

Research into How Pharmacy Technicians Help Patients Suffering from Asthma.

Asthma: a chronic inflammatory disease affecting the airways

Symptoms: Coughing, wheezing, shortness of breath, and chest tightness

Symptoms during asthma episode (attack):

Noisy and laboured breathing, whistling sound heard during breathing

* Asthma attacks can lead to sudden death and severe brain damage due to oxygen deficiency.

Problems people face in their daily lives:

- Learners become more absent from their schools
- Adults are unable to become fully proficient at their work.
- And most importantly, it interferes with their normal daily lives.

Incidence:

- In Canada, 4.6 million people are affected.
- In case of Alberta: 10.77% of people are impacted.
- Acuity (severity) of exacerbations has increased by 300%
- The percentage of people requiring hospitalization has seen an upswing from 6.8% to 11.3%.
- Children: In overall Canada, 850,000 children under the age 14 have asthma.

Role of Pharmacy Technicians:

- Pharmacy technicians: key figures who guide the patients about how to use any type of inhaler.
- Research indicates that more than 90% of people use inhalers incorrectly.
- Signaling red-flags to the pharmacist such as incorrect first-line of therapy. For example, Symbicort was prescribed instead of other first line of therapy inhalers such as Flovent.
- Evaluating the eligibility for **CACP** (Comprehensive Annual Care Plan) and **SMMA** (Standard Medication Management Assessment) – Asthma is included

Key factors of providing inhaler technique education:

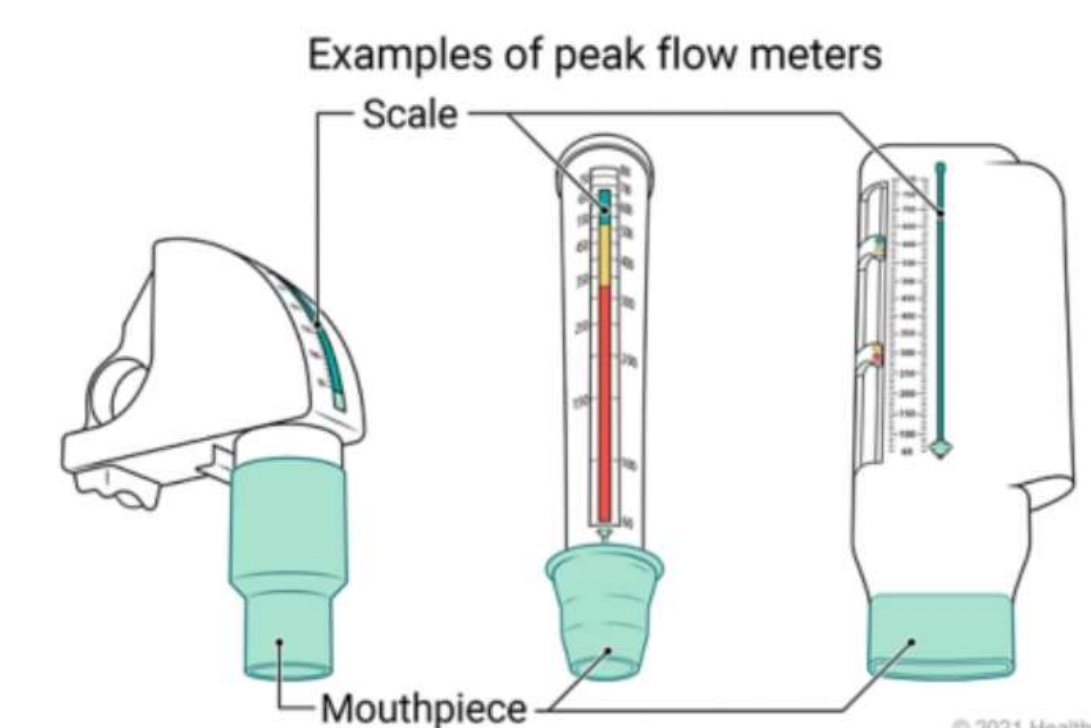
- Required competency and thorough practice beforehand.
- Giving an appropriate amount of time.
- Must be in a private consultation area.
- Use of a demo device while teaching.
- Involving teach-back method.
- Careful evaluation of the technique used by the patient during teach-back method.
- Asking if the patient has any doubts.
- Follow-up with the patient.

***Follow-ups play a pivotal role in the maintenance of asthma.**

Asthma monitoring and management: _

1. Using peak flow meter:

- Helps people to measure their PEF (peak expiratory flow)
- PEFs – how much air is quickly exhaled out.
- Can be bought at any drug store
- Proper technique is Required (Role of RPhT. comes into play)
- Indicates the functioning of lungs over a period of time
- Predicts and prevents future asthma episodes.



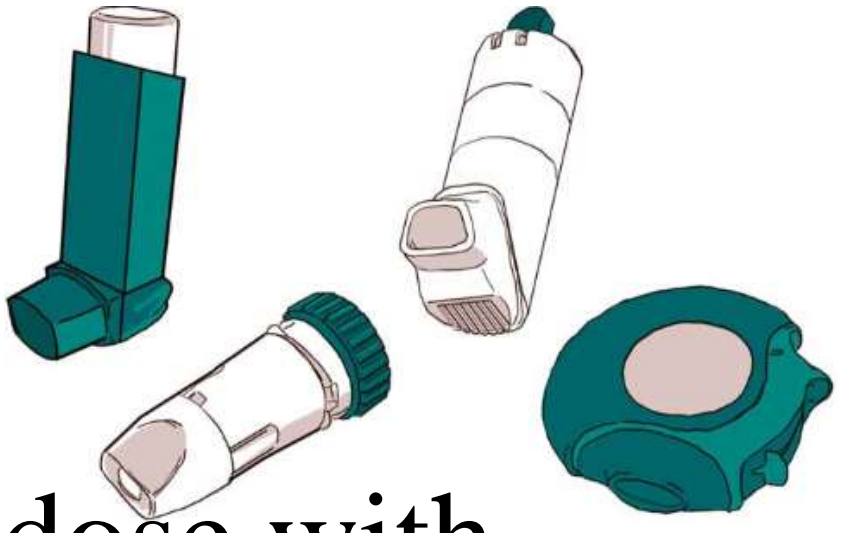
2. Asthma Action Plan-

Provides a pathway for tackling the flare-ups

- Personalized: CREs (Certified Respiratory Educators) and other healthcare professionals can work together to prepare proper action plans.
- The Annual Asthma Report of 2024 has indicated that only 33% of the respondents were aware of CREs.

Some common mistakes while using an inhaler:

- Slouching
- Not cleaning the inhaler properly: different inhalers require different techniques such as dry-powder inhalers are cleaned with a dry tissue.
- Rushing to the next dose.
- Breathing too fast or slow.
- Not shaking the canister.
- Not able to co-ordinate the release of dose with the breath.
- Not using the spacer.
- Not washing mouth after using an inhaled corticosteroid.



Other Pharmacy Services:

- Initiation of medication therapy by the pharmacists with APA (Additional Prescribing Authority) in case of wrong inhaler being prescribed to the patient.
- Making biologics available to the patients at the right time. (expensive)
- CACP/ SMMA for medication management.
- Providing allergy shots and Vaccinations.



Better Together:
Essential Pieces in
Pharmacy – PTSA
2025

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