Metered-Dose Inhaler Common Canister Process

FAQs 3.24.20 1755

Why are only metered-dose inhalers (MDIs) included?
- In order to ensure the safety of this practice for our patients, a spacer will be used to avoid physical patient contact with the inhaler. MDIs deliver aerosolized medication and contain propellants and a spacer is used to allow patients more time to inhale the medication.
- Dry powder inhalers (DPIs) such as salmeterol (Serevent) are excluded from this process as the medication delivery requires patients to breath in through the inhaler mouthpiece and many are not compatible with spacer.
- Some Respimat inhalers such as tiotropium (Spiriva) may be used with a spacer, but all will be excluded at this time for consistency.

Are any high-risk patient populations excluded from the common canister process?
- Patients who do not require droplet precautions should be administered nebulized treatment per the SBAR. For those patients who do require droplet precautions, there will be no patient populations (immunosuppressed, CF, etc.) excluded from the common canister process.

If a patient is on nebulized treatment and is subsequently assigned droplet precautions, do I need a provider order for conversion to the inhaler?
- Respiratory therapists, in alignment with the Bronchodilator Protocol, can switch patients from nebulized medication to metered dose inhaler without a provider order.

How can we be confident in the effectiveness of the cleaning process as outlined in the Standard Work?
- Common canister practices have been implemented by many institutions as a cost-saving measure. The literature notes use of 70% isopropyl alcohol (IPA) for disinfection and low rates of cross-contamination with effective cleaning measures in place.
- Considering the current COVID-19 concerns, Spectrum Health will be using PDI Sani-cloth Germicidal and Bleach wipes instead of 70% IPA, as these wipes have been validated by the EPA to be effective for inactivation of COVID-19.

Why do nurses use the bleach, orange top wipes for C. diff patients?
- Only the orange top wipes are labeled for effectiveness at killing C. diff when used with the necessary contact time. The purple top wipes are appropriate for all other patients.

What does contact time mean?
- Contact time = wet time, meaning that in order to effectively inactivate the organisms listed on the label the surface must remain wet for the noted contact time. This may require use of a second wipe.
Nurses are asked to clean the inhaler, but it will be cleaned in pharmacy prior to dispensing to another patient. Why is duplicate cleaning necessary?

- To prevent the spread of infection and contamination from one part of the hospital to another, nurses are asked to disinfect the MDI prior to placement in the clean utility room. This safety measure will reduce the likelihood of pharmacy personnel bringing contaminated inhalers to the central pharmacy.

Will the spacer be used on multiple patients?

- No. All spacers will be patient-specific and will be discarded or sent home with the patient at discharge.

How will this process change how the administrations are documented and charged?

- Respiratory therapists and/or nurses will be responsible for documentation of each administration of medication, including the number of puffs.
- Patients will no longer be charged for the entire inhaler but will be charged on a “per puff” basis for each administration. This change makes recording of the number of puffs very important.

In the ambulatory care setting, how is the administration of nebulized treatments being affected by this new process?

- Recommendation is to not administer nebulized medications in the ambulatory setting in patients with fever and respiratory symptoms. Recommendation is to use MDI. If that isn’t an option, then refer to ED.

In the ambulatory setting, how is the administration of metered dose inhalers being affected by this process?

- Common canister practices for select MDIs (albuterol, levalbuterol, fluticasone and mometasone furoate/ formoterol fumarate dihydrate) should follow standard work for ambulatory settings.

Works Referenced


