# Standard Work Activity Sheet

**Title:** Ambulatory Common Canister Standard Work

**Purpose:** Standardize process to conserve metered-dose inhalers in the ambulatory setting

<table>
<thead>
<tr>
<th>Seq. No</th>
<th>Task Description</th>
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<tbody>
<tr>
<td></td>
<td>Assumptions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>Dry powdered inhalers (DPIs), Respimat &amp; Qvar Redihaler are excluded from this process</td>
<td></td>
<td></td>
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<tr>
<td>b.</td>
<td>Aerosolized MDIs will <strong>NOT</strong> be sent home with patients</td>
<td></td>
<td></td>
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<tr>
<td>c.</td>
<td>All patients receiving an aerosolized MDI will receive a patient-specific spacer. The patient specific spacer may be sent home with the patient or disposed of.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td><strong>Patients without</strong> fever and/or severe respiratory isolation precautions <strong>shall use nebulized treatments</strong> (conserv MDI for when required)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td><strong>Patients with FEVER and respiratory symptoms and/or severe respiratory isolation precautions must use MDIs</strong> to reduce N-95 masks / PPE burden during administration.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td>Patients with fever &amp; respiratory symptoms and/or severe respiratory isolation precautions, that decompensate or cannot tolerate MDI use, shall be referred to a higher level of care.</td>
<td></td>
<td></td>
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<tr>
<td>g.</td>
<td>Used inhalers/actuators MUST be cleaned by clinical staff administering, before being brought back into a common space / med room for “re-use”.</td>
<td></td>
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</tr>
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**MDI inhaler ordered by provider via EHR**

*Additional resource: [Suggested Management of Hospitalized COVID-19 Patients](#)*

*Inpatient-specific protocol exists, included here for reference: [Bronchodilator Protocol](#)*

1. If inhaler is ordered for rescue as a “PRN,” do not proceed with below steps until the patient requires a dose, in order to conserve product.

**SH Formulary inhalers included:**

- Albuterol HFA 90mcg
- Xopenex (levalbuterol tartrate) HFA 45mcg
- Flovent (fluticasone) HFA 44, 110, 220mcg
- Dulera (mometasone furoate and formoterol fumarate dihydrate) 100mcg/5mcg, 200mcg/5mcg
- Symbicort (budesonide and formoterol) 80mcg/4.5mcg, 160mcg/4.5mcg

**SH Formulary inhalers excluded:**

- Asmanex (mometasone)Twisthaler 220mcg
- Pulmicort (budesonide) Flexhaler (90, 180mcg)
- Spiriva (tiotropium bromide) Respimat (1.25, 2.5mcg)
- Stiolto (tiotropium bromide and olodaterol) Respimat (2.5/2.5mcg)
- Serevent Diskus (salmeterol xinafoate) 50mcg
- Qvar Redihaler (40, 80mcg)- do not use spacer per package insert

Provider
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<td>2.</td>
<td>Clinical Staff retrieves spacer device for patient.  <strong>Spacers should NEVER be used on more than one patient</strong></td>
<td>A spacer device has a one-way valve that eliminates risk of contamination to inhaler. (Top picture) – typically not stocked. Bottom picture – disposable spacer</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical Staff</td>
</tr>
<tr>
<td>3.</td>
<td>Clinical Staff labels the spacer device</td>
<td>Use patient sticker readily available (to identify that spacer has been used)</td>
<td>Clinical Staff</td>
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| 4.      | If inhaler is in manufacturer packaging, remove from packaging and expiration date must be noted on the inhaler | Expiration Dating: 12 months after removal from overwrap. Utilize Beyond Use Date (BUD) stickers to write expiration month/year.  
- Albuterol HFA 90mcg  
- Xopenex (levalbuterol tartrate) HFA 45mcg  
- Flovent (fluticasone) HFA 44, 110, 220mcg  
- Dulera (mometasone furoate and formoterol fumarate dihydrate) 100mcg/5mcg, 200mcg/5mcg  
3 months after removal from overwrap:  
- Symbicort (budesonide and formoterol) 80mcg/4.5mcg, 160mcg/4.5mcg | Clinical Staff |
| 5.      | Inhaler prepared for patient use | When obtaining supply from Medication Room, ensure that product is either in manufacturer packaging (previously unopened) or in a plastic bag – indicating that product has been previously cleaned. | Clinical Staff |
| 6.      | Administration:  
Attach inhaler to spacer and administration documentation process.  
Administer as ordered with inhaler attached to patient-specific spacer | Assess inhaler/actuator product integrity  
Follow standard MDI administration practices:  
- a. Remove actuator cover/shake inhaler  
- b. If first use, prime inhaler in air per manufacturer guidelines  
- c. Attach inhaler to patient-specific spacer  
- d. Have patient sit in upright position  
- e. Place spacer mouthpiece between the patient’s teeth with the tongue under the mouthpiece so to not block the spacer  
- f. Have patient seal lips around the spacer mouth piece  
- g. Press down and activate the MDI as the patient begins to breathe in slowly and deeply through their mouth  
- h. Have the patient hold their breath for 10 seconds or as long as comfortable  
- i. Remove the spacer and MDI from the patient’s mouth and have them breathe out slowly  
- j. Repeat steps f. through i., if more than one puff is ordered  
- k. Document administration on the MAR | Clinical Staff |

Document medication administration in the EHR on the MAR (for patient safety and charging purposes)

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**Standard Work Activity Sheet**

*PI Form # 170 rev 031318*
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| 7.      | Storage when not in use:  
Spacer: Must remain with patient and either discarded or sent home after use.  
Inhaler: Must remain with patient until able to be cleaned per Step 8. | Inhaler and spacer will stay with patient and be used for all ordered doses while the inhaler order is active or until discharge.  
DO NOT send inhalers home with patients. | Clinical Staff |
| 8.      | Cleaning process to be done immediately prior to removing inhaler from patient care room:  
Separate canister from plastic actuator and thoroughly wipe both the canister/inhaler and actuator with appropriate disinfection wipes | Used inhalers/actuators MUST be cleaned by clinical staff, before being brought back into a common space / med room. (Cleaning should be complete for entry into the clean utility room / medication room.)  
Ensure all crevices and surface area of the canister/inhaler and plastic actuator are thoroughly cleaned  
Purple top Sani-Cloth wipes may be used for cleaning inhaler parts except for patients with C.Diff. Contact time for purple top wipes is 2 minutes.  
Orange top Bleach wipes: use for patients with C.Diff. Contact time for orange top wipes is 4 minutes.  
Allow to thoroughly dry – in an identified, clean space – in the medication room.  
If expiration date on sticker wears off, replace. | Clinical Staff |
## Standard Work Activity Sheet

**Owner:** Pharmacy, Infection Prevention, Respiratory Therapy, Nursing  
**Rev. Date:** 3.24.20

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<td>9.</td>
<td>Place canister and actuator together and place in a clean plastic bag (Lawson #653508) and return to identified bin in medication room</td>
<td>Inhaler and actuator must be dry before placing back together and in the plastic bag Identified location in each medication room</td>
<td>Clinical Staff</td>
</tr>
<tr>
<td>10.</td>
<td>Clinical Staff will obtain cleaned, bagged inhalers for re-use process from identified bin in medication room.</td>
<td>Items will be returned to a designated area in the medication room. Plastic storage bags shall never be reused.</td>
<td>Clinical Staff</td>
</tr>
<tr>
<td>11.</td>
<td>If inhaler is appropriate for re-use, Clinical Staff will re-clean the canister/inhaler and plastic actuator prior to re-use / administration</td>
<td>Ensure all crevices and surface area of the canister and plastic inhaler container are thoroughly cleaned Purple top Sani-Cloth wipes may be used for cleaning inhaler parts. Contact time for purple top wipes is 2 minutes. Allow to thoroughly dry</td>
<td>Clinical Staff</td>
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