

### HOME CARE MECHANICAL VENTILATION PROGRAM

- I. **PURPOSE:** To establish the procedure for the proper placement at home or private nursing home of patients with permanent ventilatory deficit requiring mechanical ventilation.
- II. **POLICY:** Patients with irreversible total or partial ventilatory failure will be thoroughly evaluated to define all the required multidisciplinary coordination for the home placement of chronic ventilatory dependent patients in accordance with this Medical Center Standards of Care and in the most cost effective way.
- III. **RESPONSIBILITIES:**
- A. The Director is responsible for ensuring the institution fulfills the requirements for the provision of patient care by providing appropriate qualified and competent human and budgetary resources, according to patient population and their specific health care needs.
- B. The Associate Center Director and Associate Director for Patient Care Services are responsible for ensuring the participation of all involved staff under his/her responsibility in supporting efforts for compliance with the requirements for the provision of patient care as established in this center memorandum.
- C. The Chief of Staff is responsible for overseeing the needs and provision of patient care. He/she ensures the participation of all medical staff and other concerned professionals under his/her responsibility to participate actively in fulfilling the requirements for the provision of patient care as established in this center memorandum.
- D. A multidisciplinary team, composed of patient primary physician's group from the Medical Stepdown Unit (MSU), Pulmonary and Critical Care Medicine section (Pulm/CCM), nurse staff, social worker, respiratory therapist, travel unit, Home Care Service, physical therapy, pharmacy service and dietitian will be responsible of performing a complete evaluation of all possible selected patients for home/private nursing home placement.
- E. The primary physician from MSU will identify the patients whom they believe will benefit from the program. The primary physician will consult the Pulm/CMM service for a complete evaluation.
- F. The Pulm/CCM Section Medical Staff is responsible for the proper evaluation and determination of the patient eligibility for chronic home ventilation, request the necessary equipment (see attachment A) and follow the procedure stated in the Home Oxygen Therapy Center Memo no. 111-15-05. The Pulm/CCM physician will initiate a progress note authorizing the home visit (see attachment A). A home visit will be performed to evaluate the physical structure condition and make the appropriate recommendation in order to comply with The Joint Commission (TJC) Standards and VA Safety Requirements.

G. The social worker will perform a complete social evaluation addressing social support system and discharge planning needs. The hard copy form "Mechanical Ventilator Guideline for Discharge" will be placed in patient's hard copy record to assure all staff involved addresses patients and family needs for discharge. (See attachment A)

H. The Prosthetic Service will determine the benefits/eligibility of each patient. They will contract and will acquire all necessary home care services and life support equipments only after receiving an electronic consultation on CPRS, authorized by the Chief, Pulm/CCM Section and/or designee. The equipment will be acquired by the Purchasing Agent or private suppliers.

I. The Respiratory Therapist from the Home Pulmonary Program will commence with the mechanical ventilator trials to evaluated tolerance and determine the adequate mechanical ventilator for the patient. Education to family members will be given until full understanding, adequate feedbacks and demonstrate full knowledge in respiratory medical equipment and troubleshooting (e.g. suction techniques, respiratory devices, ventilator alarms, infection and falls control, smoking habits, maintenance of equipment, etc.). The education, reassurance and respiratory care services will be given in the hospital or home in a timely manner.

J. The Pharmacy Service will grant all necessary supplies and medications, after an electronic order in CPRS by the primary and/or Pulm/CCM physicians and dispatch according to their policies and procedures.

K. The Dietician will evaluated and recommend the adequate diet for the patient. The Dietician will verify with pharmacy the availability of diet recommended before patients discharged.

L. The Physical and Occupational Therapy will evaluate the correct use and fitting of mobility and or transfer equipment (Wheelchairs, lifters, etc.) necessary for rehabilitation, to avoid contractures and mobility limitations.

M. Nurse Service will instruct patient's relatives in his/her care requirements (tracheotomy, skin care, suctioning techniques, change of position, among other) before discharge from Hospital. Nursing Clerical Staff will assure that ambulance for transportation to home will have oxygen supply, suction machine and power supply.

N. The attending physician at the moment of discharge, social worker, and the Home Based Primary Care representative will assure as a team that the patient is accepted either in the Home Based Primary Care (HBPC) program, following the criteria in the CM 11C-13-02 Home Base Primary Care, or in a similar home service program thru fee basis. This will assist the patient in the transition from healthcare facility to a home environment by providing patient and caregiver education, guiding rehabilitation and use of adaptive equipment in the home. The coordination of care will assist with the adapting to the home needs for a safe and therapeutic environment, and arraigning the coordination of supportive services including home tele-health, as appropriate. The HBPC and Home Pulmonary program will assure the patient complies with all requirements from VA and TJC. At the moment of discharge and no more than 24 hrs. The patient will start with the services to assure continuity in the care. In the absence of an available home-based primary care service the patient could not be eligible for discharge. The Home-Based Primary Care services security and disaster preparedness plan will be followed in case of internal or external disaster.

**IV. PROCEDURE:**

A. Chronic ventilatory dependent patients considered for home placement must be evaluated by the Pulm/CCM Section Team after proper consultation by primary physician.

B. All identified patients will be discussed in discharge planning by the multidisciplinary team to determine competence, learning potential of patient and relatives, availability of economical resources, arrangements done by relatives, and how to make them conscious of their new responsibilities.

C. After obtaining the concurrence of the multidisciplinary team, the Pulm/CCM Section physician will complete all required documents for home placement and send them to the Home Pulmonary Program. Once admitted to the Home Pulmonary Program, all policies and procedures of the program will apply to this patient.

1. All patients must be discharged home under outpatient treatment condition (OPT) in order to qualify for Home Care Services. Discharge must be coordinated between primary physician and the Pulmonary/CCM service. The Pulmonary/CCM service will assure that all equipments and education were given and there are no security issues that jeopardize the patient clinical condition.

2. All patients on chronic mechanical ventilation at home will be evaluated monthly for the first six month after discharge and then every three months due the complexity of care, following the instructions for this purpose established by the Associate Chief of Staff (ACOS) for Geriatrics and Extended Care and the Advisory Committee for External Care.

3. A home visit will be performed to evaluate physical structure condition and make the appropriate recommendations in order to comply with the Joint Commission and VA Safety requirements. The visit will be in charge by the Home Pulmonary Program in conjunction with the Prosthetic Service, social worker, contract service, physical therapy, Home Base Primary care, among others. (see Attachment A)

D. Patient's relatives will get all equipment and supplies and will have them available at home before discharge.

E. Patient's relatives will receive and have available at home all equipment and supplies before discharge.

F. All evaluation and recommendations by the multidisciplinary team should be completed prior patient discharge home.

G. Before discharge, the patient will be placed on the same type of ventilator he/she is to take home in order to provide the caregiver(s) with the adequate training by Respiratory therapist and nursing staff. The patient will not be discharged until the caregivers are judged to be competent in the management of the ventilator. Patient and relative also will receive education

concerning equipments that the patient needs at home, such as feeding tube, suction machine, tracheotomy care and ulcer control by the Nursing Personnel in the MSU. All education will be documented in CPRS.

H. Prior to discharge, the patient should have a period of time (24 hours minimum) with ventilatory parameters resulting in minimal fluctuations in acid-base, and gas exchange status (Tidal volume (TV), Respiratory Rate (RR), Vital Capacity (VC), Inspiratory Force (Insp. F.).

I. The relatives of the patient can contact the health care provider assigned by the Home Care Services and/or the Home Pulmonary Program and/or Contracting company 24hrs/7days in order to properly receive any type of assistance. The contact number will be provided to the relative at the moment of discharge.

J. The Home Oxygen Contract Company will coordinate the delivery of all equipment and education before the patient is discharge. The Contracting Company will follow the patient at home to assure an appropriate setting at home.

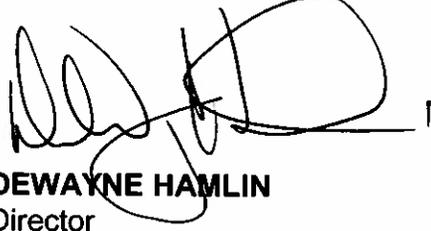
**V. REFERENCE:**

- A. Joint Commission on Accreditation of Healthcare Organizations (TJC).
- B. CENTER MEMORANDUM NO. 111-15-05, Home Oxygen Therapy.
- C. VHA Handbook 1173.13, Home Respiratory Care Program.
- D. CM 11C-13-02 Home Care Primary Care.

**VI. RESCISSION:** Center Memorandum No.111-12-02 dated May 2012.

**VII. EXPIRATION DATE:** June 2018

**VIII. FOLLOW UP RESPONSIBILITIES:** Chief, Home Oxygen Program

  
**DEWAYNE HAMLIN**  
Director

**MECHANICAL VENTILATOR GUIDELINE FOR DISCHARGE  
AND HOME OXYGEN PROGRAM (HOP) ENROLMENT REQUIREMENTS**

PATIENT NAME: \_\_\_\_\_ DATE: \_\_\_ / \_\_\_ / 200\_\_

SSN: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ WARD: \_\_\_\_\_ OTHER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TEL:(\_\_\_\_) \_\_\_\_\_ NEXT OF KIN: \_\_\_\_\_

SOCIALWORKER: \_\_\_\_\_ BEEPER: \_\_\_\_\_ OFFICE: \_\_\_\_\_

Patient will discharge to:

\_\_\_ Home

\_\_\_ Nursing Home

Specify: \_\_\_\_\_

I. Procedure:

\_\_\_ 1. Pulmonary Consult evaluation to admit patient to the Home Oxygen Program (Primary Doctor)

Pulmonary Physician initiates a Progress Note authorizing Home Visit and start with the Portable Mechanical Ventilator training.

\_\_\_ 2. Social Work Consult:

Social/discharge planning assessment, home visit report, coordinates services for discharge, GEC referral (homemaker, home care program, HBPC).

\_\_\_ 3. Home / Nursing Home Visit Evaluation (Pulm/CM Physician order): structural and environmental needs as per TJC Standards requirement

\_\_\_ Home Pulmonary Program Personnel, \_\_\_ Respiratory Therapist, \_\_\_ Social Worker, \_\_\_ Prosthetic Personnel  
\_\_\_ Physical Therapist, \_\_\_ Home Base Personnel \_\_\_ Contract Services, \_\_\_ Electrician, \_\_\_ Safety.

(National Patient Safety Goals, Environmental Safety and Equipment Management, Surveillance, Prevention, and Control of Infection, Ethics, Rights, and Responsibilities, Provision of Care Standards. The PC Standards specify the identification of patient needs, planning care, treatment and services.)

\_\_\_ 4. Home Pulmonary Program Respiratory Therapist (Pulm/CM Physician order):

The Respiratory Therapist will initiate the portable mechanical ventilator trial to evaluate tolerance. In addition education to family members will start until full understanding; adequate feedbacks is performed and have demonstrated full knowledge in respiratory medical equipment and troubleshooting (e.g. suction and therapy machine). Once the respiratory therapist has identified that the orientation has been understood, proper documentation will be performed and the pulmonary physician will initiate a Home Oxygen Consult (Prescription). Home Oxygen Consult will include Portable Ventilator settings, Oxygen Concentrator with liters per minute, Cylinders: Type E and H.

For veterans admitted at community medical facilities under VA contract, a medical order for portable

ventilator is required. The facility physician will place this order.

     5. Nutritional Evaluation (enteral nutrition)

     Pharm D. approval         verify with pharmacy medication and nutritional supplement availability  
     feeding education

     6. Social Work / Discharge Planning:

- Home Care
- Home Oxygen Program
- Homemaker
- Respiratory Therapist
- Physical Therapist
- Social Worker
- Prosthetic Service
- Other (Specify) \_\_\_\_\_

     7. Prosthetic Consult not necessarily limited to the following devices:

Primary Physician:

- Position Bed (electric)
- Feeding Pump with IV Pole
- Power Nebulizer  
(electric and with internal battery; battery operated nebulizer will be needed for transfer purpose)
- Suction Machine  
(electric and with internal battery; battery operated suction machine will be needed for transfer purpose)
- Maxi flow mattress
- Over bed table
- Lifter with Head support Canvas (commode & bath style)
- Air Conditioner (needed to prevent equipment malfunction due to overheat, to prevent patient ulcers, etc.)
- Pulse Oximeter
- Digital Blood Pressure Monitor
- Heat Moisturize humidifier Filter
- Ambu Bag
- Other (Specify) \_\_\_\_\_

Pulmonary Program:

- Mechanical Ventilator (2ea one will be used as a backup in case of malfunction)
- Electric Generator
- UPS (Uninterrupted Power System, 2 units for non-invasive ventilation)
- Ballard Flex Heat and Moisture Exchanger ( 2 box monthly 50units)

II. Medical Order:

Pharmacy	Qty/Month
by Pulmonary Physician	
Suction Catheter Kit FR 14	60
<b>Closed Suction System FR 14</b>	<b>20</b>
Tracheotomy Care Kit	60
by Primary Physician	
Hydrogen Peroxide	1000cc
Sterile Water Irrigation Bottle	8000cc
Sterile Gauze 4x4	350
Gloves Clean	300
Diapers Adults ( ) size	128
Tape (Microspore)	3 rolls
Tube Feeding Disposable, Plastic Bag	30
Therapy Medication (e.g. albuterol)	90, PRN,

\*Subject to change if patient condition deteriorates, e.g. diarrhea, infections

III. Special Transportation:

\_\_\_ Ambulance Service (will have oxygen supply, suction machine, power supply) POST