



**RESPIRATORY
CARE
POLICES
AND
PROCEDURES**

Respiratory Care Policies and Procedures

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CLINICAL RESPIRATORY CARE: ADMISSION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2011 – 2/09/2013

Joint Commission Standard:

Clients are admitted to Clinical Respiratory Care Services upon the order of a licensed physician. A Plan of Care form will be sent to the ordering physician within 72 hours of receiving an order for Clinical Respiratory Care Services. Each Plan of Care form must be returned to Oxygen Plus, Inc. within 30 days.

Criteria for admission to Oxygen Plus, Inc.'s Clinical Respiratory Care Services include the following:

1. Unstable oxygen therapy clients/patients.
2. Unstable BIPAP, NPPV clients/patients.
3. Unstable tracheostomy clients/patients.
4. Unstable clients/patients requiring chest PT and/or respiratory medication/nebulizer treatments.
5. Clients/patients requiring ongoing pulse oximetry assessments.
6. Clients/patients requiring Airway Care, which includes tracheostomy care, tracheostomy tube changing, and suctioning.
7. A payer source for the service.

Any client/patient admitted to Clinical Respiratory Care Services must demonstrate that their respiratory status is unstable and requires the intervention of a Respiratory Care Practitioner. Not all clients/patients on oxygen or with tracheotomy tubes require Clinical Respiratory Care Services, and may only require equipment management services. Clients/patients on equipment management services may become unstable and need to be started on Clinical Respiratory Care Services. It is imperative that HME services and RT services communicate with each other concerning the Plan of Service or Care for their clients/patients.

The referral and paperwork requirements are similar to the Eligibility Assessment and Guidelines outlined in the HME Services Section of the Policies and Procedures Manual, with the addition of the following:

- 1) Clinical Respiratory Care Admission Assessment form
- 2) Plan of Care form
- 3) Pulse Oximetry Report form (if applicable)

When the client/patient's condition improves, they may be discharged from Clinical Respiratory Care Services with physician approval (see discharge policy).

CLINICAL RESPIRATORY CARE: AIRWAY MANAGEMENT

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/015/2011 – 2/09/2013

Joint Commission Standard:

Oxygen Plus, Inc. provides airway management under the order of a licensed physician. Licensed Respiratory Care Practitioners provide this Clinical Respiratory Care Service.

Airway Management includes:

- 1) Assessment of the client/patient and his or her environment.
- 2) Responses to therapy and recommendations for changes to the ordering physician.
- 3) Preventive maintenance of all associated equipment.
- 4) Tracheostomy tube changing and cleaning.
- 5) Suctioning of the client/patient's natural or artificial airway.
- 6) Client/patient and caregiver(s) instruction of the suctioning procedure, tracheotomy tube care, tracheotomy tube changing and education of the client/patient or caregiver(s) about all necessary equipment.
- 7) Compliance with the Clinical Respiratory Care Plan of Care.

All referrals for Airway Management require the following before acceptance by Oxygen Plus, Inc.:

- 1) Physician orders outlining the airway care to be provided in the home. These orders should include the frequency of tracheotomy tube changing (if the client/patient is trached), and frequency of suctioning by a Respiratory Care Practitioner.

- 2) A minimum of 1 caregiver to be responsible for and help the client/patient with airway care. The caregiver will also be responsible for helping the client/patient with all associated equipment.
- 3) Education of all client/patient caregivers in the use of all equipment to be used in the home must be performed either before client/patient discharge or the day of discharge. The checklist will be completed and signed by each caregiver for each piece of equipment.
- 4) A completed Clinical Respiratory Care Plan of Care should be completed before the client/patient is discharged from the hospital.
- 5) The policy for Ventilator Management supersedes this policy if the patient receives both Ventilator and Airway Management.

Oxygen Plus, Inc. will maintain all associated equipment used in airway management per the manufacturer's guidelines. Each piece of equipment will have an Equipment Set-up and Maintenance Log form detailing all maintenance performed on it.

A Respiratory Care Practitioner will visit all clients/patients on Airway Management at intervals prescribed in the Plan of Care. Each visit will be recorded on a Clinical Respiratory Care Client/Patient Visit form and be placed in the client/patient's file. The client/patient's physician will be provided with a copy of the Visit form if so desired. Any change in the client/patient's condition and/or request for change in the Plan of Care will be telephoned to the client/patient's physician. Any verbal orders received will be noted by the practitioner on a Verbal Order Form and sent to the physician for his or her signature per policy.

CLINICAL RESPIRATORY CARE: APHEA MONITOR

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 8/08/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVES

- 1) Provides immediate warning of apnea and/or bradycardia in client/patient.
- 2) Client/patient event recording.

A physician's order is required to provide apnea equipment and Clinical Respiratory Care services. The physician must order the apnea monitor settings and the frequency of monitor download with report to the physician.

EQUIPMENT

- 1) Monitor appropriate to the needs of the client/patient and physician order
- 2) Monitor kits (pads, lead wires, belt)
- 3) Soft-side carrying case
- 4) Simulator (if appropriate)
- 5) Computer with monitor download software for event recording reports

DOCUMENTATION

- 1) Apnea monitor orientation checklist
- 2) Apnea monitor client/patient instructions
- 3) FDA safety alert: "Important Tips for Apnea Monitor Users"
- 4) Infant CPR poster
- 5) Alarm journals

6) Manufacturer user manual

7) PROCEDURE

1) Positively identify client/patient.

2) Wash hands.

3) Explain to the family the purpose of the device. Stress that the monitor should be utilized when sleeping or unattended.

4) Demonstrate how to turn the monitor on and off.

5) Explain the reset switch and the proper manner to reset the monitor.

6) Explain the meaning of the lights and alarms.

7) Inform the caregiver of the prescribed settings.

8) Explain the event recording capabilities of the monitor.

9) Explain the battery capabilities and charging procedure.

10) Instruct the caregivers in electrode and belt placement and electrode site care.

11) Instruct the caregivers in the procedure to contact Oxygen Plus, Inc..

12) Optional: Download the monitor per physician orders utilizing manufacturer's computer software and documented procedure. Oxygen Plus, Inc. will maintain up-to-date manufacturer computer software and procedures.

CONTRAINDICATIONS

➤ Caregiver inability to comprehend

➤ Caregiver non-compliance

HAZARDS

- 1) Increased family stress level
- 2) Decrease in family bonding due to presence of monitor
- 3) Skin irritation due to improper lead and/or belt placement

SPECIAL CONSIDERATION

Cardiopulmonary Resuscitation (CPR) is to be taught each parent or caregiver by the hospital. Oxygen Plus, Inc.'s Respiratory Care staff member will re-instruct during the initial set-up as needed.

CLINICAL RESPIRATORY CARE: ASSESSMENT

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

Within 24 hours of an order for Clinical Respiratory Care Services, a Respiratory Care Practitioner will perform a client/patient assessment and a Plan of Care, The Oxygen Plus, Inc.'s Clinical Respiratory Care Admission Assessment and Plan of Care form will be utilized to record the necessary data. All sections of the form must be completed as appropriate. Any spaces not requiring any information must not be left blank and shall be X'd out by the practitioner.

A one-time Equipment Management Admission Assessment and Plan of Service may be completed for equipment-management-only clients/patients with the client/patient's physician approval. A Respiratory Care Practitioner must perform this assessment. Pulse oximetry tests may not be performed on equipment-management-only clients/patients without a separate order.

The Assessment will include the following information:

- 1) Client/patient name, address, phone, physician and diagnosis
- 2) The equipment/supplies ordered
- 3) The equipment settings
- 4) A medication profile
- 5) Any adverse reactions to the treatment
- 6) Subjective information such as shortness of breath, appetite, diet, fluid intake, sleep habits, headaches, breathing pattern, coughing, and sputum production
- 7) Known allergies

- 8) Advance care directives
- 9) Vital signs; respiratory rate, heart rate, blood pressure
- 10) Notation of any edema
- 11) Auscultation
- 12) Pulse oximetry
- 13) Assessment of caregivers
- 14) Assessment of environment
- 15) Social/medical history
- 16) Activity restriction
- 17) Changes in condition
- 18) Ability to safely operate and clean the equipment
- 19) Ability to assume responsibility for home care regimen
- 20) Prior training/teaching provided by other health care practitioners
- 21) Plan of Care, problems/needs, goals, recommendations, education

The Clinical Respiratory Care Client/Patient Visit and Plan of Care Review must be used by the Respiratory Care Practitioner with each reassessment of the client/patient. Follow-up visits and assessments will be performed according to the frequency noted on the Plan of Care.

The Clinical Respiratory Care Client/patient Treatment Documentation form will be utilized to document all treatments and/or services provided to the client/patient. The client/patient's physician will be notified as soon as possible of any abnormal findings during a client/patient assessment and/or treatment.

The client/patient's physician will be notified of the progress of the client/patient in reaching the goals set in the Plan of Care at a minimum of every 3 months. The notification may be performed in writing, by telephone and/or by providing the physician a copy of documentation. Any communication to the client/patient's physician must be documented in the client/patient record.

CLINICAL RESPIRATORY CARE: EQUIPMENT

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2007 – 2/09/2013

Joint Commission Standard:

This policy and procedure applies to Respiratory Care Equipment used in the provision of clinical services to the patient. The equipment is not rented or loaned to the patient. Examples of equipment include but are not limited to: stethoscopes, blood pressure equipment, pulse oximeters, oxygen analyzers, percussors and medication compressors.

STORAGE AND TRANSPORTATION OF EQUIPMENT

All Respiratory Care equipment used in patient care will be stored in such a manner as to maintain the cleanliness of the equipment. The RCP must store the equipment in clean plastic bags after cleaning or in a clean plastic container. The RCP must transport the equipment in the plastic bag/container and separate any dirty equipment from all clean equipment in the vehicle used to provide services. The RCP must maintain the cleanliness of the vehicle used to provide services. Smoking is not allowed in Company vehicles. Smoking is discouraged by any staff member who provides Clinical Respiratory Care to patients.

TESTING AND CLEANING OF EQUIPMENT

All Respiratory Care equipment used in patient care will be routinely tested for safety and proper operation according to the manufacturer's guidelines.

Cleaning of the equipment will be performed with a germicidal cleaning agent according to the manufacturer recommendations. Where no guidelines exist, the equipment will be sprayed/wiped with germicide between patient uses. The germicide shall be left on the equipment to kill bacteria and viruses per the germicide instructions on the label and wiped clean with a disposable towel.

Equipment cleaning and testing will be documented on the Respiratory Care Equipment Cleaning and Maintenance Log.

MAINTENANCE AND REPAIR OF EQUIPMENT

Maintenance of respiratory care equipment shall be performed per manufacturer guidelines, where applicable. All maintenance will be documented on the Respiratory Care Equipment Cleaning and Maintenance Log. Repairs beyond the RCP's training and competence must be performed by the manufacturer or certified medical equipment repair services.

CALIBRATION OF EQUIPMENT

Calibration of respiratory care equipment shall be performed per manufacturer guidelines, where applicable. All calibrations will be documented on the Respiratory Care Equipment Cleaning and Maintenance Log.

MANUFACTURER RECALLS

Upon notification of a product recall, the President will be responsible for responding to the notification within the manufacturer's designated time frames. Personnel will examine all inventories for the recalled products and isolate the specified items until further instructed to either discard or return the products to the manufacturer.

Recall classifications as assigned by the Food and Drug Administration to indicate the relative degree of health hazard presented by the product being recalled are as follows:

Class 1 is a situation in which there is a reasonable probability that the use of, or exposure to, a recalled product will cause serious adverse health consequences or death.

Class 2 is a situation in which use of, or exposure to, a recalled product may cause temporary or medically reversible adverse health consequences, or in which the probability of serious adverse health consequences is remote.

Class 3 is a situation in which use of, or exposure to, a recalled product is not likely to cause adverse health consequences.

RECALL PROCEDURE

Upon receiving notification of a product recall, Oxygen Plus, Inc. personnel will take the following steps:

- 1) Review inventory for the recalled item.
- 2) Remove the items(s) from service.
- 3) Tag products as "Recalled". Place in a secured area to prevent reuse. This area shall be posted with a sign "Quarantine Area" and the area marked on the floor with red tape.
- 4) Follow the steps recommended by the manufacturer and document the steps on the Product Recall Report with the date completed and the signature of the person completing the form.
- 5) A copy of all Product Recall Reports must be on file in a notebook labeled "Product Recall" at the Oxygen Plus, Inc. office.

DISPENSING OF DISPOSABLE SUPPLIES

A prescription is required for any item with the legend, "CAUTION: US Federal law restricts this device to sale by or on the order of a physician" or "Rx Only". A prescription is also required for any item that is to be billed to an insurance carrier.

Disposable medical devices are normally marked "single use only"; however, for the sake of saving money in the home health care setting, many disposables may be clean and reused. Examples of these disposables include hand-held nebulizers, aerosol tubing, ventilator circuits and plastic adapters. Any disposable respiratory care devices that are reused must be disassembled, and the parts washed in a clean sink or container with clean warm water and a mild liquid detergent. The parts would then be rinsed with warm water and the excess water removed. The product must then be immersed in a germicide to kill bacteria. The germicide may be purchased, such as Control III, or the staff member/patient/caregiver may use a 50/50 mixture of white vinegar and water. The parts must be immersed for approximately 20 minutes, then rinsed and allowed to air dry. After drying, the item must be reassembled and put into a clean plastic bag/container. The RCP or patient/caregiver must wash his or her hands thoroughly with soap and water before handling the parts and between each step of the procedure.

CLINICAL RESPIRATORY CARE: EMERGENCY BACK-UP

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

Each client/patient on Clinical Respiratory Care Services will be provided with emergency back-up equipment appropriate to the level of care provided.

Oxygen concentrator clients/patients will be provided with a back-up oxygen cylinder that will, at a minimum, provide oxygen at the prescribed liter flow for 24 hours.

Clients/patients receiving humidity to a tracheostomy by either a jet nebulizer/high flow air compressor or heated humidifier/air compressor will be provided with a minimum of 3 Heat moisture exchangers (artificial noses) for emergency back-up for equipment failure or electric service interruption. In case of equipment failure, the Company will replace the equipment within 8 hours of notification.

Clients/patients on both humidity therapy to a tracheostomy and oxygen therapy will also be provided a system to provide oxygen to the heat moisture exchanger humidifier.

Clients/patients requiring suctioning of artificial airways (e.g., tracheotomy tubes) will be provided with both a stationary suction machine that uses regular household current and a battery-operated suction device.

Each piece of equipment set up in a client/patient's home will include an instruction sheet that outlines the use of the equipment, settings, and troubleshooting of the equipment in case of failure. Each client/patient is provided with the telephone number for Oxygen Plus, Inc.. Each piece of rental equipment will also have a Oxygen Plus, Inc. sticker attached to it with the Company's telephone number.

Oxygen Plus, Inc. provides on-call personnel for service to our clients/patients 24 hours per day, 7 days per week. During hours the office is closed, all telephone calls will be forwarded to our answering service, which will record the client/patient's message or concern and then contact the on-call personnel. Diligent attempts will be made to return each call within 30 minutes of the initial telephone call. Personnel are directed to respond to equipment failure or concerns as quickly as possible.

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CLINICAL RESPIRATORY CARE:

CHEST PHYSIOTHERAPY AND POSTURAL DRAINAGE

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVES

- 1) Improve secretion clearance in clients/patients.
- 2) Decrease mucus plugging in clients/patients.

A physician's order is required to provide Clinical Respiratory Care Services.

EQUIPMENT

- 1) Percussion device (optional).
- 2) Suction machine and catheter or bulb syringe (optional).
- 3) Tissues.

DOCUMENTATION

Clinical Respiratory Care Client/Patient Visit report

PROCEDURE

1. Check physician's orders for the frequency of CPT & PD.
2. Positively identify the client/patient.
3. Explain procedure to client/patient and/or caregiver.
4. Wash hands.
5. Gather equipment and set up in a clean area near the client/patient.

6. Assess the client/patient's breath sounds.
7. Position the client/patient comfortably for percussion. The client/patient should be positioned upright or with head and upper body elevated for percussion of the anterior and upper areas of the chest. Place the client/patient in Trendelenburg position (head and body lowered) for percussion of the anterior, posterior, and lateral segment of the lower lobe.
8. Percuss with a cupped hand or percussion device for a least one minute over each segment of the chest.
9. Encourage the client/patient to cough up any mucous present, or suction the client/patient as needed. Note characteristics of secretions.
10. Assess breath sounds.
11. Wash hands.
12. Document procedure:
 - a. Percussion method utilized.
 - b. Total amount of time.
 - c. Secretions coughed or suctioned.
 - d. Characteristics of secretions.
 - e. Client/patient's tolerance of procedure.
 - f. Assessment of breath sounds.

CONTRAINDICATIONS

- 1) Head and neck injury.
- 2) Active hemorrhage with hemodynamic instability.
- 3) Acute spinal injury or active hemoptysis.

- 4) Pulmonary edema associated with congestive heart failure.
- 5) Rib fracture.

HAZARDS

- 1) Hypoxemia.
- 2) Increased intracranial pressure.
- 3) Acute hypotension.
- 4) Pulmonary hemorrhage.
- 5) Pain or injury to muscles, ribs or spine.
- 6) Vomiting and aspiration.
- 7) Bronchospasm.

SPECIAL CONSIDERATIONS

- 1) CPT & PD are best accomplished before meals or two hours after meals to reduce the risk of emesis.
- 2) Performing CPT and PD in the early morning after the client/patient awakens, one hour before bedtime, and after nebulizer treatment is most helpful.
- 3) Following a set routine of percussion and positioning will help to ensure that all areas are covered.
- 4) Percuss over ribs only. Avoid abdomen, sternum, spine and scapulas.
- 5) Do not percuss in bare skin. Percuss over a layer of clothing or linens.
- 6) Do not percuss hard enough to cause discomfort.
- 7) The use of various positions of a mechanical hospital-type bed is most helpful in postural drainage. Pillows may also be used for positioning. Infants and small children may be positioned on the RCP's lap.

- 8) The length of the therapy will depend upon the size of the client/patient (small children and infants have less lung area to cover), the client/patient degree of cooperation, and the amount of secretions to be coughed out of suctioned. Times could vary from 10 minutes for an infant to 30 minutes for an adult.

CLINICAL RESPIRATORY CARE:

CLIENT/PATIENT EDUCATION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2005 – 2/09/2013

Joint Commission:

The Respiratory Care Practitioner will be responsible for instructing the client/patient and/or caregiver(s) in the tasks and/or information related to the achievement of the goals established in the Plan of Care. Assessment of knowledge deficits and the client/patient or caregiver's learning abilities shall begin during the first visit. Instruction shall proceed in accordance with the client/patient's readiness and condition and/or, when appropriate, the responsible party/caregiver's readiness, so that all involved may be knowledgeable and the client/patient may be independently maintained in the home.

Instruction shall be an integral part of respiratory care services and, at a minimum, shall include the following:

- 1) Individual learning needs expressed by the client/patient or caregiver(s), or observed by the Respiratory Care Practitioner shall be incorporated into the client/patient's education goals in the Plan of Care.
- 2) This plan shall be communicated to all members of the health care team through the use of informal team conferences.
- 3) An ongoing assessment of needs shall be made with each visit or as the condition changes and learning progresses.
- 4) All client/patient or caregiver teaching and assessments shall be documented in the Client/patient record.
- 5) The patient record must include documentation to the patient and caregiver about actions to take if a medication or treatment reaction occurs when the Respiratory Care Practitioner is not present.

- 6) The Respiratory Care Practitioner shall provide written instructions relative to the treatment/care provided. The written instructions shall include disease management.
- 7) Oxygen Plus, Inc. will maintain client/patient instruction/consulting handouts for each type of equipment it uses to provide care to the client/patient. The Respiratory Care Practitioner shall provide written instruction/consulting handouts for each type of equipment it uses to provide care to the client/patient. The handout shall include proper use, safety hazards and maintenance of the respiratory care equipment the client/patient will use in his or her self-care. The patient will receive written information on how to notify the Company of problems, concern and complaints.

CLINICAL RESPIRATORY CARE; CLIENT/PATIENT REASSESSMENT

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2011 – 2/09/2013

Joint Commission Standard:

Oxygen Plus, Inc. will provide for reassessment of clients/patients on Clinical Respiratory Care Services. The client/patient's physician will define the frequency of reassessment of the client/patient on the Plan of Care. The Respiratory Care Practitioner shall consult with the physician in setting the frequency of reassessment.

The Clinical Respiratory Care Plan of Care should take into account the severity of the condition of the client/patient in determining the frequency of visitation and reassessment.

The reassessment of the client/patient will be performed in relation to established goals to determine a client/patient's progress toward the achievement of desired outcomes. The Plan of Care will be reviewed with each clinical respiratory visit. The client/patient will continue to be involved in the review of the Plan of Care as evidenced by his or her signature on the reassessment form. The client/patient or caregiver(s) will be asked during the Plan of Care update if they are satisfied with the services/care being provided and asked for comments.

The client/patient's physician should be requested to revise the Plan of Care according to the achievement of the established goals. Clients/patients may be transferred to equipment management services when all goals are met (excluding those services requiring a Respiratory Care Practitioner) with the approval of the prescribing physician. The Clinical Services Transfer/Discharge Summary form must be completed, with a copy to be sent to the client/patient's physician.

Clients/patients will be visited and the Plan of Care will be reviewed a minimum of every 3 months for clients/patients on Clinical Respiratory Care Services.

CLINICAL RESPIRATORY CARE: COMMUNICATION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2011 – 2/09/2013

Joint Commission Standard:

Oxygen Plus, Inc. requires that the Respiratory Care Practitioners communicate with the client/patient's physician any changes in the client/patient's condition that may warrant physician involvement. Copies of client/patient visitation sheets will be sent to all physicians who request that they be sent.

Communications will be maintained with other agencies, such as home health nursing, which are providing services to the client/patient. Copies of visit reports and Plans of Care will be sent these agencies upon request.

Communications will be maintained within the Company for those shared clients/patients in Clinical Respiratory Care Services and equipment management services. Communication of client/patient information will be shared through informal team conferences.

CLINICAL RESPIRATORY CARE: CONTINUING EDUCATION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

Oxygen Plus, Inc. shall require continuing education/in-service training for its Respiratory Care Practitioners. Oxygen Plus, Inc. requires its RCP's to complete all Company mandatory in-service education programs plus the Continuing Education (CE) requirements for each state the RCP is licensed in. The CE shall be directly related to the practice of Respiratory Care. The CE shall be approved by the American Association for Respiratory Care (AARC) and/or the State Respiratory Care Licensing Board.

Continuing education records/certificate will be kept in the individuals' personnel file. The continuing education record/certificate shall contain, at a minimum, the following: date of continuing education received, program title, hours of instruction (CE's) and instructor's credentials.

CPAP, BSLEVEL, AND NPPV

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/03/2007 – 2/09/2013

Joint Commission Standard:

The CPAP (Continuous Positive Airway Pressure) or BILEVEL CPAP is a device sleep apnea. The BILEVEL CPAP is used when it has been demonstrated that tolerate CPAP. NPPV (Non-invasive Positive Pressure Ventilation) is a device respiratory failure, central apnea, and hypoventilation syndrome.

Admission Criteria

- 1) Determination by a physician of the need for the device.
- 2) A prescription for the device with the settings.
- 3) Insurance criteria for payment have been met, unless client/patient is private pay.
- 4) Residence adaptable for placement and use of the device.
- 5) Client/patient or caregiver(s) trainable in the basic use, maintenance, cleaning, and troubleshooting of the device.

Physician Responsibilities

- a. Provide diagnosis of the physiologic need for the device.
- b. Inform the client/patient or caregiver(s) of the necessity for such the device in the home.
- c. Provide a written, signed physician's prescription and any other necessary documents.

Company Responsibilities

- 1) Equipment delivery and set-up per policy, unless otherwise specified.

- 2) Equipment delivered will be clean, properly maintained, and safely operating within manufacturer's specifications. Accessories will be provided as per physician's prescription or client/patient's needs.
- 3) Provide written documentation of the delivery, set-up, and proper function of the suction device to referral source.
- 4) Provide written documentation that the client/patient or caregiver(s) has been instructed about basic safety procedure associated with suctioning technique. The client/patient or caregiver(s) will sign the Equipment Management Admission Assessment and Plan of Service, that they have been instructed and understand the proper use, maintenance, cleaning, and troubleshooting of the equipment, and also basic home safety and the Plan of Care.

Client/Patient Responsibilities

1. Client/patient or caregiver(s) must demonstrate the use, maintenance, cleaning, and troubleshooting of the equipment, and also basic safety procedures associated with the device.
2. Client/patient or caregiver(s) must sign all necessary Company paperwork.
3. Client/patient must have acceptable reimbursement source.

Equipment Needed

- 1) CPAP or BILEVEL CPAP or NPPV
- 2) Appropriate size mask, headgear and swivel (by the sleep lab/physician's order or by RCP fitting)
- 3) 6 foot CPAP tubing
- 4) Humidifier, if prescribed.

Set-up Requirements

- 1) Instruct per manufacturer's guidelines.

- 2) Complete all necessary paperwork

NOTE: DELIVERY PERSONNEL MAY NOT APPLY ANY APPARATUS TO A CLIENT/PATIENT. DELIVERY PERSONNEL MAY NOT PRACTICE RESPIRATORY CARE (SEE STATE LAWS AND RULES).

Return Procedure

For sale items: only unused equipment may be returned. Returns require a copy of receipt (Client/Patient Service Agreement) and must be done within 10 days of sale.

CPAP, BILEVEL CPAP or NPPV equipment may only be returned (picked up) if:

- 1) The client/patient's physician discontinues the equipment.
- 2) The client/patient signs an AMA Form (Against Medical Advice) if the physician wants the client/patient to keep using the equipment.
- 3) The client/patient moves outside Oxygen Plus, Inc.'s service area. We will refer the client/patient to another company serving the area to which the client/patient moved.
- 4) The client/patient wishes to use another home care dealer.
- 5) The client/patient expires.

CLINICAL RESPIRATORY CARE: DRUG ADMINISTRATION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2008 – 2/09/2013

Joint Commission Standard:

Respiratory Care Practitioners employed by Oxygen Plus, Inc. may administer respiratory medications, as prescribed by a licensed physician, to clients/patients as part of Clinical Respiratory Care Services. The practitioners may also administer respiratory medications to clients/patients during the initial set-up and instruction of a medication compressor/nebulizer.

The medications approved for administration by Oxygen Plus, Inc. Respiratory Care Practitioners include the following classifications. These medications may only be administered by inhalation:

- Diluents
- Mucolytics
- Bronchodilators
- Corticosteroids
- Cromolyn Sodium
- Anticholinergic Agents
- Antibiotics

CLINICAL RESPIRATORY CARE:

ADVERSE DRUG REACTIONS

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2008 – 2/09/2013

Joint Commission Standard:

The Respiratory Care Practitioner must report any adverse reactions to the client/patient's physician as soon as possible. All adverse reactions will be recorded on an Incident Report. If a life-threatening reaction occurs while the practitioner is in the client/patient's home, the practitioner will call 911 and take necessary steps to resuscitate the client/patient (excluding clients/patients with a DNR).

The following describes the adverse reactions that may occur for the drug classifications dispensed:

Mucolytics: This medication may cause nausea, vomiting, runny nose, clamminess, fever and an unpleasant odor the first several days as the client/patient adjusts to the medication. The client/patient should notify his or her practitioner or doctor if he or she develops a rash, swelling of the mouth, mouth sores or breathing trouble while taking this medication. If using a facemask, the client/patient may feel sticky after use. Wipe clean with water. This medication should be used during pregnancy only under a physician's supervision. The client/patient should discuss the risks and benefits with her practitioner or doctor. The client/patient should consult the doctor before breast-feeding.

Bronchodilators: This medication may cause tremor, nervousness, shakiness, headache, nausea, lightheadedness, difficulty sleeping, unusual taste in mouth, increased appetite, muscle cramps, flushing or dry throat. These reactions may occur the first several days as the client/patient adjusts to the medication. If any of these effects continue or become bothersome, the client/patient should inform his or her practitioner or doctor. The client/patient should inform his or her practitioner or doctor if he or she develops a rash, a rapid heartbeat, chest pain, dizziness, coughing, wheezing or breathing trouble while taking this medication. This medication should be used during pregnancy only if clearly needed. The client/patient should discuss the risks and benefits with her practitioner or doctor. The client/patient should consult the doctor before breast-feeding. The

client/patient should tell his or her practitioner or doctor if he or she has any pre-existing heart disease, chest pain, diabetes, high blood pressure, thyroid disease, a history of seizures or stroke or any allergies. Interactions: May interact with medications for blood pressure, chest pain, diabetes or depression. This drug may cause an allergic reaction in clients/patients with a history of sensitivity to the following: Sympathomimetics.

Corticosteroids: May cause a cough, a dry irritated throat, unpleasant taste or hoarseness. The client/patient should notify his or her practitioner or doctor if he or she experiences breathing difficulties, mouth or prolonged throat irritation while using this medication. The client/patient should tell the doctor if she is pregnant or breast-feeding. If the client/patient has switched from an oral corticosteroid to an inhaled one he or she may experience loss of appetite, nausea, vomiting, unusual tiredness, headache, fever, joint and muscle pain, peeling skin, or weight loss. If the client/patient is coughing up mucus that has thickened or changed color from clear white to yellow, green, or gray he or she should contact his or her practitioner or doctor, these changes may be signs of an infection.

Cromolyn Sodium: This medication may cause nasal stuffiness, nasal itching or burning, sneezing, or stomach pain the first few days as the client/patient's body adjusts to the medication. The client/patient should inform his or her practitioner or doctor if these symptoms continue or become bothersome. The client/patient should inform his or her practitioner or doctor if he or she experiences coughing, wheezing, skin rash or hives while taking this medication. This medication should be used during pregnancy only if clearly needed. The client/patient should discuss the risks and benefits with her practitioner or doctor. Since small amounts of this medication are found in breast milk, the client/patient should consult her practitioner or doctor before breastfeeding. The client/patient should inform his or her practitioner or doctor if he or she has any pre-existing kidney disease, liver disease or any allergies. Interactions: Isoproterenol.

Anticholinergic Agents: This medication may cause dizziness, headache, nausea, dry mouth, cough, hoarseness, or blurred vision. These effects should disappear as the client/patient's body adjusts to the medication. The client/patient should inform his or her practitioner or doctor if these symptoms continue or become bothersome. The client/patient should inform his or her practitioner or doctor if he or she experiences a skin rash, itching, an irregular heartbeat, chest pains or a rapid heartbeat while taking this medication. If the drug comes in contact with the eye,

temporary blurring of vision may occur. Do not use this drug during pregnancy unless clearly needed. The client/patient should consult with her practitioner or doctor before breast-feeding. The client/patient should inform his or her practitioner or doctor if he or she has glaucoma, enlarged prostate or bladder trouble (obstruction).

Antibiotics: This medication may cause stomach upset, diarrhea, nausea, and vomiting during the first few days as the client/patient's body adjusts to the medication. The client/patient should inform his or her practitioner or doctor if these symptoms continue or become severe. The client/patient should inform his or her practitioner or doctor immediately if an allergic reaction occurs while taking this medication. Symptoms include difficulty breathing, skin rash, hives or itching. The client/patient should inform his or her practitioner or doctor if the following rare side effects occur: sore mouth, sore throat, fever, easy bruising or bleeding. Use of this medication for prolonged or repeated periods may result in a secondary infection (e.g., oral, bladder or vaginal yeast infection). The client/patient should inform his or her practitioner or doctor if he or she has any other illnesses or any allergies, especially to penicillin or other antibiotics. This medication should be used during pregnancy only if clearly needed. The client/patient should discuss the risks and benefits with her practitioner or doctor. Since small amounts of this medication are found in breast milk, the client/patient should inform her practitioner or doctor before breast-feeding. This medication may interfere with oral contraceptives. If the client/patient is using oral contraceptives, she should discuss with her practitioner or doctor other birth control methods to use while she is taking this drug. The client/patient should inform his or her practitioner or doctor if he or she is taking tetracycline. This drug may cause an allergic reaction in clients/patients with a history of sensitivity to the following: Penicillins; Cephalosporins; Carbapenem; Aztreonam.

CLINICAL RESPIRATORY CARE: MANUAL RESUSCITATION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVES

To inflate the client/patient's lungs for rescue breathing and provide oxygen during suctioning.

EQUIPMENT

- 1) Resuscitation Bag of appropriate size with face mask. (No mask if client/patient has a tracheostomy)
- 2) Oxygen source with O₂ tubing.

DOCUMENTATION

- 1) Equipment Management Admission Assessment and Plan of Service
- 2) Client/patient instructions
- 3) Clinical Respiratory Care Client/Patient Visit report

PROCEDURE

- 1) Positively identify the client/patient.
- 2) Explain procedure to client/patient and/or caregiver(s).
- 3) Gather supplies.
- 4) Wash hands.
- 5) Position client/patient and stabilize head.
- 6) Place resuscitation bag with mask securely over client/patient's nose and

mouth. For tracheostomy clients/patients attach resuscitation bag with to tracheotomy.

- 7) Hold the resuscitation bag in your hand and gently squeeze the bag and release pressure to provide a breath.
- 8) Synchronize the resuscitation bag breaths with the client/patient's inhalation. For apneic clients/patients, provide breaths at the appropriate rate for the client/patient's age or baseline respiratory rate.
- 9) Watch for the client/patient's chest movements to ensure adequate ventilation.
- 10) Continue resuscitation bagging as needed.
- 11) Clean up area and store supplies properly.
- 12) Wash hands.
- 13) Document procedure and client/patient's response.

SPECIAL CONSIDERATIONS

- 1) Pediatric resuscitation bags have a release (pop-off) valve that prevents high pressures to the lungs. This valve should be tested before use and after cleaning. To test the valve squeeze the bag and feel for air flow at the client/patient end. Next, block the client/patient end with a clean cloth, squeeze the bag and check that the pop off releases.
- 2) Some resuscitation bags have variable PEEP valves attached to the exhalation port. PEEP should be used if the client/patient is on a ventilator and is ordered PEEP on the ventilator. Set the PEEP to the same setting as the ventilator.
- 3) The resuscitation bag should remain at the head of the client/patient's bed at all times.
- 4) Always leave the resuscitation bag connected to the oxygen source with the oxygen turned off.

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CLINICAL RESPIRATORY CARE:

MEDICATION ACCOUNTABILITIES

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2008 – 2/09/2013

Joint Commission Standard:

During the initial client/patient assessment, Oxygen Plus, Inc.'s Respiratory Care Practitioners are to complete a medication profile of the client/patient to determine all the medications the client/patient is consuming. This profile is to include prescription medications, over-the-counter medications, herbs and supplements.

The practitioner is to determine that the client/patient is not taking medications:

- 1) That is contraindicated with each other.
- 2) That have effects that may rapidly endanger a client/patient's life or well-being.
- 3) That may have unusual and unexpected effects.
- 4) That may have toxic effects.
- 5) That may cause allergic reactions.

The practitioner is also responsible to:

- 1) Determine any changes in the client/patient that may contraindicate continued administration of the medication.
- 2) Instruct the client/patient, family members and/or caregiver, as necessary, in following the prescribed regimen.

The Respiratory Care Practitioner must consult with the client/patient's pharmacist or physician with any questions or concerns about the client/patient's medication profile.

CLINICAL RESPIRATORY CARE; DEDICATION ADMINISTRATION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVES

- 1) Administer respiratory medications.
- 2) Improve airflow by bronchodilation
- 3) Improve efficiency of cough mechanism

A physician's order is required to provide the equipment and Clinical Respiratory Care services. The physician must order the medication dosage and frequency of treatments.

EQUIPMENT

- 1) Medication Compressor
- 2) Nebulizer Kit
- 3) Medication
- 4) Aerosol Mask (if necessary)

DOCUMENTATION

- 1) Equipment Management Admission Assessment and Plan of Service
- 2) Client/patient instructions
- 3) Clinical Respiratory Care Client/Patient Visit form

PROCEDURE

- 1) Positively identify the client/patient using two forms of identification.

- 2) Wash hands.
- 3) Select area in the home that has a flat, clean surface for administration of the treatment.
- 4) Explain the procedure to the client/patient.
- 5) Have client/patient assume upright or semi-fowlers position if possible.
- 6) Assemble Nebulizer with special consideration to client/patient's ability to follow procedure. Stress the importance of tight connections and circuit patency.
- 7) Determine client/patient's resting vital signs. (If appropriate)
- 8) Place medication to be nebulized in the medication cup of the nebulizer.
- 9) Connect the nebulizer to the flow generator.
- 10) Turn on the flow generator and begin treatment.
- 11) Instruct the client/patient on the proper technique for taking a treatment. The technique is slow, diaphragmatic breathing with an inspiratory hold.
- 12) The aerosol should be nebulized for approximately 10 to 15 minutes or until all of the medication is gone.
- 13) Instruct the client/patient that they may take rest periods during the course of treatment. Have the client/patient turn the unit off during these breaks.
- 14) Encourage the client/patient to cough.
- 15) Upon completion of treatment, instruct client/patient in cleaning procedure.

CONTRAINDICATIONS

- 1) Client/patient history of adverse reaction to the drug that is being nebulized.
- 2) Severe dyspnea that would preclude the client/patient from taking an effective treatment.
- 3) Profound tachycardia.

HAZARDS

- 1) Nosocomial Infection
- 2) Bronchospasm

PENTAMIDINE ADMINISTRATION PROCEDURE

It is the policy of the Oxygen Plus, Inc. that pentamidine isoethionate will be administered to clients/patients only when or if prescribed by a physician for the treatment of *Pneumocystis Carini* Pneumonia (PCP).

Employees should not administer pentamidine if they have a medical condition that is contraindicated (e.g., pregnancy, immuno-suppressed condition).

OBJECTIVES

Prevention and treatment of *Pneumocystis carini* infection in clients/patients with acquired immunodeficiency syndrome.

EQUIPMENT

- 1) Nebulizer System that is equipped with one-way valves and a filter to decrease environmental contamination.
- 2) Air Compressor with capabilities of 50 PSI.
- 3) Pentamidine in prepared syringe.

DOCUMENTATION

- 1) Equipment Management Admission Assessment and Plan of Service
- 2) Pentamidine client/patient instructions

PROCEDURE

- 1) Put on mask and gloves before entering client/patient's home.
- 2) Positively identify the client/patient and explain procedure to client/patient and/or caregiver(s).
- 3) Assemble nebulizer circuit utilizing the corrugated tubing and bacteria filter and attach to airflow generator.
- 4) Verify color, expiration date, and proper storage of pentamidine.
- 5) Reconstitute medication as per physician's order for proper strength and place medication in the nebulizer cup.
- 6) Assess vital signs (heart rate, respiratory rate, and breath sounds) prior to beginning the treatment; record this data on the client/patient's progress record.
- 7) Turn the system on and have the client/patient take slow, deep breaths. Assess for any adverse reactions to the medication (e.g., increase or decrease in heart rate, increased difficulty in breathing).
- 8) Check client/patient's heart rate at the midpoint of the treatment to assess for a significant increase or decrease ($\neq$ 20 bpm from initial).
- 9) If the client/patient becomes fatigued, stop the treatment, turn off the flow generator and allow client/patient to rest. Continue with treatment.
- 10) When the treatment is finished, assess the client/patient's heart rate, respiratory rate, and bilateral breath sounds.

- 11) Assess for client/patient's comfort prior to leaving the home. Record these findings and the client/patient's response to the treatment in the client/patient's chart.
- 12) Discard the nebulizer circuit and filter via biohazard disposal procedure. Wipe down the flow generator with germicidal agent prior to leaving the client/patient's home (if the client/patient doesn't own the unit).
- 13) Dispose of universal precaution apparel via biohazard disposal procedure.

CONTRAINDICATIONS

All potential contraindications are relative and must be weighed against possible hazards.

- 1) Blood dyscrasias
- 2) Hepatic disease
- 3) Renal disease
- 4) Diabetes mellitus
- 5) Pregnancy
- 6) Hyper/hypotension

CONSIDERATIONS

- 1) Pentamidine should be administered in a well-ventilated room. The treatment must be interrupted if the client/patient experiences coughing, bronchospasm, fatigue, or if other concerns arise.
- 2) The compressor should be turned off before the client/patient removes the nebulizer from his or her mouth.
- 3) After the treatment, the patient's mouth should be rinsed with water. If the client/patient is having difficulty with the taste of the medication, suggest placing a piece of candy, preferably with a strong flavor (e.g., peppermint), in the mouth.

MEDICATION COMPRESSOR PROCEDURE

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/30/2007 – 2/09/2013

Joint Commission Standard:

The medication compressor is a device used to deliver aerosol medications to the client/patient's airways. It is prescribed to treat reactive airway diseases such as Asthma, Bronchitis and COPD (Chronic Obstructive Pulmonary Disease)

Admission Criteria

- 1) Determination by a physician of the need for the device.
- 2) A prescription for the device with the medication(s) and dosage ordered and the treatment frequency.
- 3) Insurance criteria for payment have been met, unless client/patient is private pay.
- 4) Residence adaptable for placement and use of the device.
- 5) Client/patient or caregiver(s) trainable in the basic use, maintenance, cleaning, and troubleshooting of the device.

Physician Responsibilities

- 1) Provide diagnosis of the physiologic need for the device.
- 2) Inform the client/patient or caregiver(s) of the necessity for such a device in the home.
- 3) Provide a written, signed physician's prescription and any other necessary documents.

Company Responsibilities

- 1) Equipment delivery and set-up per policy, unless otherwise specified.

- 2) Equipment delivered will be clean, properly maintained, and safely operating within manufacturer's specifications. Accessories will be provided as per physician's prescription or client/patient's needs.
- 3) Provide written documentation of the delivery, set-up, and proper function of the device to referral source.
- 4) Provide written documentation that the client/patient or caregiver(s) has been instructed about basic safety procedure associated with device. The client/patient or caregiver(s) will sign the Equipment Management Admission Assessment and Plan of Service, that they have been instructed and understand the proper use, maintenance, cleaning, and troubleshooting of the equipment, and also basic home safety and the Plan of Care.

Client/Patient Responsibilities

- 1) Client/patient or caregiver(s) must demonstrate the use, maintenance, cleaning, and troubleshooting of the equipment, and also basic safety procedures associated with the treatments.
- 2) Client/patient or caregiver(s) must sign all necessary Company paperwork.
- 3) Client/patient must have acceptable reimbursement source.

Equipment Needed

- 1) Medication compressor
- 2) Hand-held nebulizer with tubing
- 3) Client/patient should have medications

Set-up Requirements

1. Instruct per manufacturer's guidelines.
2. Complete all necessary paperwork

NOTE: DELIVERY PERSONNEL ARE NOT TO DISPENSE MEDICATIONS. DELIVERY PERSONNEL MAY NOT APPLY ANY APPARATUS TO A CLIENT/PATIENT. DELIVERY PERSONNEL MAY NOT PRACTICE RESPIRATORY CARE (SEE STATE LAWS AND RULES).

Return Procedure

For sale items: only unused equipment may be returned. Returns require a copy of receipt (Client/Patient Service Agreement) and must be done within 10 days of sale.

Medication compressor equipment may only be returned (picked up) if:

- 1) The client/patient's physician discontinues the equipment.
- 2) The client/patient signs an AMA Form (Against Medical Advice) if the physician wants the client/patient to keep using the equipment.
- 3) The client/patient moves outside Oxygen Plus, Inc.'s service area. We will refer the client/patient to another company serving the area to which the client/patient moved.
- 4) The client/patient wishes to use another home care dealer.
- 5) The client/patient expires.

CLINICAL RESPIRATORY CARE:

OXYGEN ADMINISTRATION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 3/16/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVES

To increase the oxygen content in client/patient's arterial blood to normal levels.

A physician's order is required to provide the equipment and Clinical Respiratory Care services. The physician must order the delivery source, the liter flow of oxygen or O₂% or the SaO₂ to titrate the O₂ setting.

EQUIPMENT

- 1) Oxygen source.
- 2) Delivery device.
- 3) Humidity bottle (if required or ordered)
- 4) Distilled water (if needed)

DOCUMENTATION

- 1) Equipment Management Admission Assessment and Plan of Service
- 2) Client/patient instructions
- 3) Clinical Respiratory Care Client/Patient Visit form

PROCEDURE

- 1) Check physician's orders for method of oxygen delivery and flow rate or percentage.

- 2) Check equipment set-up to ensure proper operation.
- 3) Oxygen concentrators, liquid oxygen systems, oxygen regulators and pulse dose oxygen systems are to be maintained according to manufacturer guidelines. See HME manual for equipment maintenance.
- 4) Oxygen Plus, Inc. shall have available a copy of the manufacturer's clinical guidelines for use of the equipment.
- 5) Positively identify the client/patient.
- 6) Wash hands.
- 7) Install the equipment in the client/patient's home. For clients/patients on nasal oxygen you may position the equipment in such a manner as to allow delivery of the oxygen in every room of the home. For room confined clients/patients, such as bed confined tracheostomy clients/patients or ventilator clients/patients, position the oxygen delivery equipment near the client/patient.
- 8) Perform an assessment of the home. See Clinical Respiratory Care Client/Patient Admission Assessment form.
- 9) Perform an assessment of the client/patient. See Clinical Respiratory Care Client/Patient Admission Assessment form.
- 10) Instruct the client/patient and caregivers in the use of the equipment, the Plan of Care, and how to contact Oxygen Plus, Inc.
- 11) Give the client/patient and/or caregivers a copy of equipment instructions and/or consulting sheets for each piece of equipment set up.
- 12) If the Respiratory Care Practitioner determines that the client/patient is currently unstable and would benefit from Clinical Respiratory Care Services, he or she may contact the physician for an order and fill out the Clinical Respiratory Care Plan of Care.
- 13) Fill out all necessary paperwork and have the client/patient or caregiver sign. Note any Advance Care Directives and inform all Oxygen Plus, Inc. staff members of any directives.

Oxygen delivery devices:

1) Nasal cannula

- Ensure proper fit of cannula prongs in nares. Do not occlude nares. To hold the cannula in place, adjust slide clamp located on the tubing behind the neck.
- Change cannula every 7 to 14 days. Clean cannula with antiseptic dish washing liquid daily.

2) Simple mask

- Ensure proper fit of mask against the face. Pull band behind ears and around head to secure.
- Clean mask daily with antiseptic dish washing liquid.

Aerosol mask or Tracheostomy mask

- Set up high flow air compressor to power jet nebulizer. Connect jet nebulizer and fill with distilled or sterile water. Connect an adapter (e.g. pressure line adapter) to the outlet of the jet nebulizer to attach oxygen tubing. Connect the aerosol tubing and mask.
- Turn on the air compressor and set it for 30 to 40 PSI. Connect the oxygen source to the tubing adapter and set it for 1 to 5 LPM.
- Analyze oxygen percentage with oxygen analyzer. The system can effectively deliver 22% to 40% oxygen. The higher the liter flow of oxygen the higher the O₂%. The higher the pressure setting of the air compressor the lower the O₂%. The higher the oxygen % entrainment numbers of the jet nebulizer the higher the O₂%. It is recommended to set the jet neb to O₂% entrainment numbers between 30% and 50% to improve the delivery of humidity.
- Supply the caregiver(s) the settings for the O₂ liter flow, the air compressor PSI and the jet nebulizer entrainment setting. As long as it is set back up with the same numbers the O₂% will be close to that ordered. Check the O₂% with each client/patient visit.
- For heated humidity you may use a heated humidifier such as a Fisher-Paykel. You may mix the air from the compressor and O₂ together to supply the O₂ mixture to the input of the heated humidifier. A thermometer should be added to the outlet port of the heated humidifier to aid the practitioner in setting the temp control.
- Clean mask, jet nebulizer or heated humidifier and aerosol tubing daily with antiseptic dish washing liquid.

4. CPAP and BILEVEL

- 1) Connect the oxygen source to the device by the adapter supplied by the manufacturer or the use of an adapter attached to the outlet of the equipment, e.g. pressure line adapter.
- 2) Set the oxygen source to deliver the prescribed LPM flow or O₂ %. The devices can effectively delivery between 22% to 30% oxygen depending on the O₂ liter flow setting, and the device settings. The practitioner must analyze the delivered volume with an inline adapter to determine actual O₂ %.
- 3) Set the device settings according to the physician's orders.
- 4) Connect the humidity delivery device, and ventilator circuit.
- 5) The device's pressure(s) must be measured using a calibrated pressure manometer to determine the accuracy of the device.

Oxygen delivery systems:

- 1) Cylinders or tanks with oxygen regulators and/or flowmeters or including pulsed dose systems.
- 2) Oxygen concentrators.
- 3) Liquid oxygen systems.

Oxygen Plus, Inc. will maintain copies of the manufacturer's clinical guidelines for each type of equipment listed for practitioner's use. Oxygen Plus, Inc. will maintain all equipment according to manufacturer recommendations. This maintenance will be logged on an Equipment Maintenance Log for each piece of rental equipment.

Oxygen Plus, Inc. will also maintain instruction and/or consulting sheets and/or handouts for each piece of equipment utilized in client/patient care. The client/patient and/or caregiver will receive a copy of the handout during the set-up of the equipment.

CONTRAINDICATIONS

- 1) No clinical evidence for supplemental oxygen.

2) High oxygen flows (%) in hypercapnic COPD clients/patients.

HAZARDS

- 1) Increased fire risk
- 2) Oxygen toxicity
- 3) Retrolental fibroplasia
- 4) Atelectasis.
- 5) Hypoventilation in COPD clients/patients

CLINICAL RESPIRATORY CARE; PLAN OF CARE

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2011 – 2/09/2013

Joint Commission Standard:

Clinical Respiratory Care Services will be provided as prescribed in the Client/patient's Plan of Care. Oxygen Plus, Inc. will provide respiratory care services to clients/patients according to the treatment and frequencies stated in the Plan of Care.

The Clinical Respiratory Care Plan of Care form will be sent to the client/patient's physician upon order by the physician or assessment by the Respiratory Care Practitioner that Clinical Respiratory Services are needed for the client/patient.

The Plan of Care form includes the following information and order request:

- 1) Client / patient name
- 2) Client / patient address
- 3) Primary diagnosis (related to the service prescribed)
- 4) Secondary diagnosis
- 5) Problems/needs, course of treatment, and goals/outcomes to pursue
- 6) Respiratory care equipment ordered with settings. Orders for conservation device evaluation if ambulatory oxygen is prescribed.
- 7) Request for frequency order for pulmonary assessment. Assessment includes vital signs, auscultation, and pulse oximetry. A space is provided for other orders.
- 8) When to contact the client/patient's physician.
- 9) Precautions that may affect the Plan of Care.
- 10) Physician's name, address and signature.

11) The Plan of Care will be valid for a period specified by the prescribing physician.

The Plan of Care order will expire if one of the following occurs:

- 1) The Plan of Care is not reordered by the client/patient's physician.
- 2) The Plan of Care changes which requires another Plan from the prescribing physician.
- 3) The client/patient is discharged from Clinical Respiratory Services.
- 4) The client/patient transfers to other home care company.
- 5) The client/patient expires.

The Plan of Care form may be filled out by the Respiratory Care Practitioner (excluding the physician's signature) or the prescribing physician. The Plan is not valid until the client/patient's physician signs the form. The form must be signed before Clinical Respiratory Services may be performed (excluding the Initial Assessment).

A physician's order must be received (excluding death or transfer to another home care company) before Clinical Respiratory Care Services are discontinued (D/C'd). The Respiratory Care Practitioner visiting the client/patient will fill out a Clinical Services Transfer / Discharge Summary after D/C, with a copy to be sent to the client/patient's physician. The original Discharge Summary will be placed in the client/patient's file.

CLINICAL RESPIRATORY CARE; PULSE OXIMETRY

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVE

To provide an accurate reflection of oxygenation of the patient/client.

A physician's order is required to perform pulse oximetry. Pulse oximetry application and testing to be performed by a licensed RCP or licensed nurse only.

EQUIPMENT

- 1) Pulse Oximeter
- 2) Pulse oximeter cable and probe

DOCUMENTATION

Clinical Respiratory Care Client/Patient Visit report

PROCEDURE

- 1) Positively identify the client/patient.
- 2) Wash hands.
- 3) Inform the client/patient about what you will be doing.
- 4) Turn on the pulse oximeter and determine it has calibrated itself. Attach cable and probe.
- 5) Attach probe to the client/patient's finger (for adults) or to the big toe or foot (pediatric clients/patients)

- 6) Allow the pulse oximeter to stabilize. The reading will be accurate when the heart rate, pulse wave and SaO₂ reading does not fluctuate. Record readings and the oxygen flow or % the client/patient is receiving.
- 7) Evaluate client/patient, and fill out client/patient visit form. Sent the report to client/patient's physician. Call the physician as soon as possible if the SaO₂ values require a change in the oxygen setting.

CONCERNS

- 1) Hypotension may cause the pulse oximeter to read lower than actual.
- 2) The pulse oximetry cannot distinguish between SaO₂ and SaCO.

RETURN PROCEDURE

Pulse oximetry equipment may only be returned (picked up) if:

- 1) The client/patient's physician discontinues the equipment.
- 2) The client/patient signs an AMA Form (Against Medical Advice) if the physician wants the client/patient to keep using the equipment.
- 3) The client/patient moves outside Oxygen Plus, Inc.'s service area. We will refer the client/patient to another company serving the area to which the client/patient moved.
- 4) The client/patient wishes to use another home care dealer.
- 5) The client/patient expires.

CLINICAL RESPIRATORY CARE:

REGULATIONS AND QUALIFICATIONS

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2011 – 2/09/2013

Joint Commission Standard:

Clinical Respiratory Care Services will be delivered by qualified staff members and administered in accordance with state laws, regulations and established standards of practice. All Respiratory Care Practitioners employed by Oxygen Plus, Inc. will be credentialed by the National Board for Respiratory Care (NBRC) and licensed by each state in which services will be provided. A copy of each practitioner's NBRC credentials and license(s) will be placed in the employee's personnel file. Any Respiratory Care Practitioner who allows his or her license to expire will be placed on probation and not be allowed to practice until a renewal license is provided.

Each Respiratory Care Practitioner will be required to complete and maintain, at a minimum, Healthcare Provider CPR certification. A copy of the practitioner's current CPR card and copies of all completed continuing education will be placed in the employee's personnel file.

Respiratory care services shall be conducted in accordance with accepted ethical and professional practice standards and in accordance with all applicable federal, state and local laws and guidelines set by the National Board of Respiratory Care (NBRC) and the American Association of Respiratory Care (AARC). Current copies of applicable rules and regulations will be maintained in Oxygen Plus, Inc. office at all times and are readily available to all staff members.

CLINICAL RESPIRATORY CARE: SCOPE OF SERVICES

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2011 – 2/09/2013

Joint Commission Standard:

Clinical Respiratory Care Services pertains strictly to "hands-on" assessment and treatment of a client/patient in need of respiratory care. This section does not preclude Oxygen Plus, Inc. from utilizing non-clinical delivery staff members to provide delivery, set-up, instruction in the mechanical operation, or maintenance of home medical equipment as covered in the HME section of this manual. HME techs may not perform clinical assessments, fitting of respiratory equipment, application of respiratory equipment or patient monitoring.

Oxygen Plus, Inc. provides the following Clinical Respiratory Care Services:

- 1) Respiratory assessment of a client/patient, which includes:
 - a. Vital signs; blood pressure, heart rate, respiratory rate.
 - b. Auscultation
 - c. Mental alertness
 - d. Cough, sputum production and sputum assessment
 - e. Description of any shortness of breath and exercise tolerance
 - f. Medication profile
 - g. Social and mental history
- 2) Pulse oximetry
- 3) Airway care, which includes:
 - a. Tracheostomy care
 - b. Tracheostomy tube changing
 - c. Suctioning procedures
- 4) Nebulizer treatments and respiratory medication administration.
- 5) CPAP, BiLevel, pressure support (NPPV), application and monitoring.

- 6) Chest physiotherapy and breathing exercises.
- 7) Apnea monitors, application and monitoring.
- 8) Consultation and instruction of the client/patient including respiratory care treatment suggestions and/or interpretations.

The Company provides respiratory care services 24 hours a day, seven days a week as necessary to meet client/patient needs. There is immediate availability of a licensed Respiratory Care Practitioner to perform respiratory care services. A qualified supervisor will be accessible via electronic communications device when respiratory care services are provided after regular working hours.

CLINICAL RESPIRATORY CARE: SUCTIONING

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVES

- 1) To remove secretions from the lungs and airways for those clients/patients unable to expectorate the secretions on their own.
- 2) Maintain airway patency by assisting in the removal of secretions.
- 3) Prevent infection.

A physician's order is required to provide Clinical Respiratory Care services.

EQUIPMENT

- 1) Suction machine with container and tubing.
- 2) Sterile suction catheter kit with sterile gloves and sterile container.
- 3) Sterile normal saline solution or sterile water.
- 4) Sterile saline for insertion into tracheostomy tube.
- 5) Resuscitation bag
- 6) Oxygen

DOCUMENTATION

- 1) Equipment Management Admission Assessment and Plan of Service
- 2) Client/patient instructions
- 3) Clinical Respiratory Care Client/Patient Visit form

PROCEDURE

- 1) Positively identify the client/patient.

- 2) Explain procedure to client/patient and/or caregivers.
- 3) Gather equipment and set up in clean work area near client/patient.
- 4) Wash hands.
- 5) Open sterile kit.
- 6) Pour sterile saline into sterile cup.
- 7) Turn suction machine on.
- 8) Put on gloves.
- 9) Attach suction catheter to suction tubing, being sure not to handle sterile end of catheter.
- 10) Suction a small amount of water from the cup, this ensures that suction is working and lubricates the catheter.
- 11) If secretions are thick, instill unit dose sterile saline into tracheostomy tube as needed to help loosen secretions.
- 12) If necessary, administer breaths with resuscitation bag at the prescribed oxygen concentration.
- 13) Insert Catheter gently into the tracheostomy without applying thumb to suction at this time. Do not insert the suction catheter any further than the length of the tracheostomy tube to prevent tracheal trauma.
- 14) With thumb over suction port to apply suction, gently rotate and withdraw suction catheter slowly. Suction should not last for more than 10 seconds.
- 15) Administer breaths with the resuscitation bag and oxygen, if required.
- 16) Clear secretions from catheter by suctioning a small amount of sterile saline from the sterile cup.

- 17) When suctioning is completed, clear suction connection tubing by suctioning water from the sterile cup.
- 18) Turn off suction machine and oxygen.
- 19) Discard catheter, glove, and sterile water.
- 20) Clean work area and store supplies properly,
- 21) Wash hands.
- 22) Document procedure:
 - a. Color, amount, consistency, and odor of secretions.
 - b. Size of suction catheter used.
 - c. How the client/patient tolerated the procedure.

CLINICAL INDICATIONS

- 1) Indications for suctioning include moist, noisy breathing; increased stridor and/or respiratory rate not caused by activity; frequent coughing; nasal flaring; restlessness, irritability, or crying; and color changes.
- 2) A Yankeuer suction tip can be used for suctioning the oral cavity when the client/patient coughs up secretions.

CONTRAINDICATIONS

If not needed.

HAZARDS

- Hypoxia/Hypoxemia
- Tissue trauma
- Cardiac arrest
- Cardiac arrhythmias
- Infection

CLINICAL RESPIRATORY CARE: SUPERVISION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2011 – 2/09/2013

Joint Commission Standard:

All Clinical Respiratory Care Services will be provided under the supervision of a Respiratory Care Practitioner with sufficient education and clinical experience in the scope of services offered. The supervisor will have a minimum of two (2) years of experience providing clinical respiratory care under medical direction with a minimum of one (1) year of recent experience in the home care setting.

The supervisor of Clinical Respiratory Care Services will be responsible for the following:

- 1) Interviewing applicants for open Respiratory Care Practitioner positions.
- 2) Evaluating Respiratory Care Practitioners for competence.
- 3) Confirming that all Respiratory Care Practitioners' licenses and CE's are current.
- 4) Providing continuing education programs for staff members.
- 5) Be available for technical respiratory care questions from staff members or physicians.
- 6) Assisting staff members in performing client/patient assessments and visits as needed.
- 7) Attending trade shows and educational programs to maintain competence.
- 8) Confirming that all required state and federal permits and licenses to perform Clinical Respiratory Care Services are current.
- 9) Evaluating Policies and Procedures to determine compliance with accreditation standards.
- 10) Marketing Clinical Respiratory Care Services to area hospitals, physicians and referral sources.

CLINICAL RESPIRATORY CARE: SPUTUM COLLECTION

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 3/16/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVES

To obtain a client/patient sputum sample to isolate and identify the cause of a pulmonary infection.

A physician's order is required to provide Clinical Respiratory Care services.

EQUIPMENT

- 1) Sterile sputum container or mucus trap (if suctioning required)
- 2) Suction equipment and suction catheter (if required)

DOCUMENTATION

Document performance of procedure on Clinical Respiratory Care Client/Patient Visit form or Client/Patient Notes.

PROCEDURE

- 1) Check physician's orders for sputum analysis.
- 2) Positively identify the client/patient.
- 3) Wash hands.
- 4) Apply gloves.
- 5) Explain procedure to client/patient and/or caregivers.
- 6) Gather supplies and set up in clean work area.
- 7) Instruct client/patient to cough deeply and expectorate sputum into the container, or suction with catheter using sterile procedure to collect sputum in a mucus trap.

- 8) Seal container securely and place in plastic bag. Label properly.
- 9) Clean work area and store supplies properly.
- 10) Remove gloves and wash hands.
- 11) Document specimen collection method and characteristics of sputum.
- 12) Ensure that specimen is transported to the lab as soon as possible.
- 13) Record lab analysis report in the client/patient file. Send a copy of the report or call the findings to client/patient's physician. Call the physician as soon as possible if the report requires a change in the Plan of Care.

CLINICAL RESPIRATORY CARE: TRACHEOSTOMY TUBE CHANGING

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 4/15/2011 – 2/09/2013

Joint Commission Standard:

OBJECTIVES

To maintain client/patient airway patency, prevent infection, and promote cleanliness.

A physician's order is required to provide Clinical Respiratory Care services.

EQUIPMENT

- 1) Appropriate size tracheostomy tube and obturator
- 2) Tracheostomy tube holder or tracheostomy ties
- 3) Clean tracheostomy dressing (optional)
- 4) Water-soluble lubricant
- 5) Sterile gloves
- 6) Suction equipment
- 7) Resuscitation bag with facemask and oxygen source
- 8) Sterile normal saline for suctioning (optional)
- 9) Hydrogen peroxide for cleaning stoma
- 10) Cotton-tipped swabs for cleaning stoma
- 11) Scissors if needed to cut tracheostomy ties

DOCUMENTATION

Clinical Respiratory Care Client/Patient Visit report

PROCEDURE

- 1) Check physician's orders for tracheostomy tube change.
- 2) Positively identify the client/patient.
- 3) Explain procedure to client/patient and/or caregiver.
- 4) Ask assistant to secure client/patient and/or to assist with supplies.
- 5) Gather equipment and set up in clean work area near client/patient.
- 6) Wash your hands.
- 7) Suction client/patient well before changing tube. Give a few breaths with resuscitation bag to oxygenate or allow brief rest after suctioning.
- 8) Apply sterile gloves.
- 9) Have assistant open tracheostomy tube package without touching tracheostomy tube. Take tracheostomy tube out of package in a sterile procedure manner. Apply sterile water-soluble lubricant to portion of tube to be inserted in stoma. Put obturator inside tracheostomy tube.
- 10) Ask assistant to untie ties or undo Velcro on tracheostomy tube holder.
- 11) Using the hand not holding the tracheostomy tube, remove the tracheostomy tube with quick, smooth motion, pulling outward and downward.
- 12) Clean the stoma area depending on age of client/patient and airway stability. Stoma may need to be cleaned before removing old tube or after insertion of new tube.
- 13) Holding exterior portion of tracheostomy tube and holding obturator in place with thumb, insert new tracheostomy tube gently into stoma following the natural contour of the trachea first upward and then in a downward curved motion.

- 14) When tracheostomy tube fully inserted, hold tube in place and immediately remove obturator.
- 15) Secure tracheostomy ties or tracheostomy tube holder as soon as possible. Keep the tracheostomy tube held in place until tied securely.
- 16) Suction or give breaths with resuscitation bag if needed after tube changes.
- 17) Apply clean tracheostomy sponge dressing as needed.
- 18) Discard used supplies properly and clean the work area. Store supplies properly.
- 19) Wash your hands.
- 20) Document procedure:
 - a. Procedure performed
 - b. Type and size of tube utilized
 - c. Suctioning performed
 - d. Characteristics of tracheal secretions
 - e. Condition of stoma site
 - f. Client/patient's tolerance of procedure

SPECIAL CONSIDERATIONS

- NEVER change a tracheostomy tube alone, unless it is an absolute emergency and no help is available.
- Always have resuscitation bag with face mask and oxygen source available in the event of emergency or if unable to reinsert tracheostomy tube.
- If unable to insert new tracheostomy tube, attempt to reposition client/patient's head and neck by turning slightly backward or forward and try to reinsert tube. If the tube will not enter, try to reinsert the old tube or use a tube of the next smaller size.

CLINICAL RESPIRATORY CARE: TRANSFER I DISCHARGE

APPROVED BY: Board of Directors

DATE EFFECTIVE: 3/30/05 DATE(S) REVISED: 2/04/2006 – 2/09/2013

Joint Commission Standard:

Note: Transfers or Discharges from Clinical Respiratory Care will be documented on the clinical Services Transfer/Discharge Summary form.

Clients/patients may be transferred from Clinical Respiratory Care Services when one or more of the following occur:

1. The client/patient moves out of Oxygen Plus, Inc.'s service area or requests a transfer to another home medical equipment / clinical respiratory care services company. A Transfer/Discharge Summary Form must be filled out for all clients/patients who transfer to another company. A copy of the client/patient's orders, Plan of Care and Transfer/Discharge Summary Form should be given to the new company. Other information may be copied and given to the new company with the approval of the client/patient and the Clinical Respiratory Care Coordinator.

Clients/patients may be discharged from Clinical Respiratory Care Services when one or more of the following occur:

- 1) The client/patient's condition has improved and no longer requires the service of a Respiratory Care Practitioner. A client/patient whose condition has stabilized, but still requires home medical equipment, should be discharged from Clinical Respiratory Care Services and be placed in equipment management services. A physician's order is needed to discontinue Clinical Respiratory Care Services. A Transfer/Discharge Summary form must be filled out for all Clients/patients being discharged from Clinical Respiratory Care Services.
- 2) The Plan of Care has expired and the client/patient's physician does not continue the order for Clinical Respiratory Care Services.
- 3) The client/patient refuses further Clinical Respiratory Care Services. The client/patient's physician must be notified and either a discontinue (D/C)

order received or have the client/patient sign an Against Medical Advice (AMA) form.

- 4) There is no payer source for the Clinical Respiratory Care Services. If the client/patient does not have a payer source for the service and cannot pay for the service, Oxygen Plus, Inc. may recommend the client/patient contact local social services for assistance.
- 5) The client/patient expires. The death of the client/patient will be noted in the client/patient records.

VENTILATOR MANAGEMENT

APPROVED BY: Board of Directors

DATE EFFECTIVE: 4/1/05 DATE (S) REVISED: 3/16/2011 – 2/09/2013

Joint Commission Standard:

Oxygen Plus, Inc. provides ventilator management under the order of a licensed physician. Licensed Respiratory Care Practitioners provide this Clinical Respiratory Care Service.

Ventilator Management includes:

- 1) Assessment of the client and his/her environment
- 2) Responses to ventilator settings and recommendations for setting changes to the ordering physician.
- 3) Measurement of exhaled tidal volume.
- 4) Measurement of Oxygen Saturation, End Tidal CO₂ and arterial blood gases.
- 5) Preventative maintenance of the ventilator.
- 6) Airway Care.
- 7) Weaning of the client from the ventilator as ordered.
- 8) Client and caregiver instruction of the ventilator and other required equipment.
- 9) Compliance with the Plan of Care.

All referrals for home ventilator care require the following before acceptance by Oxygen Plus, Inc.:

- 1) Physician orders for ventilator care in the home with ventilator settings. These orders should include Mode, tidal volume, respiratory rate, oxygen concentration, and PEEP (If any). The physician may order a range of settings to allow the Respiratory Care Practitioner some latitude in response to client outcomes.

- 2) A minimum of 2 family caregivers for every 8 hours per day the client is on the ventilator. If private duty nursing services is ordered for the client there must be 2 family caregivers for every 8 hours there is no nursing coverage.
- 3) At least 5 days of in-hospital ventilator care with the ventilator to be used in the home. This will allow the hospital and Oxygen Plus, Inc. to determine if the client will tolerate the equipment and the move to home.
- 4) Education of all client caregivers in the use of all equipment to be used in the home must be performed before client discharge. Checklists for each piece of equipment will be completed and signed by each caregiver. Any nursing company used by the client should only provide staff trained in the use of any equipment provided by Oxygen Plus, Inc.
- 5) Receipt of complete discharge orders and a completed Plan of Care should be performed before the client is discharged from the hospital.

Oxygen Plus, Inc. will maintain a clinician and user manual for each brand of ventilator owned by the company. Each Respiratory Care Practitioner providing clinical services to a ventilator client will be provided a copy of the clinician manual. A copy of the user manual will be provided for use in each client's home.

Oxygen Plus, Inc. will maintain each ventilator per the manufacture's guidelines. Each ventilator will have a Maintenance Log detailing all maintenance performed on it.

Back-up Ventilator will be provided for patients who are ventilator dependent.

A Respiratory Care Practitioner will visit all clients on ventilator management at intervals prescribed in the Plan of Care. Each visit will be recorded on the Clinical Respiratory Care Client Visit Form and be placed in the client's file. The client's physician will be provided a copy of the visit form if so desired. Any change in the client's condition and/or request for change in the prescribed ventilator settings or Plan of Care will be telephoned to the client's physician. Any verbal orders received will be noted by the practitioner on a verbal orders form and sent to the physician for his/her signature per policy.

Home Ventilator Protocol

APPROVED BY: Board of Directors

DATE EFFECTIVE: 4/1/05 DATE (S) REVISED: 3/16/2011 – 2/09/2013

Joint Commission Standard:

Our protocol for the setup and management of the home ventilator patients will be utilized following these guidelines as closely as possible.

Goal: To make the transition from the hospital to home as smooth and effortless as possible, acknowledging the physical and psychological demands placed on the patient and caregivers that this transition creates.

After the initial contact by the Hospital discharge planner or referral source, the Practitioner will evaluate if the patient is a home ventilator candidate by utilizing the following criteria.

It must be clear to all parties that the evaluation process must be completed prior to accepting a patient into our care.

1. The patient's condition will be evaluated for:

- Medical stability. (Ventilatory / Hemodynamic Stability)
- The equipment needs/ physician orders can be met.
- Ventilator orders/ settings that do not exceed the capabilities for the home ventilator ordered or available for home use.
- Sustained FiO₂ must be equal to or less than 50%.
- Mode: A/CMV, SIMV, Spont
- Tidal Volume: 100-2200ml
- Pressure Control: 5-60 cmH₂O/mbar
- Flow: 6-100 l/min
- Inspiratory Time: 0.1-3.0 sec
- Frequency: 1-99 BPM
- PEEP / C_{map} 0-30 cmH₂O/mbar
- P support 0-60 cmH₂O/mbar above baseline pressure. I:E Ratio: 1:99 to 3:1

b. The Family/ Caregivers Identification and subsequent evaluation for:

- Their willingness to accept the challenges and responsibilities necessary to appropriate care for and manage a home ventilator patient.
- Provide 24-hour care and supervision of a home ventilator patient.

2. Insurance Verification and verbal authorization will be received prior to proceeding with the acceptance of the home ventilator patient for private insurances. Appropriate diagnoses and orders from the patient's physician(s) and his/her willingness to complete appropriate medical necessity/ justification forms, will be a prerequisite for the acceptance of ventilator patients.

3. A Home Safety Survey will be performed prior to the acceptance of a home ventilator candidate. Special emphasis will also be paid to:

- a) Adequate Space as well as storage space for supplies.
- b) Phone in the home.
- c) Safe environment.

4. Evaluation of the need for additional equipment, such as:

- Hospital bed, Ventilator Cart, Over Bed Table, Group II Support Surface
- Suction Machine, suction catheters, Tracheostomy Tube and size.
- Other equipment and/or supplies specific to the individual needs of the patient, with special emphasis paid to nutrition: who, how, and when feedings will be provided.

5. Prior to placing our ventilator on the patient in the hospital, the following criteria must be met.

- We must have the cooperation of the hospital staff from all departments involved.

- A group meeting will be held to review patient's needs with all departments, this meeting should be setup and coordinated by the Hospital Discharge Planner.
- A meeting will then be held with the family to review patients needs as identified by the home Respiratory Specialist, hospital caregivers, and discharge committee.

6.The patient will be placed on the ventilator in the hospital. In addition to the technical portion of the set-up, the company Respiratory Practitioner will:

- a) In-service hospital personnel (when necessary) on the operation of the equipment to be used in the home.
- b) Begin familiarizing the patient and caregivers with the equipment and begin instruction phase after the patient has been placed on the ventilator.
- c) Instruct the caregivers in a manner such that prior to discharge the caregivers will be able to perform total patient care for a period not less than 24 to 48 hours; this care shall be under the close supervision of the hospital staff to assure patient safety.

7.The practitioner will schedule with the family / caregivers a time prior to discharge to set-up additional equipment and supplies necessary to support the patient in the home.

- It is preferred for patients to be discharged on Mondays or Tuesdays to facilitate response to emergencies and smoothly transition patient from hospital to home when all caregivers are the most accessible.
- Ventilator settings and patient orders should be re-verified with the physician prior to discharge.
- Discharge should be coordinated between transporting person, family, home nursing, and home respiratory care practitioner.

8. After discharge, the Respiratory Practitioner will visit the patient according to the following schedule:

- Three times the first week.
- Once a week for the next three weeks.
- Monthly and PRN visits are then scheduled based on patient need and care plan.

9. Routine visits by the clinician should consist of the following:

- i. Assessing and verifying ventilator function and compliance with the physician orders.
- ii. Checking any accessory equipment for appropriate function.
- iii. Reviewing/ re-instructing in the care, use and procedures related to home ventilator management with the caregivers.
- iv. Check supply levels.

b. Patient assessment to include but not limited to:

- a. Auscultation of chest.

10. BP, Temp, Pulse, non-invasive SaO₂ monitoring.

11. Regular revision of patient care plan.

All maintenance and routine service will be done in accordance to manufacturer and/or factory guidelines. A back up unit will be available in the event of ventilator malfunction.