\text{O}_2}, mode.

**While the guidelines only address the use of oxygen for COPD, exceptions to the criteria may be clinical conditions where it has become practice to try oxygen therapy, i.e., cluster headaches, end stage CHF or other terminal illness. In general, if the patient does not desaturate to the level of 55 PaO2, even in light dyspnea, supplemental oxygen is not indicated. Physician discretion should be employed.
(3) Re-evaluating the patient to ensure the continued need for intervention. The initial re-evaluation may be accomplished from 4 weeks to 3 months, depending upon the reason for the intervention. A re-evaluation for veterans requiring long-term oxygen and mechanical ventilation will occur at least annually. The clinician will notify Prosthetics of the continued need or the need to discontinue intervention.

(4) Authorizing fee-basis evaluations, if so indicated in accordance with VA Acquisition Regulation 801.670-3, Medical, Dental, and ancillary services, for eligible patients who are unable to report to the VA medical center for evaluation of continued need or initial determination of need for home respiratory care.

c. **Prosthetic Service.** The Prosthetic Service, or other responsible entity, is responsible for administering the program. This includes the following functions:

   (1) Determining the eligibility of the veteran for home respiratory care.

   (2) Working with the responsible home oxygen therapy physician to identify contracted home oxygen therapy requirements for equipment management such as concentrators, tanks, regulators, canulas, masks, tubing, Continuous Positive Air Pressure (CPAP) devices, ventilators, and other respiratory care equipment. This responsibility also includes submission of the home respiratory care requirements to A&MMS for development of a solicitation for bids or offers and inspection of bidders’ or offerors’ facilities prior to award of the contract to provide home oxygen therapy to eligible VA beneficiaries or identifying vendors already under contract.

   (3) When designated by the contracting officer, appropriate personnel will serve as the Contracting Officer’s Technical Representative (COTR) for the home respiratory care contract. The designee will ensure the contractor’s compliance with technical requirements of the contract, including all JCAHO requirements as specified in the contract.

   (4) Monitoring contractual compliance and JCAHO standards on a quarterly basis. For example, this will be accomplished through site visits, receipt and review of all required documentation and performance improvement activities, customer satisfaction surveys and patient interactions. The results will be documented and maintained according to established local policy.

   (5) Scheduling home visits at a minimum of 10 percent (10%) of the patients on home respiratory care on a yearly basis. These random home visits are necessary to provide quality assurance of this treatment modality. Individual home visits may be conducted by multi-disciplinary teams consisting of clinicians and prosthetic representatives.

   (6) In concert with clinical respiratory representative, formulation and distribution of the medical center's policy relating to the home respiratory care program including eligibility criteria and clinical and administrative responsibilities.

   (7) Recording all transactions/expenditures for this program by utilizing the appropriate prosthetic software module, i.e., Home Oxygen Program. Recording home oxygen use as follows: Budget Object Code (BOC) 2574, Cost Center 8272, for rental item, repair, preventative maintenance, cylinder contents or liquid oxygen contents or other service contract
cost; and BOC 2674, Cost Center 8272, for purchasing new equipment and/or supplies for home oxygen use.

(8) Budget management and control of all Fund Control Points relating to home respiratory care.

(9) Purchase of equipment such as Continuous Positive Airway Pressure (CPAP devices), Bi-level Positive Airway Pressure (BiPAP devices), concentrators, ventilators, nebulizers, etc.

(10) Rental of equipment as concentrators, cylinder tanks, liquid reservoirs, ventilators, etc.

(11) Payment for liquid oxygen and cylinder tank fills and refills, and all invoices reflecting charges associated with the home respiratory care program.

(12) Purchase of consumable supplies such as masks, tubing, disposable nebulizer kits, nasal cannulars, humidification bottles, nasal pillows, etc.

(13) Performance Maintenance Inspections (PMIs) on VA owned equipment.

d. **Home Respiratory Care Team.** The Home Respiratory Care Team is responsible for:

(1) Reviewing all aspects of the home oxygen program in relation to local needs and resources to ensure that patients receive appropriate care, home oxygen equipment, and other aspects of the program are available.

(2) Recommending changes in the medical center policy on home respiratory care.