

Inhaler Device Assessment

Pharmacist Assessment Record

Patient Name: Birthdate:

Patient Address:

Patient Phone No.:

Health Services No.: Date:

Medical History:

☐ Patient's drug profile reviewed

☐ Allergies/Intolerances:

Patient's medical diagnosis:

☐ Asthma ☐ Chronic Obstructive Pulmonary Disease (COPD) ☐ Post-Viral Reactive Airway Symptoms

☐ Other indication for inhaler therapy

☐ No indication for inhaler therapy.

Additional medical diagnoses (not listed above):

Patient Assessment

"Hello [patient name], while I was reviewing your [inhaler name] inhaler, I considered whether there might be alternative options that could suit you better. Some inhaler types can work just as effectively – or sometimes even better – while also being more convenient to use, less expensive, and/or better for the environment. Would you have a few minutes to discuss some alternative options?"

Step 1: Patient Consent

- ☐ Patient has provided consent to participate in this inhaler assessment (risks and benefits discussed with patient)
- ☐ Patient has consented to communication of assessment with primary care prescriber

Step 2: Patient Eligibility

- ☐ Age >18 years old^{1,2} ☐ Currently prescribed an MDI device

continued on next page

Patient Assessment *(continued)*

Step 3: Symptom Assessment^{3,4}

Cough, sputum production

Daytime symptoms

Nighttime symptoms

Physical activity (normal or limited)

Need for reliever inhaler Number of exacerbations in the past year

Exacerbations that required emergency department visit or hospitalization

Other

Assess for exacerbation and refer for urgent/emergent care (Ineligible for therapeutic substitution)

Asthma	COPD
Excessive cough, wheeze, and chest tightness, difficulty speaking due to asthma, shortness of breath at rest, unresponsive to reliever medication, sweating, altered mental state (drowsy or confused, increased anxiety) due to asthma	Change in dyspnea, sputum purulence, or sputum volume

Step 4: Inhaler Assessment

Assess Inhaler Suitability

- Inspiratory Flow: Confirm patient can generate adequate flow for device (use placebo device or professional judgement).⁵
 - High risk for inadequate peak inspiratory flow – severe disease/female/older age/frequent exacerbations
- Dexterity & Cognition: Evaluate physical/cognitive ability for DPI/SMI use.⁵
- Formulation Availability: Ensure medication is available in DPI/SMI format.⁵
- Allergy to cow's milk protein (lactose is in most DPIs)
- Discuss device options, including environmental impact, cost, ease of use, adherence, multi-drug devices (e.g. budesonide/formoterol for reliever +/- maintenance), and efficacy (all drugs within a class are considered equally efficacious).^{5,6}
- Use placebo device for hands-on demonstration.^{5,6}
- If switch is ineligible, optimize MDI use, including addition of a spacer (select MDI brand with least environmental impact, proper technique, disposal).⁶

Therapeutic Options

See <https://www.inhalerguide.ca/> and Appendix A for therapeutic alternatives and use shared-decision making to work through options with patient.

Asthma Guidelines: [Canadian Thoracic Society 2021 Guideline update: Diagnosis and management of asthma in preschoolers, children and adults](#)

COPD Guidelines: [2023 Canadian Thoracic Society Guideline on Pharmacotherapy in Patients with Stable COPD](#)

Step 5: Non-Pharmacological Treatment/Lifestyle Modifications⁷

■ Patient presents with modifiable risk factors and triggers at home/work. If present, provide further education and intervention or referral as appropriate:

- Smoking (consider smoking cessation counselling/assessment)
- Environmental exposures
- Medication use (i.e. Non-Selective Beta Blockers and NSAIDs)
- Allergen exposure
- Mold and noxious chemicals, or other housing related risk factors

■ Others:

continued on next page

Prescription

☐ New inhaler

☐ Stopped inhaler

☐ Referral

Rationale for prescribing:

Rx:

Directions:

Quantity:

☐ New inhaler

☐ Stopped inhaler

☐ Referral

Rationale for prescribing:

Rx:

Directions:

Quantity:

☐ New inhaler

☐ Stopped inhaler

☐ Referral

Rationale for prescribing:

Rx:

Directions:

Quantity:

Step 6: Monitoring and Follow-up Plan

☐ Patient has received counselling on the inhaler technique (using written, video (<https://www.lung.ca/inhaler-how-to>), or demonstration resources), adherence, monitoring response and side effects, when to follow up with healthcare provider/prescribing pharmacist, when to seek medical attention, and environmentally safe disposal (return to the pharmacy)

☐ Patient has received their individualized Asthma/COPD action plan based on their current inhaler regimen (as appropriate)

See Lung Health (asthma) (<https://lunghealth.ca/wp-content/uploads/2022/03/2022-March31-Adult-Asthma-Action-Plan.pdf>) or Canadian Thoracic Society (COPD) (https://cts-sct.ca/wp-content/uploads/2018/03/4915_THOR_COPDActionPlanUpdate_Editable_Eng_v006.pdf)

Follow-up Actions Taken by Prescribing Pharmacist

☐ Reassess technique and symptom control at next visit/refill.

☐ Follow-up completed on:

Prescribing Pharmacist: Pharmacist Signature:

Pharmacy Address:

Phone No.: Fax No.: Time and Date:

continued on next page

Notification of Healthcare Providers

(mandatory for primary care practitioner and other practitioners whose care is impacted by pharmacist prescribing):

Primary Care Practitioner:

Name:

Fax No.: Phone No.:

Other Practitioners:

Name:

Fax No.: Phone No.:

Patient's Regular Pharmacy (if different from prescribing pharmacy):

Name:

Fax No.: Phone No.:

Work Cited

1. Miyahara H, Korematsu S, Nagakura T, Izumi T. Efficacy of fluticasone metered-dose inhaler and dry powder inhaler for pediatric asthma. *Pediatrics International*. 2008 Feb;50(1):103-8
2. Bickel S, Morton R, O'Hagan A, Canal C, Sayat J, Eid N. Impact of Payor-Initiated Switching of Inhaled Corticosteroids on Lung Function. *The Journal of Pediatrics*. 2021 Jul;234:128-133.e1.
3. Yang CL, Hicks EA, Mitchell P, Reisman J, Podgers D, Hayward KM, et al. Canadian Thoracic Society 2021 Guideline update: Diagnosis and management of asthma in preschoolers, children and adults. *Canadian Journal of Respiratory, Critical Care, and Sleep Medicine*. 2021 Aug 19;5(6):1-14.
4. Bourbeau J, Bhutani M, Hernández P, Aaron SD, Beauchesne MF, Kermelly SB, et al. 2023 Canadian Thoracic Society Guideline on Pharmacotherapy in Patients with Stable COPD. *Canadian journal of respiratory, critical care, and sleep medicine*. 2023 Jul 4;7(4):173-91.
5. Goldak J, Tri S, Roy C, Underwood L. A stepwise approach for pharmacists in selecting climate-conscious inhaled therapy for COPD. *Can J Hosp Pharm*. 2024;77(6):355-360. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11656517/>
6. CASCADES Canada. Climate Conscious Inhaler Prescribing in Outpatient Care. Toronto: CASCADES; 2022. Available from: cascadescanada.ca/resources/sustainable-inhaler-prescribing-in-primary-care-playbook/
7. Porsbjerg C, Melén E, Lehtimäki L, Shaw D. Asthma. *The Lancet* [Internet]. 2023;401(10379):858-73. Available from: <https://www.sciencedirect.com/science/article/pii/S0140673622021250>
8. Canadian Lung Association [Internet]. How to use your inhaler. [cited 2025 Oct 12]. Available from: <https://www.lung.ca/inhaler-how-to>
9. Crawley A, Regier L, & Jensen B. Asthma & COPD: Inhalation Devices Chart. 2025. Available at: <https://www.rxfiles-ca.shal.idm.oclc.org/RxFiles/uploads/documents/members/AsthmaDevices.pdf>

Choosing Wisely Canada provided financial support for this resource. All content was developed independently by the Canadian Association of Pharmacists for the Environment (CAPhE) and the Canadian Pharmacists Association (CPhA).

Appendix A Device Characteristics^{5,6,9}

	Dry-powder inhaler						Soft-mist inhaler	Metered-dose inhaler
	Turbuhaler Twisthaler	Ellipta	Diskus Inhub	Genuair	Handihaler	Breezhaler	Respimat	
Inspiratory capacity required	High (30-60 L/min)	Moderate (30 L/min)				Moderate-high (50 L/min)	Low (at least 10-20 L/min)	
Dose counter	Yes (every 20 doses)	Yes (with large numbers)	Yes	Yes (every 10 doses)	N/A (caps loaded)		No, except Breztri, Advair, Zenhale	
Inhalation	Hard and fast inhalation Breath-actuated						Slow and steady inhalation Requires timing of actuation and breath Can be used with spacer	
Dexterity/cognition required	Low			Feedback mechanism when dose taken	Multistep process to load, requires most dexterity and cognition Rattling or whirring sound feedback if contents inhaled correctly		Loading device requires dexterity and strength (pharmacy can pre-load) Priming required	Actuation requires hand strength Priming required
Climate impact	Lowest carbon footprint (1 inhaler = ~5 km by car)						Low carbon footprint (1 inhaler = ~7.5 km by car)	Highest carbon footprint (choose brands with lower HFA content (e.g. Teva-salbutamol) (1 inhaler = ~98 km by car)

Appendix B Additional Resources for Shared Decision Making

- CASCADES Climate Conscious Inhaler Prescribing in Outpatient Care. cascadescanada.ca/resources/sustainable-inhaler-prescribing-in-primary-care-playbook/
- A stepwise approach for pharmacists in selecting climate-conscious inhaled therapy for COPD. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11656517/>
- Inhaler Technique Instructions: <https://www.lung.ca/inhaler-how-to-use-your-inhaler>