Patients and Inhaled Respiratory – Change to Current Processes

Updated May 26, 2020

Background
MercyOne remains committed to providing safe and effective therapies for patients and colleagues. Patients that are COVID-19 positive or Patients Under Investigation (PUI) for COVID-19 often need inhaled medications. Inhaled medications can be delivered either by Metered Dose Inhalers (MDIs) or by nebulization. When delivered by nebulization, these can be aerosol generating.

Guidance for Delivery of Inhaled Medications to COVID-19 or PUI
Effective, March 18, 2020, we ask all locations to make the following changes in the delivery of inhaled medications:

1. Non-Ventilated Patients that are COVID-19 positive or are PUI and require inhaled medications: the use of MDIs is preferred when / if available.
   a. Use of patients own medications for MDI’s is preferred (Reference: COVID-19 USE/RE-USE PATIENTS MEDICATIONS IN ISOLATION)
   b. If a bronchodilator MDI is indicated in the Emergency Department, and a patient’s own medication is not available, a common canister should be used (Reference: COVID-19 PATIENTS AND INHALED RESPIRATORY MEDICATIONS IN THE ED/ALTERNATIVE TREATMENT SITES)
   c. If MDI is NOT available, nebulization may be used AND the use of an Airborne Infection Isolation Room (AIIR) / (negative pressure room) if available is preferred.
   d. When using nebulization AND an AIIR is NOT available, use of a private room and colleagues administering nebulization will use an N95 mask and eye protection or PAPR. If N95 and / or PAPR are not available, colleagues administering nebulization will use standard mask plus eye protection.
   e. Not all patients are capable of using an MDI. This will require a case-by-case assessment involving at least the following factors: i. Patients must have the capacity to use a sufficient amount of inspiratory force in order to use MDIs.
      i. Patients must have the mental status and strength / capability to inhale medications from an MDI through a spacer.

2. Ventilated Patients that are COVID-19 positive or are PUI and require inhaled medications: use MDI when / if available - OR - nebulization Aerogen device if available.
   a. Patients receiving medications through the Aerogen device, which is a closed-system (enclosed within the ventilator circuit) high efficiency nebulizer, may continue with nebulized treatments.
   b. Patients NOT using Aerogen devices will need to have the MDI used with the appropriate spacer enclosed within the ventilator circuit.

3. There will be exceptions to the above, but these should be rare (e.g., transplant patients may require nebulizers, etc.).
4. Not all medications can be converted from nebulization to MDI - so again - this will need to be a case-by-case evaluation.
5. Patients who require corticosteroid therapy may need to be transitioned from inhaled to systemic therapy therefore negating the need for nebulization or MDI modalities.
6. Patients on "home maintenance" respiratory medications will also need to be evaluated for continuation based on medications formulary status.

All the above will require a case-by-case assessment necessitating collaboration and communication between physician, nursing, respiratory and pharmacy colleagues within the RHMs in order to deliver the high-quality care needed for all our patients during this challenging time.

Changes have been added across all platform/EHR to support physicians ordering MDI with guidance as established above.

In summary, the above changes are being made in order to reduce the risk of aerosolizing respiratory secretions induced through nebulization, which in turn will reduce the spread of COVID-19 to our colleagues and other patients we serve.