



ADVANCING INTEGRATED HEALTHCARE

Asthma Essentials ECHO®

Session Topic: Use of Asthma Medications/Asthma Action Plans

Facilitator: Pat Flanagan, MD

Faculty Presenter(s): Lillian Nieves, PharmD, PCHC

Case Presenter(s): Sarah Fessler, MD, EBCAP

Date & Time: November 9th, 2022 7:30am

PLEASE NOTE: Project ECHO case consultations do not create or otherwise establish a provider-patient relationship between any clinician and any patient whose case is being presented in a project ECHO setting

Care Transformation Collaborative of RI

Welcome

- This session will be recorded for educational and quality improvement purposes
- Please do not provide any protected health information (PHI) during any ECHO session



Mute your microphone when not talking.



Limit distractions as best as possible.



Use reactions & the raise hand feature.



Engage and turn your camera on if you are able.



Use the chat to ask introduce yourself, ask questions and share resources.



Engage - ask questions, offer feedback, provide support.

Agenda

Time	Topic	Presenter
7:30 – 7:35 AM	Welcome/Announcements	Pat Flanagan, MD
7:35 – 8:00 AM	Didactic Presentation	Lillian Nieves, PharmD
8:05 - 8:25 AM	Case Presentation & Discussion	Sarah Fessler, MD/Team
8:25 – 8:30 AM	Wrap up; Evaluation; Announcements	Michelle

Disclosures

Session presenters have no financial relationships with a commercial entity producing healthcare-related products used on or by patients.

If CME credits are offered, all relevant financial relationships of those on the session planning committee have been disclosed and, if necessary, mitigated.

Today's Faculty

Dr. Nieves has been working as a clinical pharmacist at The Providence Community Health Centers for the past four years. In her practice, Dr. Nieves strives to provide high quality, patient centered care that is accessible to everyONE regardless of race, ethnicity, gender, sexual orientation, cultural background, social barriers, or ability to pay. Dr. Nieves has close to 20 years of experience in diverse areas of pharmacy practice including: retail pharmacy management, hospital pharmacy, pharmaceutical industry training and more recently, ambulatory care. Dr. Nieves counterbalances her professional and family life with an advanced stress management practice that include Cross-Fit exercise, hot power yoga, acupuncture and daily meditation. These self care practices invigorate her passion to lead her life with full purpose.

Learning Objectives

Understand and be able to explain in simple terms the role medications play in asthma disease state management

Be able to assess patient/caregiver proper medication delivery techniques

Be able to explain what an Asthma Action Plan is to patients/caregivers

Learn to use quick assessment tools to identify common areas when medication effectiveness may be at risk

Treatment Goal

To prevent and mitigate asthma symptoms without the patient experiencing any limitations of daily living activities while using the least amount of medication as possible

What is happening in the lungs?

What happens normally?

Lungs bring in fresh air and push out used air

What happens during an asthma flare?

- It is harder to push used air out and pull in fresh air because:
 - the lining of the airway swells up
 - the body makes too much mucus
 - mucus clogs up the airway passages
 - muscles around the airway tighten up
 - airway narrows with is less room for air to flow through

Asthma

Two-Step Process:

1. Quiet Asthma: airway inflammation
2. Noisy Asthma: bronchospasm

Medication Misleading Labels

Rescue inhaler: don't wait to use medication until needed rescue or near death. Be specific on when patient should use medication.

As needed: vague term need medication now or maybe later. Be specific on when patient is to use each medication.

Controller medication: most asthma medications are effective in controlling symptoms because they work in different ways. It is highly unlikely, that one medication alone will provide patients with asthma full symptom control.


Mild or moderate asthma: all asthma is serious. Mild asthma symptoms can turn severe quickly.

Puffer: Inhaler asthma medications don't puff up or inflate your lungs. It depends on how medication works.

Asthma Medications: À la Carte!

AllergyAsthmaNetwork.org
800.878.4403

organization dedicated to ending needless death and suffering due to asthma, allergies and related conditions through outreach, education, advocacy and research.



SHORT-ACTING BETA₂-AGONIST BRONCHODILATORS relax tight muscles in airways and offer quick relief of symptoms such as coughing, wheezing and shortness of breath for 3-6 hours.

LONG-ACTING BETA₂-AGONIST BRONCHODILATORS relax tight muscles in airways and offer lasting relief of symptoms such as coughing, wheezing and shortness of breath for at least 12 hours.

INHALED CORTICOSTEROIDS reduce and prevent swelling of airway tissue; they do not relieve sudden symptoms of coughing, wheezing or shortness of breath.

MUSCARINIC ANTAGONISTS (ANTICHOLINERGIC) relaxer tough, reduce production, wheeze and chest tightness experienced with chronic lung diseases.

COMBINATION MEDICATIONS contain both short-acting beta₂-agonist and short-acting muscarinic antagonist.

COMBINATION MEDICATIONS contain both long-acting beta₂-agonist (LABA) and long-acting muscarinic antagonist (LAMA).

COMBINATION MEDICATIONS contain both long-acting beta₂-agonist (LABA) and long-acting muscarinic antagonist (LAMA).

BIOLOGICS target cells and pathways that cause airway inflammation; delivered by injection or IV.

BRONCHIAL THERMOPLASTY A minimally invasive procedure that uses mild heat to reduce airway smooth muscle, leading to fewer severe asthma flares, ER visits, and days lost from activities.

PDE4 INHIBITORS ease lung inflammation and reduce exacerbations.

ProAir® Digihaler® 90 mcg albuterol sulfate inhalation powder (A) (A) (G)

ProAir® HFA 90 mcg albuterol sulfate (A) (G)

ProAir® RespiClick® 90 mcg albuterol sulfate inhalation powder (A) (G)

Proventil® HFA 90 mcg albuterol sulfate (A) (G)

Ventolin® HFA 90 mcg albuterol sulfate (A) (G)

Xopenex HFA® 45 mcg levalbuterol tartrate (A) (G)

Serovent® Diskus® 50 mcg salmeterol xinafoate inhalation powder (A) (C)

Striverdi® Respimat® 2.5 mcg salmeterol hydrochloride (A) (C)

Alvesco® HFA 90, 180 mcg ciclesonide (A)

ArmoAir® Digihaler® 55, 113, 232 mcg fluticasone propionate inhalation powder (A)

Arnuity® Ellipta® 50, 100, 200 mcg fluticasone furoate inhalation powder (A)

Acomax® HFA 50, 100, 200 mcg mometasone furoate (A)

Asmanex® Twisthaler® 110, 220 mcg mometasone furoate inhalation powder (A)

Flovent® Diskus® 50, 100, 250 mcg fluticasone propionate inhalation powder (A)

Flovent® HFA 44, 110, 220 mcg fluticasone propionate (A)

Pulmicort Flexhaler® 90, 180 mcg budesonide inhalation powder (A)

QVAR® Redihaler™ 40, 80 mcg budesonide inhalation powder (A)

Atrovent® HFA 17 mcg ipratropium bromide (A)

Incruse® Ellipta® 92.5 mcg umedidinium inhalation powder (A) (C)

Spiriva® Respimat® 15 mcg tiotropium bromide inhalation powder (A) (C)

Spiriva® Respimat® 1.25, 2.5 mcg tiotropium bromide (A) (C)

Tudorza® Pressair™ 400 mcg aclidinium bromide inhalation powder (A) (C)

Combivent® Respimat® 20/700 mcg ipratropium bromide and albuterol (A) (C)

Advair Diskus® 100/50, 250/50, 500/50 mcg fluticasone propionate and salmeterol inhalation powder (A) (C) (G)

Advair® HFA 45/21, 115/21, 230/21 mcg fluticasone propionate and salmeterol inhalation powder (A) (G)

AirDuo® Digihaler® 55/14, 113/14, 232/14 mcg fluticasone propionate and salmeterol inhalation powder (A) (G)

AirDuo® RespiClick® 55/14, 113/14, 232/14 mcg fluticasone propionate and salmeterol inhalation powder (A) (G)

Breo® Ellipta® 100/25, 200/25 mcg fluticasone furoate and vilanterol inhalation powder (A) (C)

Dulera® 50/5, 100/5, 200/5 mcg mometasone furoate and formoterol fumarate dihydrate (A)

Symbicort® 80/4.5, 160/4.5 mcg budesonide and formoterol fumarate dihydrate (A) (C) (G)

Wixela™ Inhub™ 100/50, 200/50, 400/50 mcg fluticasone propionate and salmeterol inhalation powder (A) (C)

Anoro® Ellipta® 82.5/2.5 mcg umedidinium and vilanterol inhalation powder (A) (C)

Brevo® Aerosphere® 9/4.5 mcg glycopyrronium and formoterol fumarate (A) (C)

Duaklir® Pressair™ 400, 12 mcg aclidinium bromide and formoterol fumarate (A) (C)

Stiolto™ Respimat® 2.5/2.5 mcg tiotropium bromide and albuterol (A) (C)

Trelegy® Ellipta® 200/50, 50/25 mcg, 100/50, 50/25 mcg fluticasone furoate, umedidinium and vilanterol inhalation powder (A) (C)

Bretri® Aerosphere™ 100/14.8 mcg budesonide, glycopyrronium and formoterol fumarate (A) (C)

Cinqair® reslizumab (A)

Depixent® dupilumab (A)

Fasenra™ benralumab (A)

Nucala® mepolizumab (A)

Xolair® omalizumab (A)

Daliresp® 250, 500 mcg roflumilast (A) (C)

Reviewed by Dennis Williams, PharmD ©2021 Allergy & Asthma Network

Quick Relief Bronchodilators

Drug Names: ProAir HFA (albuterol) • ProAir Respiclick • Proventil HFA • Ventolin HFA Xopenex HFA (levalbuterol)

How does medication work?

Relief symptoms of noisy asthma like coughing, wheezing and shortness of breath by relaxing the muscles around the airways

Important Counseling Points:

- ✓ Use at the first sign of shortness of symptoms
- ✓ DO NOT WAIT for symptoms to go away on their own
- ✓ Use according to patient's Asthma Action Plan (AAP)
- ✓ Use before exercise or exposure to triggers to prevent symptoms

What to expect?

Improved breathing within minutes, lasting 3-6 hours

Possible increased heart rate and shakiness, children may become more energetic and excited

Long-Acting Bronchodilators

Drug Name: Severent (salmeterol)

How does medication work?

Help reduce bronchospasm for up to 12 hours when taken as directed

Important Points:

- ✓ Should always be used along with an inhaled corticosteroid when treating asthma
- ✓ Do NOT use more often and once every 12 hours
- ✓ Do not use to relieve sudden asthma symptoms

What to expect?

There is no immediate sensation that is working

When use as directed, over time, less quick relief bronchodilator is needed

Inhaled Corticosteroids (ICS)

Drug Names: Alvesco (ciclesonide) • Arnuity Ellipta (fluticasone) • Asmanex (mometasone) • Asmanex Twisthaler (mometasone) • Flovent (fluticasone) Diskus and HFA • Pulmicort Flexhaler (budesonide) • QVAR Redihaler (beclomethasone)

How does the medication work?

Help treat the quiet side of asthma. They decrease and prevent airway inflammation.

Important Counseling Points:

- ✓ Take daily as prescribed even if feeling well
- ✓ Rinse mouth with water or brush teeth immediately after use
- ✓ Do NOT at higher doses or more frequently than prescribed
- ✓ Tell your health care provider if using more than one type of corticosteroid medication ie: nasal sprays, topical creams, eye drops, or tablets
- ✓ ICS are not related to anabolic steroids which are used by some athletes to bulk up or build muscle mass

What to expect?

There is no immediate sensation that is working

When use as directed will see a gradual improvement of symptoms

Over time less quick relief bronchodilator is needed

Long-Acting Muscarinic Antagonists

Drug Names: • Atrovent HFA (ipratropium) • Incruse Ellipta (umeclidinium) • Spiriva Respimat (tiotropium) Spiriva Handihaler (tiotropium) • Tudorza Pressair (aclidinium)

How does the medication work?

Open asthma constricted airways for approximately 24 hours and reduce the risk of asthma flares.

Important Points:

- ✓ Take daily as prescribed as an inhalation spray; for patients 6 years of age and older.
- ✓ May be prescribed as an add-on treatment for patients who still experience asthma symptoms while taking a long-acting beta agonist or inhaled corticosteroids
- ✓ May cause allergic reactions, such as hives, itching, or swelling of the lips, tongue or throat making it difficult to breathe or swallow; if these symptoms occur, stop taking the medication and seek emergency medical care
- ✓ May cause breathing to suddenly worsen; if this happens, use a quick-relief inhaler and seek medical care.

What to expect?

A gradual improvement in asthma symptoms and control

Reduced risk of experiencing an asthma flare

Possible side effects: sore throat, sinus problems, upset stomach, vomiting, constipation, urinary retention, rapid heartbeat; severe allergic reaction requiring emergency epinephrine may occur

Combination Medications

Drug Names: • Advair Diskus and HFA (fluticasone and salmeterol) • AirDuo Digihaler (fluticasone and salmeterol) • Airduo Respiclick (fluticasone and salmeterol) • Anoro Ellipta (umeclidinium and vilanterol) • Bevespi Aerosphere (glycopyrrolate and formoterol) • Breo Ellipta (fluticasone furoate and vilanterol) • Breztri Aerosphere (budesonide, glycopyrrolate and formoterol fumarate) • Dulera (mometasone and formoterol) • Stiolto Respimat (tiotropium and olodaterol) • Symbicort (budesonide and formoterol) • Trelegy Ellipta (fluticasone, umeclidinium and vilanterol) • Wixela Inhub (fluticasone and salmeterol)

How does the medication work?

Open asthma constricted airways for approximately 24 hours and reduce the risk of asthma flares.

Important Points:

- ✓ Take no more than once every 12 hours
- ✓ Do not use to relieve sudden-onset asthma symptoms; use the quick relief bronchodilator listed in the Asthma Action Plan

What to expect?

No immediate sensation that it is working

Over time, less need for quick relief bronchodilators

Leukotrienes Modifiers

Drug Names: • Singulair (montelukast) • Accolate (zarfirlukast) • Zyflo (zileuton)

How does the medication work?

Block the action of leukotrienes, chemicals involved in immune responses that cause inflammation, swelling and airway constriction.

Important Points:

- ✓ Available as granules, chewables and tablets
- ✓ Do not use to treat sudden-onset asthma symptoms; always have a quick relief bronchodilator
- ✓ May reduce severity of exercise-induced asthma
- ✓ Montelukast may cause side effects such as sleep disturbances and behavior or mood changes. Contact healthcare provider if these occur.

What to expect?

No immediate sensation that it is working

A gradual improvement in allergy and asthma symptoms

Biologicals (Immunomodulators)

Drug Names: Cinqair (reslizumab) • Dupixent (dupilumab) • Fasenra (benralizumab) • Nucala (mepolizumab) • Xolair (omalizumab)

How does the medication work?

Target specific cells and pathways in the inflammation cascade that cause allergic inflammation linked to asthma

Important Points:

- ✓ Delivered by injection or IV in a doctor's office
- ✓ Approved as add-on therapy for patients who have specific phenotypes of severe asthma not controlled by other medications

What to expect?

A gradual reduction in asthma and/or allergy symptoms. No immediate sensation that it is working

Possible side effects: injection site reactions such as pain, swelling, redness or itching at site of injection; severe allergic reaction requiring emergency epinephrine may occur

Important NOTE

If symptoms are not going away as expected or if medication is wearing off and more medication is needed it could be a sign of:

1. Asthma worsening- it is time to activate sick day plan and/or call the patient's health care provider
2. A partially clogged inhaler
3. A dose was given without a primed dose
4. An empty inhaler
5. An expired inhaler
6. Poor inhaler technique

Mastering Metered Dose Inhaler (MDI) Technique

Two types of inhalers:

1. Metered Dose Inhalers: pressurized inhaler release medication in a fine spray
2. Dry powder Inhalers: many different styles release medication in a fine dry powder

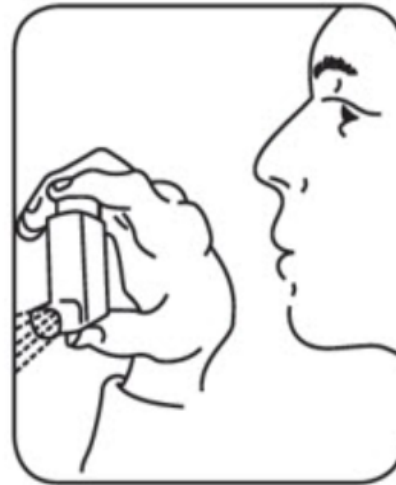
Before using review patient instructions for use with patients

If MDI not used in past 7 days or more reprime before use

Priming Your Albuterol Sulfate HFA Device:

Your Albuterol Sulfate HFA device must be primed before you use it for the first time or if your device has not been used for more than 14 days in a row. **Do not** prime your Albuterol Sulfate HFA device every day.

- Remove your Albuterol Sulfate HFA device from its package.
- Remove the protective dust cap from the mouthpiece.
- Shake the inhaler well, and spray it into the air away from your face. See Figure C.



Mastering Metered Dose Inhaler (MDI) Technique

Using Your Albuterol Sulfate HFA Device:

Step 1. **Shake the inhaler well** before each spray. Take the cap off the mouthpiece of the actuator.

Step 2. Hold the inhaler with the mouthpiece down. See Figure E.

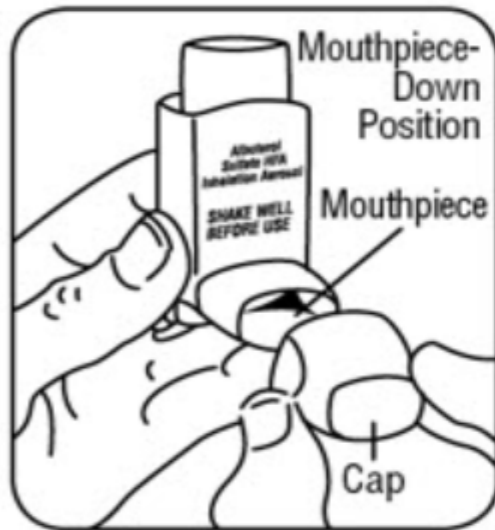


Figure E

Step 3. **Breathe out through your mouth** and push as much air from your lungs as you can. Put the mouthpiece in your mouth and close your lips around it. See Figure F.

Mastering Metered Dose Inhaler (MDI) Technique

Step 4. Push the top of the canister all the way down while you breathe in deeply and slowly through your mouth. See Figure F.

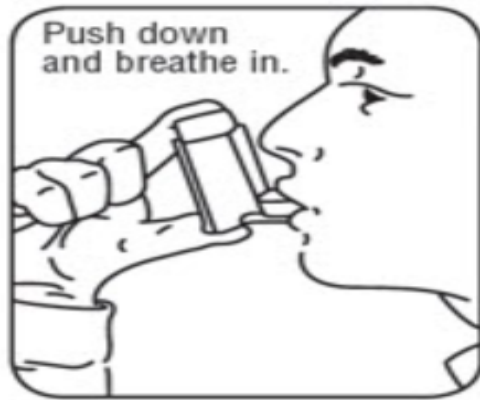


Figure F

Step 5. Right after the spray comes out, take your finger off the canister. After you have breathed in all the way, take the inhaler out of your mouth and close your mouth.

Step 6. **Hold your breath as long as you can**, up to 10 seconds, then breathe normally.

If your doctor has told you to use more sprays, wait 1 minute and shake the inhaler again. Repeat Steps 2 through Step 6.

Step 7. Put the cap back on the mouthpiece after every time you use the inhaler. Make sure the cap snaps firmly into place.

Mastering Use of MDIs with a Spacer



Why use?

It decreases the velocity of medication delivery so less medication is swallowed and more goes into the lungs

Recommend for:

Patients who have difficulty coordinating inhaling the medication in the canister and breathing in at the right time

Particularly, the elderly and children $\geq 5y/o$

Ask patients if they received spacer at the pharmacy

Most insurance companies pay for 2 spacers/yr

Mastering Metered Dose Inhaler (MDI) Technique without a Spacer



1. If the patient doesn't have a spacer some providers recommend holding the inhaler 1 to 2 inches (or two finger widths) in front of the open mouth
2. Patient breathes in slowly
3. As patient starts breathing in slowly through the mouth, they press down on the inhaler once
4. Repeat steps 1 to 3 in 1 to 3 minutes

Mastering Dry Powder Inhalers (DPI) Technique

Step 1: Follow device instructions for use to preload the dose of medication.

Step 2: Stand or sit up straight and breathe out completely immediately before use.

Step 3: Put the mouthpiece into your mouth, close your lips tightly around it and breathe in quickly and forcefully.

Step 4: Take the DPI out of your mouth, hold your breath for 5-10 seconds, then exhale slowly.

Step 5: If your treatment plan requires a second dose, reload and repeat the steps 2 and 3.

Step 6: When using a capsule device, open the chamber and check if the powder has been fully inhaled. If not fully inhaled, repeat 2 and 3. When the capsule is empty, remove and discard it.

Step 7: Close the device and store in a dry place. Do not wash with water; use only a dry cloth to wipe the mouthpiece.

Mastering Dry Powder Inhalers (DPI) Technique

Quick Tips:

- ✓ Do not open device until ready to use it
- ✓ Never swallow capsule. Always use it with its device
- ✓ Do not shake the DPI
- ✓ DO NOT use with a holding chamber or spacer with a DPI
- ✓ Point mouthpiece should be pointed up or horizontal when using to prevent dumping the medication after loading the dose
- ✓ Rinse your mouth after using
- ✓ Check dose counter to alert you to the number of doses remaining, or when the device is almost empty
- ✓ DPI should not get wet wipe mouthpiece regularly with a clean, dry cloth
- ✓ If you experience coughing after inhaling the dry powder talk with your health care provider

Mastering Nebulizer Use

Helpful as add on treatment for small children and others who are unable to coordinate inhaler timing

Step 1: Wash hands

Step 2: Check medication

Is it expired, discolored, tampered or has it been exposed to extreme temperatures? If yes, replace.

Step 3: Gather equipment

Step 4: Sit back, relax. Use a mask.

Do not “blow by” or mist the medication in front of face, releases medication into the air and NOT the lungs.

Step 6: Wash up

Asthma Action Plan

Physician Orders



Date: _____
 Patient Name: _____
 Date of Birth: _____

TO BE COMPLETED BY PHYSICIAN/HEALTHCARE PROVIDER

Take _____ 15 to 20 minutes before sports and play.
 Student may: Self Carry Self Administer

GREEN: WELL PLAN // My child feels well.

No cough / no wheeze
 Can play or exercise normally
 Peak flow number above _____
 Personal best peak flow is _____

Use these medicines every day to control asthma symptoms. Remember to use spacer with inhaler.

MEDICINE	DOSE	HOW TO TAKE	WHEN TO TAKE

YELLOW: SICK PLAN // My child does not feel well.

Coughing
 Wheezing
 Tight chest
 Shortness of breath
 Waking up at night
 First sign of a cold
 Peak flow number ranges between _____ to _____

Continue DAILY MEDICINES and ADD:

QUICK RELIEF	DOSE	HOW TO TAKE	WHEN TO TAKE

If needing quick relief medicine more than every 4 hours or every 4 hours for more than a day, call the doctor at the phone number below. Call doctor/clinic anytime if there is no improvement or with any questions! For School Use: Contact Parent.

RED: EMERGENCY PLAN // My child feels awful.

Breathing is hard and fast
 Wheezing a lot
 Can't talk well
 Rib or neck muscles show when breathing
 Nostrils open wide with breathing
 Medicine is not helping

Take quick relief medicine _____ puffs, or one nebulizer/breathing treatment every 15 minutes until you reach a doctor.
 If a doctor cannot be reached, please go to the Emergency Room or Call 911.
 For School Use: Follow Emergency Plan and contact parent.

Physician's name (print): _____ Physician's phone number: _____
 Physician's signature: _____

TO BE COMPLETED BY PARENT OR GUARDIAN

TRIGGERS

<input type="checkbox"/> Life threatening allergy to:	<input type="checkbox"/> Pollen	<input type="checkbox"/> Stuffed animals	<input type="checkbox"/> Dust mites / dust
<input type="checkbox"/> Cold air / changes in weather	<input type="checkbox"/> Cockroaches	<input type="checkbox"/> Animal fur	<input type="checkbox"/> Mold
<input type="checkbox"/> Cigarette Smoke	<input type="checkbox"/> Strenuous exercise	<input type="checkbox"/> Colds / flu	<input type="checkbox"/> Other: _____

I authorize the exchange of medical information about my child's asthma between the physician's office and school nurse.

Parent/guardian name (print): _____ Parent/guardian phone number: _____
 Parent/guardian's signature: _____ Cell phone number: _____

Asthma Action Plan (AAP)

Personalized treatment guide to help patients/caregivers recognize, treat and prevent asthma related symptoms

- What medications patient should take? How much? How often and in what order to take? What to expect from taking the medication?
- What asthma triggers exist and how to eliminate or mitigate exposure?
- How to monitor and track asthma symptoms?
- How to recognize and manage asthma symptoms worsening? When to seek help?

Is your patient's asthma under "control"?

Did your patient had an asthma exacerbation that required medical treatment in the past year?

Did your patient have 3 or more flare ups in the past 3 months?

Does your patient have symptoms that prevent them from doing their daily activities?

Does your patient hesitate to engage in physical activity because of fear of a flare up?

Does your patient wake up at night because of excessive coughing?

Asthma Therapy Assessment Questionnaire (ATAQ)

In the past 4 weeks, did you:

a. Miss any work, school, or normal activity because of your asthma?

_____ Yes (1) _____ No (0) _____ Unsure (1)

b. Wake up at night because of asthma?

_____ Yes (1) _____ No (0) _____ Unsure (1)

c. Believe that your asthma is well controlled?

_____ Yes (1) _____ No (0) _____ Unsure (2)

Do you use an inhaler for quick relief from asthma symptoms?

_____ Yes (1) _____ No (0) _____ Unsure (1)

If yes, in the past 4 weeks, what was the highest number of puffs in 1 day you took of the inhaler?

_____ 0 (0) _____ 1-4 (0) _____ 5-8 puffs (1) _____ 9-12 puffs (1) _____ More than 12 puffs (1)

Add the numbers enter the total score: _____

If the score is 1 or greater, discuss questionnaire with health care provider.

Quick Assessment Tool

Rules of Two

Your treatment is **NOT** working if:

- ✓ You have asthma symptoms and require use of a quick-relief bronchodilator two or more times a week.
- ✓ Your asthma wakes you up two or more times a month.
- ✓ You are refilling your quick-relief bronchodilator canister two or more times a year.

What if your patient's asthma under NOT "control"?

- Action(s) will depend on the severity of symptoms and specific circumstances
- Ask motivational interviewing questions to determine what the problem may be:
 - ✓ What is getting on the way of effective medication use?
 - ✓ Are there any social determinants of health to consider?
 - ✓ Is the patient having trouble affording the medication(s)? Does the patient have a spacer?
 - ✓ Is the patient having difficulty with transportation to and to and from the pharmacy?
 - ✓ Are there any environmental triggers that need to be addressed? Who to contact to fix?
 - ✓ Is the barrier lack knowledge of how to appropriately use the medications and devices?
 - ✓ Is it lack medication adherence? And Why?
 - ✓ Is there a lack of understanding of how to follow their individualized asthma action plan?
 - ✓ Is the patient administering medications in the wrong order or given at the wrong times?
 - ✓ Is it possible to assist patient/caregiver troubleshoot the device? (picture/video/hands on)
 - ✓ Is there a lack of medical access when the patient is sick?

Conclusions

- ✓ Simplify asthma disease state management education
- ✓ Explain how medications work to target and improve visible and invisible asthma symptoms
- ✓ Review appropriate medication delivery technique often
- ✓ Ensure patients/caregivers know how to use their Asthma Action Plans (AAPs)
- ✓ Use quick assessment tools to identify common areas when medication effectiveness may be at risk

Resources

- State of RI Asthma Action Plan - <https://health.ri.gov/publications/actionplans/Asthma.pdf>
- Asthma Therapy Assessment Questionnaire (ATAQ) Merck Co. - http://centegra.org/wp-content/uploads/2014/10/ATAQ-Children_questionnaire-2014.pdf
- *Rules of Two Baylor Health Care System. 2011*
- Albuterol HFA MDI Patient Instructions for Use - <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=7bb5b6dd-9105-4ee7-b205-ed79cf4b371b>
- How to use a MDI with a spacer and mask patient handouts - <https://www.chop.edu/health-resources/how-use-metered-dose-inhaler-spacer-and-mask>
- Video: How to use an MDI with a spacer and mask - <https://www.youtube.com/watch?v=Br9irulpbsc>
- Video and Handouts on how to use an MDI with a spacer and mask - <https://www.aerochambervhc.com/instructions-for-use>
- Asthma Control Test - <https://www.asthma.com/understanding-asthma/severe-asthma/asthma-control-test/>
- Respiratory Inhaler Poster - <https://allergyasthmanetwork.org/news/inhalers-at-a-glance-posters-resources/>



ADVANCING INTEGRATED HEALTHCARE

Questions?



ADVANCING INTEGRATED HEALTHCARE

Asthma Essentials ECHO® Case Presentation

PLEASE NOTE: Project ECHO case consultations do not create or otherwise establish a provider-patient relationship between any clinician and any patient whose case is being presented in a project ECHO setting

Care Transformation Collaborative of RI

Questions? And Contact information

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- Sarah Fessler, MD
 - sfessler@ebcap.org

Announcements & Reminders

Next Session Date:	Dec 14 th @ 730am
Topic:	Assessing & Managing Environmental Triggers
Presenter:	<i>Jim Ginda, MA, RRT, AE-C, FAARC</i>
Case Presenter:	<i>Marie Habershaw, School Nurse/ Healthcare Coordinator, Diocese of Providence</i>



CME Credits

(currently available for MDs, PAs, Rx, RNs and NPs)



ADVANCING INTEGRATED HEALTHCARE

- CME Credits – Please request session credits when filling out the evaluation at the end of the meeting.
- Evaluation/Credit Request Form: <https://www.surveymonkey.com/r/M9VJ8LT>

The AAFP has reviewed ‘ECHO Series Focused on Best Practices and QI,’ and deemed it acceptable for AAFP credit. Term of approval is from 09/16/2022 to 09/16/2023. Physicians should claim only the credit commensurate with the extent of their participation in the activity. NPs and RNs can also receive credit through AAFP’s partnership with the American Nurses Credentialing Center (ANCC) and the American Academy of Nurse Practitioners Certification Board (AANPCB).