(A) Policy Statement

Bronchodilators and steroids to be dispensed via metered dose inhaler (MDI) will be administered by Respiratory Care and Nursing Service. Respiratory Care Practitioners will administer MDIs to patients on mechanical ventilation and those patients with tracheotomies. Nursing Service is responsible for administering the balance. Drugs which can be administered via MDI are listed in RC policy 3364-136-33-01.

(B) Purpose of Policy

To assure the safe, effective, and timely use of metered dose inhaled medications.

Indications: for nebulizer/aerosol therapy:
1. Bronchospasms
2. Chronic Obstructive Pulmonary Disease
3. Laryngeal edema
4. Secretion retention
5. Antibiotic or Steroid therapy

Goals: to improve respiratory status through the delivery of prescribed medications and to improve the efficiency of coughing.

Contraindications: of nebulizer therapy include tachycardia, adverse drug reactions, and the inability to effectively take the treatment.

Hazards: include nosocomial infections, and bronchospasms.

(C) Procedure

1. The Respiratory Care Practitioner and Registered Nurse will verify from the physician orders, the type of medication, the dosage, the frequency, and the number of breaths for each metered dose treatment. The MDIs are kept in the Accudose, in a patient specific bin. The patient may self-administer with the appropriate physician order.

2. Prior to the initial MDI treatment, the patient will be instructed for proper use of the MDI. Such instruction will include: proper assembly of the MDI unit to the medication holding chamber (spacer), patient will exhale to FRC. Place the spacer mouthpiece between the teeth and seal the
lips. Make sure that the tongue is flat under the mouthpiece and does not block the MDI. Actuate
the device as the patient inspires slowly and deeply, holding maximal inspiration for 5-10 seconds.
Repeat the procedure according to written physician order.

3. “Common Canister” MDI therapy is used only on patients NOT in isolation. The common canister
is retrieved from the Pyxis. Each patient is provided with their own spacer to be used with these
shared MDI’s.

4. A Respiratory Care Practitioner, if needed, can review the patient's ability to perform the MDI
treatment properly and will provide supplemental instruction as necessary if the nurse requests it.

5. The patient will be evaluated for breath sounds, cough, and secretions before and after each MDI
treatment. The results will be recorded on the RT section of the EMR and in AdminRx. The
Respiratory Care Practitioner or the Nurse will notify the physician if the patient cannot perform
the MDI technique. An order for an up-draft nebulizer should be obtained.

6. The order and scheduled frequency will be recorded on the master treatment schedule in the
Respiratory Care Department.

7. Aerosol treatments that are changed to MDI treatments will continue to be given until the MDI
medication is sent to the floor from pharmacy.

8. MDIs given in line with a mechanical ventilator circuit will be delivered via an MDI adapter
connected between the inspiratory limb and the Y-piece.

9. For patients with tracheotomies, the MDI should be administered by a manual resuscitation bag
and an aerochamber, specially designed for use with a manual resuscitation bag.

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<th>Approved by:</th>
<th>Review/Revision Date:</th>
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| /s/ Michael Taylor  
Director, Respiratory Care | 9/9/1998  
8/24/1999  
7/16/2001  
6/26/02  
3/01/2005  
3/05/2008  
2/11/2011  
5/1/2013  
5/1/2016  
4/8/2019 |
| /s/ Monecca Smith  
Chief Nursing Officer | Date  
Date  
Date  
Date  
Date  
Date  
Date  
Date  
Date  |

Review/Revision Completed By:
Director, Respiratory Care

Next Review Date: April 8, 2022

Policies Superseded by This Policy: