PROTOCOL – ADULT RESPIRATORY THERAPY PROTOCOLS

DIRECTOR:	
MEDICAL DIRECTOR:	

PURPOSE:

Establish guidelines that, when physician-ordered, allow Respiratory Therapists to initiate, adjust, and discontinue specific respiratory therapy modalities in accordance with the AARC Clinical Practice Guidelines and by the National Institutes of Health for age 18 and older patients.

POLICY:

- A. Respiratory Therapy will be administered by protocol when physician ordered as:
 - 1. Evaluate and treat
 - 2. RT protocol
 - 3. Physician has a standing order for Respiratory Therapy protocols.
- B. Delivery of respiratory therapy by protocol is limited to those treatment modalities listed under "Modalities/Interactions."
- C. Valved holding chamber and/or actuation devices will be used. These devices are obtained from Respiratory Therapists and may be kept in the patient's room.
- D. Rescue Medication:
 - 1. Rescue medication may be stored at the patient's bedside.
 - 2. Prior to placing a "rescue medication" at the patient's bedside, an order must be written (e.g. Albuterol MDI 2 puffs Q4PRN for dyspnea and wheezing may be kept at bedside per RT protocol/Dr. /RRT).
 - 3. Included in Respiratory Therapy order per RT Protocol will be the following statement (if applicable): "MDI's and/or DPI's can be kept in the patient's room." Areas of exclusion are: TCU (North Dakota State Long Term Care policies and procedures), Rehab, and Psych (JCAHO and Safety and Security policies and procedures). In the areas listed above, MDI's and DPI's need to be returned to the medication cart unless otherwise ordered by physician.
 - 4. Patients who are in isolation: patient medications must be kept in their rooms in a labeled Zip-Lock bag. Do not return the medications to the medication cart due to contamination to the drawer and/or other medications in those drawers.
- E. Home RT medication:
 - 1. Order must be written stating that the patient's own supply of RT medications may be used while in the hospital.
 - 2. Patient's supply of RT medications need to be sent to the hospital Pharmacy for identification/expiration once returned to the floor the home medications are to be left in the patients medication drawer in a patient labeled Zip-Lock bag. (Refer to the Medication Storage Policy RCPP0484)

- F. A patient will be assessed within 30 minutes of receiving an order. Medications/Modalities will be administered based on the patient's acuity and/or by physician order.
- G. PRN Evaluation/Assessment:
 - 1. Patients only on prn medications must have an RT protocol evaluation done upon admission. The re-evaluation date for the patient may be made prn after the initial evaluation. If the patient takes the prn medication for any reason, they will have a re-evaluation done at that time and a re-evaluation date will be set for no less than three days after this second evaluation.
 - 2. If you have not seen your prn patient on your shift please check to see if they have been discharged or not and adjust the count accordingly.
- H. Order of delivery for PRN medications:
 - 1. If the patient needs a treatment less than 4 hours after they have had a Short Acting Beta Agonist or Anticholinergic medication, they should receive the prn MDI (if ordered and able) or the prn nebulizer (if indicated or unable to do MDI). The prn treatment should not contain an Anticholinergic if the previous treatment delivered contained an Anticholinergic and was given less than 4 hours ago.
 - 2. If the patient needs a treatment close to their next scheduled nebulized treatment or if they need a treatment greater than 4 hours or longer after they have had a Short Acting Beta Agonist or Anticholinergic medication, they may receive the next scheduled nebulized treatment, or, if not on scheduled treatments, they should receive the prn nebulizer (if ordered).
 - 3. If a PRN treatment is needed and the patient has received their regularly scheduled Spiriva, administering Combivent or Duoneb for PRN use would be considered duplicate therapy. The sole use of a Short Acting Beta Agonist as the PRN therapy would be indicated at this time.

MODALITIES/INTERACTIONS:

- A. Modalities included in respiratory therapy protocols are:
 - <u>Bronchodilator therapy</u> metered dose inhaler with valved holding chamber, dry powdered inhaler, hand held nebulizer, EzPAP with hand held nebulizer, Continuous Nebulized Bronchodilator (CNB).
 - <u>Bronchial hygiene therapy</u> nasotracheal suctioning, aerosol therapy, deep breathe and cough/incentive spirometry; CPT including: percussion, vibration, postural drainage, PEP valve, flutter valve/Acapella, vest suctioning eg. Tracheostomy, CoughAssist device.
 - <u>Volume expansion therapy</u> deep breathing and cough/incentive spirometry, EzPAP, BiPAP.
 - Oxygen therapy/EtCO2 and SpO2 Monitoring nasal cannula, face tents, venturi mask, simple mask, non-rebreather and partial non-rebreather masks and high-flow nasal cannula as determined by acute need or home use, ETCO2, Nellcor.
 - <u>Self-Administered Medical Modality (S.A.M.M.)</u> If patient passes eligibility and checklist requirements in S.A.M.M. policy and procedure, patient may self-administer medical modality.

- <u>Tobacco Cessation</u> if patient meets the established conditions/criteria (see policy and procedure on smoking cessation **RCPP0026**), patient may be evaluated for further therapy.
- <u>Pulmonary Rehabilitation Consult</u> If patient meets the established conditions/criteria (see protocol and policy and procedure on pulmonary rehabilitation **RCPP0298** or Physician standing orders), patient may be evaluated for appropriateness of pulmonary rehabilitation.
- <u>Modified Pulmonary Stress (MPS)</u> If patient meets indications in the Modified Pulmonary Stress policy and procedure or if ordered by a physician, they may have a MPS performed to evaluate supplemental oxygen needs and/or pulmonary rehabilitation. (Evaluation for home O2 therapy, MPS must be done within 48 hours or less, prior to discharge). (**RCPP0299**)
- <u>Sleep Hygiene</u> <u>CPAP/BiPAP</u> per home use.
- B. Medications/Oxygen:
 - 1. Oxygen (Refer to the Oxygen Protocol **RCPP0378**)
 - 2. Medication, indications and suggested dosage/frequency included under adult respiratory therapy protocols are per attached tables.
 - 3. Inhaled medications including corticosteroids or other maintenance medications may be added as per home use.
 - **a. LIMITATIONS** (if not a home medication these require a physician order)
 - 1. Long Acting Bronchodilators
 - 2. Corticosteroids

C. Physician interactions:

Respiratory Therapy will inform the ordering and/or primary physician of:

- Adverse response noted.
- Acute change in mental status.
- Significant increase in oxygen requirements: more than 10% is required to maintain in baseline SpO2 (example, increased from 1 liter to 3½ liters or from 24% to 35%) then physician must be notified.
- Patient's condition requires more than Q2 hour treatments
- A significant change in the patient's respiratory therapy plan.
- Lack of response to the rapeutics.
- Worsening ventilatory status.

NOTE: If a protocol physician admits a patient, and then consults a non-protocol pulmonary physician, the patient can still be on protocols per primary admitting physician. However, a courtesy call to the Pulmonary physician must be made when making changes. When a protocol pulmonary physician admits a patient on the week-end or on nights, the patient is only on protocols for that time if the primary pulmonary physician is not a protocol physician.

D. Nursing interactions:

Respiratory Therapy will notify the RN/LPN if:

- Adverse reactions are noted.
- When oxygen liter flow/percentage changes are made.
- Any acute changes in patient's condition occur.
- pain compromising respiratory status
- complaints of pain or other patient needs

PROCEDURE:

- A. Adult RT protocols **will** be initiated when:
 - 1. Order is received for protocols or therapies: "RT to evaluate and treat," "RT protocol" **OR** an order is received for a respiratory medication/modality from a physician that has a standing order for Respiratory Therapy protocols.
 - 2. Check orders, medication sheet, and H & P for respiratory history/medications.
- B. Chart review:
 - 1. <u>Admission history:</u> Chief complaint, admitting diagnosis, home meds, medical history (as appropriate), pulmonary history.
 - 2. <u>Diagnostics:</u> ABG's/SpO2, chest x-rays, PFT's (baseline and current), labs (electrolytes, WBC, Hgb, Hct, BNP, sputum cultures, theophylline level, glucose, CRP) and other data as may pertain.
 - 3. <u>Medical/occupational/social history.</u>
 - 4. <u>Admission medications</u>. Oxygen is considered a medication and therefore, should be administered as a home medication unless otherwise ordered by the physician.
- C. Physical Assessment, including but not limited to:
 - 1. Need for **STAT** therapeutic intervention (This patient's needs take priority).
 - A. Appearance.
 - B. Heart rate, respiratory rate.
 - C. Breath sounds.
 - D. SpO2
 - E. WOB/SOB.
 - F. Apparent hypoxemia.
 - G. Acute hypercarbia.
- D. Indications for bronchodilator therapy, bronchial hygiene, volume expansion, aerosol therapy, sleep hygiene and oxygen therapy/EtCO2 and SpO2 monitoring are evaluated. A modality (e.g. hand-held nebulizer, O2 via nasal cannula, etc.) is selected if indicated.
- E. Evaluation for therapy:
 - 1. Evaluate for appropriate therapy modalities as supported by AARC Clinical Practice Guidelines, and the methods outlined in respective therapy algorithms, and other supportive guidelines in the appropriate policy and procedure.
 - 2. Determine the patient's acuity and the appropriate therapy and frequency by utilizing the adult acuity grid.
 - 3. Determine doses/frequencies as outlined under Modalities and Interactions previously mentioned in this policy. (see attached medication table)
 - 4. Establish history of Obstructive Sleep Apnea; determine use of home CPAP/BiPAP.
 - 5. After the initial evaluation for therapy, patients will be re-evaluated whenever significant changes occur in their clinical status (i.e.: worsening peak flows, ABG, chest x-ray, dyspnea). Patients will be re-evaluated every 24-72 hours and/or prn following the patient assessment form acuity assignment guidelines. Acute pulmonary patients will be considered for 24 hour and/or prn re-evaluations. Occasional exceptions for re-evaluation frequency may be made for long-term, stable patients.
 - 6. Evaluations will be done (or as otherwise indicated):

- Initial evaluation.
- Second evaluation date 24 to 72 hours and/or prn.
- PRN evaluations if patient is stable and there are no new changes after a second evaluation has been done.
- When the patient moves to or from TCU, Rehab, or Psych the therapist is to do an initial evaluation on admission; if patient is stable re-evaluations can be made prn.
- Evaluation will be done if patient has a significant change in their respiratory status.
- F. Modalities started per Respiratory Therapy protocols shall be written as physician orders. Order should include modality, medication (if pertinent) and frequency. Orders shall be signed, dated, timed and include: per Respiratory Therapy protocol/physician name/respiratory therapist.
- G. Documentation/Communication:
 - 1. Document protocol evaluation in Electronic Charting under "RT Protocol Evaluation" tab (or Respiratory Therapy paperwork when applicable)
 - 2. Initial therapy and further changes in therapy are also to be communicated to nursing by the evaluating therapist.
 - 3. Shift report in the Respiratory Therapy Department will be utilized as an idea exchange for matching current patient status with indicated therapy.
 - 4. When patient is transferred to or from TCU, Psych, and Rehab Respiratory Therapy orders need to be rewritten per Respiratory Therapy protocol or physician order. Respiratory Therapy must check the MAR sheets to see that the medications have been re-ordered as they were on the floors prior to TCU, Psych, and Rehab.
 - 5. A care plan is documented in Electronic Charting. A care plan should include pertinent subjective, objective, and assessment data to support the proposed treatment regime.

INDICATIONS:

- Presence of signs/symptoms when based on clinical assessment warrant use of any of those modalities listed under Modalities/Interactions section.
- Respiratory Therapy protocols are ordered.
- Protocol physician

CONTRAINDICATIONS:

- Absence of order for protocols or a non-protocol physician.
- See policy and procedure for those modalities listed under the Modalities/Interactions section.

COMPLICATIONS/HAZARDS

• See policy and procedure for those modalities listed under the Modalities/Interactions section

ADVERSE EFFECTS

• See policy and procedure for those modalities listed under the Modalities/Interactions section (when applicable).

INFECTION CONTROL:

- Universal precautions (unless otherwise specified).
- See policy and procedure for those modalities listed under the Modalities/Interactions section.
- All equipment and supplies should be appropriately disposed of or subjected to high-level disinfection between patients.
- See policy and procedure for each modality that's appropriate.

EQUIPMENT:

• See policy and procedure for those modalities listed under the Modalities/Interactions section.

PATIENT EVALUATION 1. RT MED/MODALITY ORDERED. 2. PHYSICIAN ORDERS FOR RT PROTOCOL. 3. STANDING ORDER. CLINICAL ASSESSMENT DONE WITHIN 30 MINUTES. DOCUMENT PATIENT RT ASSESSMENT AND A NO INDICATED PROTOCOL AND/OR EVALUATION/CARE PLAN PHYSICIAN STATING NO THERAPY ORDERED INDICATED AT THIS TIME. YES EVALUATE, RE-EVAL PRN ORDER AND PER RT INITIATE DISCRETION. INDICATED RT TREATMENT OR EVALUATE AND CONTACT PHYSICIAN IF NECESSARY CONTINUE WITH ORDERED RT THERAPY. IF PATIENT IS TRANSFERRED TO/OR FROM REHAB, TCU, OR PSYCH MUST HAVE INITIAL EVAL DONE IN THOSE AREAS. RE-EVAL PER POLICY. (1)

- A. Initial eval must be done upon arrival (except for patients with IH/IS which are done on POD2).
 - B. The first re-eval must be done 24 to 72 hours post initial eval as per guidelines.
 - C. Patients may be changed to PRN evals or another date 24 to 72 hours post