


(Em)power Moves for better Asthma Outcomes
 Asthma Best Practices Across Settings

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Asthma Ready® Communities
<https://showmeecho.org/clinics/asthma/>

Asthma Ready® Communities | Ben Francisco 3/22



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I have no disclosures of potential conflict of interest.

Asthma Ready® Communities | Ben Francisco 3/22

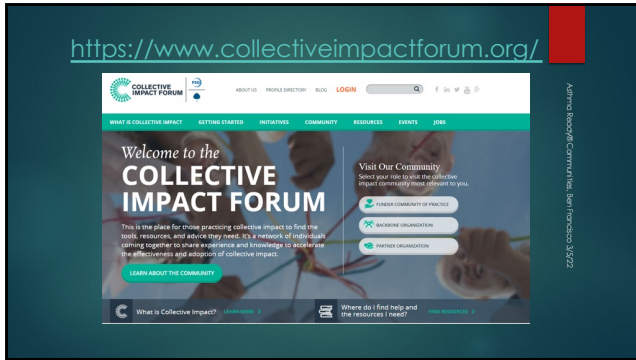
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Goals and Learning Objectives

- ▶ Identify settings of care where adoption of best asthma practices improves outcomes
- ▶ Describe 3 best practices that reflect adoption of expert guidelines beyond the clinical setting

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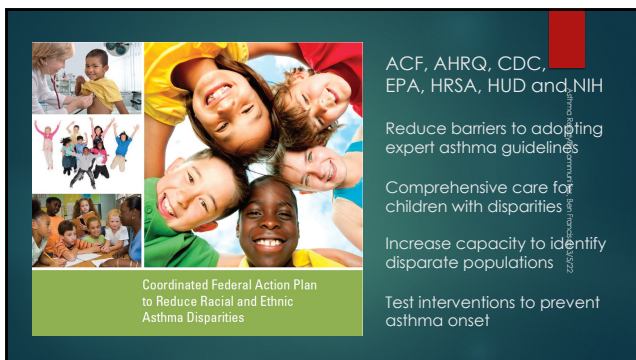
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How Do We Implement Best Practices for Asthma Management

- ▶ Learning together (ECHO®)
- ▶ Academic Detailing (supplies, routines)
- ▶ Performance feedback (claims data)
- ▶ Practice facilitation (seeing patients)



Implementing Asthma Guidelines Using Practice Facilitation and Local Learning Collaboratives: A Randomized Controlled Trial

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4018371/>

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Missouri Asthma Assets

- ▶ Asthma ECHO® has been funded for 7 years allowing >1400 health professionals to learn together to adopt best practices
- ▶ Missouri Medicaid (MO HealthNet) provides access to administrative claims data that are being used to identify those at risk and to evaluate the impact of interventions
- ▶ Strong leadership for personal & environmental health is influencing policy and practice

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THE TRANSFORMATIVE MODEL IN MEDICAL EDUCATION AND CARE DELIVERY

<https://www.youtube.com/watch?v=VAMaHP-tEwk>

Project ECHO® (Extension for Community Healthcare Outcomes) helps democratize medical knowledge and develops specialty care capacity in underserved communities.

Using a revolutionary model of telementoring, collaborative medical education and care management, Project ECHO empowers front-line primary care professionals to provide the right care, in the right place, at the right time.

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The AIR Doctrine (Asthma In Remission)

- ▶ Born with the genetic potential to develop asthma
- ▶ Epigenetics determine the expression of disease – ETS and air quality, what you eat and your weight status, viral infections, problems with your nose, GERD, other
- ▶ Intrinsic factors – gaining weight, lipid metabolism, activation of the inflammatory cascade, T2 stimulation, including proliferation of eosinophils with airway infiltration
- ▶ Extrinsic factors – environmental irritants, allergens, infections

Asthma: Beyond the Conventional, Benfante et al. 2022

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The AIR Doctrine (Asthma In Remission)

- ▶ 90 days of ICS w/reduction of contributing factors begins remission in most children
- ▶ If well controlled for 3 months step down
- ▶ If well controlled for 3 months step down AGAIN
- ▶ If well controlled for 3 months step down and AGAIN
- ▶ When on low dose go to NO dose of ICS. Continue hypertonic nasal hygiene with trigger avoidance
- ▶ Is asthma in REMISSION? Monitor lung function (FEV1, ratio and FEF75) and ACT. Manage co-morbidities

Asthma: Beyond the Conventional, Benfante et al. 2022

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3 things to help keep asthma in remission

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Before you step up asthma therapy...

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Assign a grade to the US Health System for Asthma Care Quality and Value

- ▶ **A** - excellent
- ▶ **B** - good
- ▶ **C** - average
- ▶ **D** - poor
- ▶ **F** - failing

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❖ Asthma Risk Panel Reports

Based on payer claims data:

- ✓ Med refill hx (inhaled steroids, rescue meds, oral steroids)
- ✓ Use of montelukast
- ✓ Visits for asthma (PCP, UC/ER, hospital stays)
- ✓ Inhaler instruction provided (94664)
- ✓ Comorbidities

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❖ Asthma Risk Panel Reports

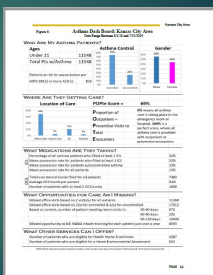
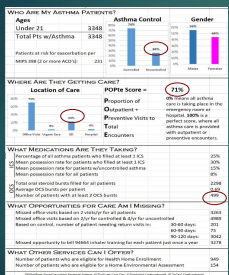
Summary report dashboard "Asthma Report Card"

- ✓ Tracks overall level of asthma control
- ✓ Calculates POPTE score (% of care in outpt settings)
- ✓ Displays trends in medication usage
- ✓ Summarizes incidence of comorbidities
- ✓ Looks at testing trends such as spirometry vs CXRs
- ✓ Identifies missed opportunities for proactive care
- ✓ Provides action items for providers

Asthma Report Card - San Francisco, CA 2022

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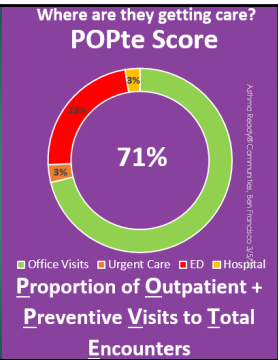
Proportion of Outpatient Asthma Care urban core 69% or rural region 71% - "D"



Asthma Report Card - San Francisco, CA 2022

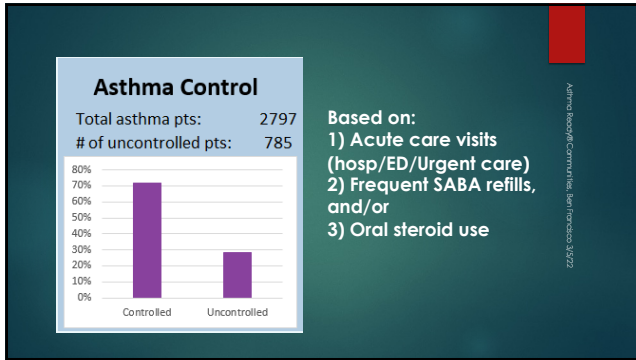
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Metric = POPTE
0% means all asthma care is taking place in the emergency room or hospital. **100%** is a perfect score, where all asthma care is provided with outpatient or preventive encounters.

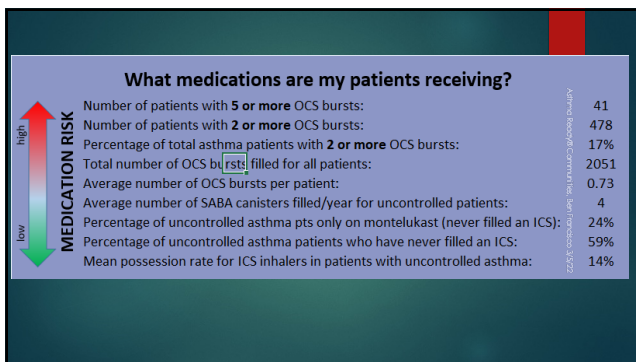


Asthma Report Card - San Francisco, CA 2022

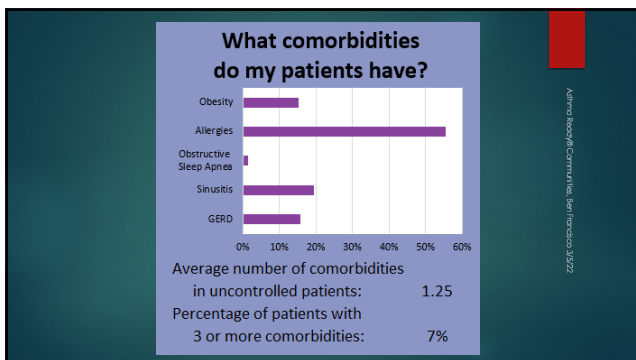
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What opportunities for practice growth am I missing?

Missed opportunity to bill 94664 inhaler training for each patient minimum of once/year	2725
Missed opportunity for office visits (based on 2 visits/year for all patients)	2631
Missed office visits (based on 2/year for controlled & 4/year for uncontrolled)	4201

Asthma Risk Panel Reports - Performance 3/22

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Asthma Risk Panel Report – Dashboard

My Asthma Dashboard

Where are they getting care? **POpTE Score**

71%

Proportion of Outpatient + Preventive Visits to Total Encounters

How can I help improve asthma control for my patients?

- 85% of uncontrolled patients have not used controller in the reporting period
- 92% of uncontrolled patients have not used controller in the reporting period
- 93% of uncontrolled patients have not used controller in the reporting period
- 94% of uncontrolled patients have not used controller in the reporting period

What comorbidities do my patients have?

Average number of comorbidities in uncontrolled patients: **1.25**

Percentage of patients with 3 or more comorbidities: **7%**

What medications are my patients receiving?

Number of patients with 8 or more OCS bursts: **41**

Number of patients with 2 or more OCS bursts: **408**

Percentage of total asthma patients with 8 or more OCS bursts: **13%**

Percentage of total asthma patients with 2 or more OCS bursts: **20%**

Average number of OCS bursts per patient: **0.73**

Percentage of uncontrolled asthma patients (never filled on ICS): **24%**

Percentage of uncontrolled asthma patients who have never filled on ICS: **59%**

Mean possession ratio for ICS inhalers in patients with uncontrolled asthma: **14%**

What tests are they getting?

Percent of pts age 4+ with spirometry: **8%**

Avg # of OCS in uncontrolled pts: **0.60**

of patients with 2 or more OCS: **0**

What other services are my patients eligible for?

Number of patients who are eligible for Preventive Asthma Services at home: **791**

Total number of patients who are eligible for Health Home enrollment: **739**

Number of patients eligible but not yet enrolled in the Health Home program: **739**

What opportunities for practice growth am I missing?

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Asthma Risk Panel Reports - PHI

Detailed report listing individual patient data

- Report can be worked by staff to follow up with high utilizers
- Lists data for each eligible patient in spreadsheet format
- Columns can be sorted to display the data in different ways (such as sorting to see who has the most oral steroid fills, or the most inpatient days for asthma)

Asthma Risk Panel Reports - Performance 3/22

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The screenshot shows a data dashboard with a header row containing various filters and tabs. Below the header is a large grid of data with alternating light blue and white rows. The columns contain various numerical and categorical data points.

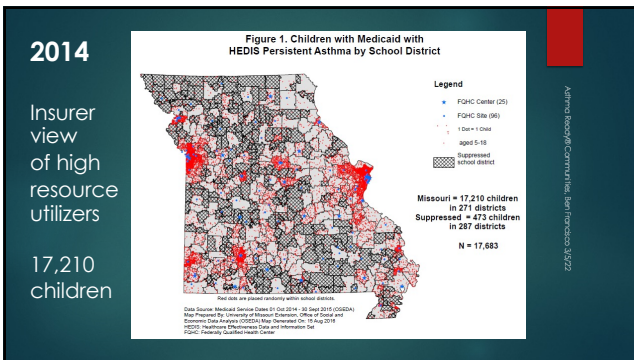
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Challenges and Assets

- ▶ >50,000 children with asthma enrolled in Medicaid, 95% among 3 MCOs
- ▶ One third experiencing uncontrolled asthma today
- ▶ Huge disparities, African American children in urban core ED rate 16 times the state average
- ▶ Rural persons have worse asthma outcomes

https://www.cdc.gov/mmwr/volumes/70/ss/ss7005a1.htm?cid=ss7005a1_w

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Find "your" patient\$

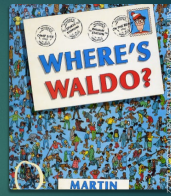
How would you find people with hypertension, hyperlipidemia or diabetes? BP, lipid profile, FBS/A1C

Undiagnosed – **monitor FEV1 at each visit**, document % personal best, response to albuterol



Review claims data – who needs care?

Look at other service lines – dental and behavioral health, ED, inpatient



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NIH National Library of Medicine
National Center for Biotechnology Information

PubMed.gov

Advanced

Save Email

> J Asthma. 2015 Jun;52(5):505-11. doi: 10.3109/02770903.2014.984842. Epub 2014 Nov 25.

Sensitivity of different spirometric tests for detecting airway obstruction in childhood asthma

Benjamin Francisco ¹, Zarah Ner, Bin Ge, John Hewett, Peter König

Affiliations + expand
PMID: 25375906 DOI: 10.3109/02770903.2014.984842

<https://pubmed.ncbi.nlm.nih.gov/25375906/>

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We Can Do It!

Primary Care
High Impact – low cost
PLAN & IMPLEMENT BEST PRACTICES

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Cost of Asthma Encounters (Medicaid)

1 INPATIENT STAY=
5 ED ENCOUNTERS=
20 SCHEDULED OUTPATIENT VISITS

AVERAGE # ANNUAL OUTPATIENT VISTS~1

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Implementing Asthma Best Practices

<https://h2.formsite.com/openform/form30/index.html>

Asthma Care – Routine in My Practice

If anyone on your team routinely provides this service check the adjacent box. If it is unlikely that the service is provided routinely in your practice setting, do not check the box.

About You

Name *

Organization or Clinic Name *

Email Address *

Which of these role(s) best describes you in the care of support of people with asthma? *

Nurse Practitioner Physician
 Nurse Community Health Worker

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Results of Asthma Care-Routine in My Practice Survey

N=55 providers

Mean total score for these 13 items = 36.6%

Question Inventory (this is a routine activity of my practice)	Items (Physician, etc. other)	% of providers
Q1. Assess Severity Initial Visit. Assess and document asthma severity at initial visit and update severity when well controlled based on agreed therapy step required (poorly/uncontrolled, moderate or severe persistent) (High Quality Medical Care)	35	63.3%
Q2. Assess Asthma Control. Assess and document asthma control at every visit (well controlled, not well controlled, or very poorly controlled) (High Quality Medical Care)	32	58.2%
Q3. FEV1. Assess, interpret and document FEV1 for all patients age 5 and older at each visit (High Quality Medical Care)	6	10.9%
Q4. Spirometry. Order and evaluate spirometry every 1-2 years for all patients 4 years and older (VC, FEV1, and FEV1/FVC), determine lung growth pattern and evidence for lung function impairment (High Quality Medical Care)	13	23.6%
Q5. Inhalation Technique. Assess adequacy of inhalation technique for ICS and LABA inhalers (MDI and DPI) (ongoing). Document inhaler use and time before and after coaching (High Quality Medical Care)	16	29.1%
Q6. Use Validated Asthma Control Test. Perform (or compare) computerized validated asthma control test at each visit. TRAC (0-4 years), ACT (4-11 years) for 5-11 or ACT (12 years and older scores) (High Quality Medical Care)	15	27.3%
Q7. Confirm Medication Adherence. For patients with uncontrolled asthma the last 3 ICS dispensing dates will be confirmed to determine if adherence is supported (call patients pharmacy or review claims data requests) (High Quality Medical Care)	25	45.5%
Q8. Home Environment Assessment Referral. For uncontrolled asthma with good inhaler technique and adherence complete an asthma trigger screening tool and consider referral for home environmental assessment & education (High Quality Medical Care)	12	21.8%
Q9. Asthma Comorbidity. For uncontrolled asthma with good inhaler technique and adherence evaluate and document clinical history/results for allergic rhinitis (nasal antihistamine, saline or immunotherapy for perennial allergens), sinusitis, gastroesophageal reflux, and other comorbidities (High Quality Medical Care)	30	54.6%
Q10. Written Asthma Action Plan. All patients receive a written asthma action plan that documents peak flow ranges, best FEV1 on record, an ICS step plan and an order for alternative path to visit holding chamber for the evening asthma (High Quality Medical Care)	21	38.2%
Q11. Key Message Prompts in EHR. All patients will have a "key message" EHR dashboard to ensure delivery of critical guidance and counseling over the last 3 asthma visits (High Quality Medical Care)	3	5.5%
Q12. Self-management Education. High risk and impacted patients will be enrolled for standardized, evidence-based education for asthma self-care (or dependent care) (High Quality Medical Care)	18	32.7%
Q13. Timely Follow-up Visit. Ensure that follow-up visits are set at appropriate intervals matching level of control (1-2 weeks for very poorly controlled, 2-4 weeks for not well controlled and 4-6 months for well controlled) (High Quality Medical Care)	36	65.5%

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Missouri Telehealth Network
University of Missouri Health

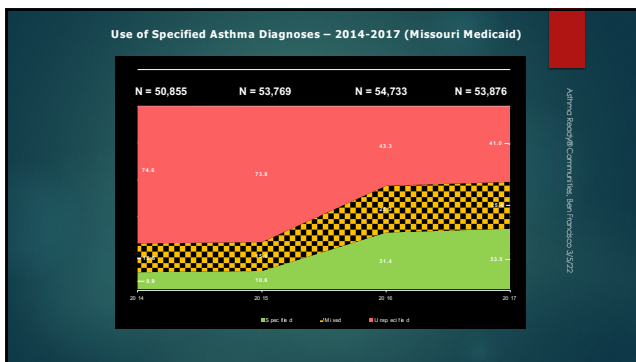
Asthma Best Practice #1

- Assess and document asthma severity at initial visit and update severity when well controlled based on lowest therapy step required (intermittent, mild, moderate or severe persistent)

Show-Me ECHO

Asthma Best Practice Communitel, Jan 16/2022, 3:52Z

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Asthma Care Quick Reference (EPR3)

http://www.nhlbi.nih.gov/guidelines/asthma/asthma_qr.pdf

Asthma Care Quick Reference

DIAGNOSING AND MANAGING ASTHMA

Guidelines from the National Asthma Education and Prevention Program
EXPERT PANEL REPORT 3

The goal of this asthma care quick reference guide is to help clinicians provide quality care to people who have asthma.

Quality asthma care involves not only initial diagnosis and treatment to achieve asthma control, but also long-term, regular follow-up care to maintain control.

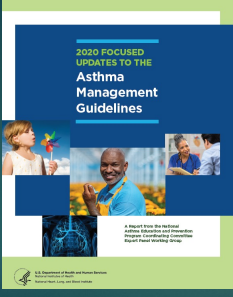
Asthma control focuses on two domains: (1) reducing the frequency and severity of symptoms and (2) preventing asthma-related morbidity and mortality.

INITIAL VISIT

- Diagnose asthma
- Assess asthma severity
- Select medications & demonstrate use
- Develop written asthma action plan
- Establish follow-up arrangement

Asthma Best Practice Communitel, Jan 16/2022, 3:52Z

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2020 FOCUSED UPDATES TO THE Asthma Management Guidelines

A Report From the National Asthma Education and Prevention Program Expert Panel on Asthma Diagnosis and Management Working Group

EPR3 Updates - 6 selected topics

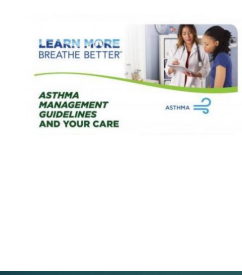
- [Role of Immunotherapy](#)
- [Intermittent ICS and Step Plans](#)
- [Long-Acting Muscarinic Antagonists](#)
- [Effectiveness of Indoor Allergen Reduction](#)
- [Effectiveness and Safety of Bronchial Thermoplasty](#)
- [Exhaled Nitric Oxide \(FeNO\)](#)

• Clinician's Guide – synopsis (16)
 • At-Glance Therapy Steps by age (6)
 • Focused Updates (322)
 • 7 Patient Fact Sheets & AAP (18)

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Asthma Updates 2020 – Fact Sheets



LEARN MORE BREATHE BETTER

ASTHMA MANAGEMENT GUIDELINES AND YOUR CARE

ASTHMA

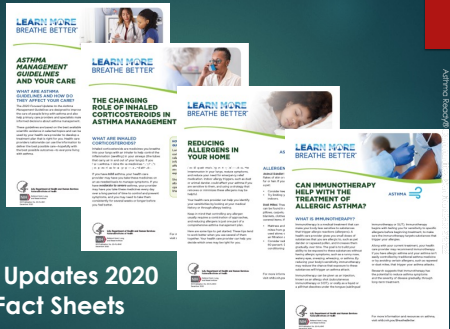
Fact Sheets

Share these fact sheets to help patients understand different treatment options and asthma management:

- [Asthma Management Guidelines and Your Care](#)
- [The Changing Role of Inhaled Corticosteroids in Asthma Management](#)
- [Long-Acting Muscarinic Antagonists \(LAMAs\)](#)
- [Reducing Allergens in Your Home](#)
- [Can Immunotherapy Help with the Treatment of Allergic Asthma?](#)
- [What is Fractional Exhaled Nitric Oxide \(FeNO\) Testing?](#)

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LEARN MORE BREATHE BETTER

ASTHMA MANAGEMENT GUIDELINES AND YOUR CARE

LEARN MORE BREATHE BETTER

THE CHANGING ROLE OF INHALED CORTICOSTEROIDS IN ASTHMA MANAGEMENT

LEARN MORE BREATHE BETTER

REDUCING ALLERGENS IN YOUR HOME

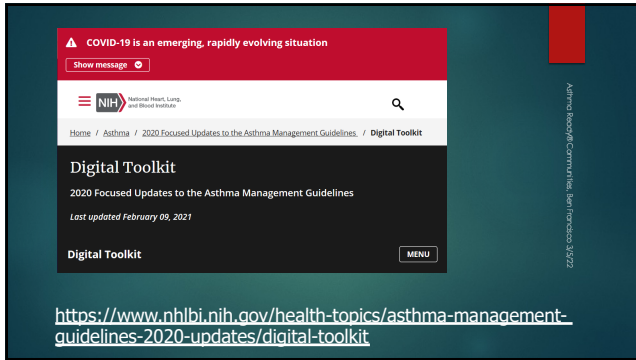
LEARN MORE BREATHE BETTER

CAN IMMUNOTHERAPY HELP WITH THE TREATMENT OF ALLERGIC ASTHMA?

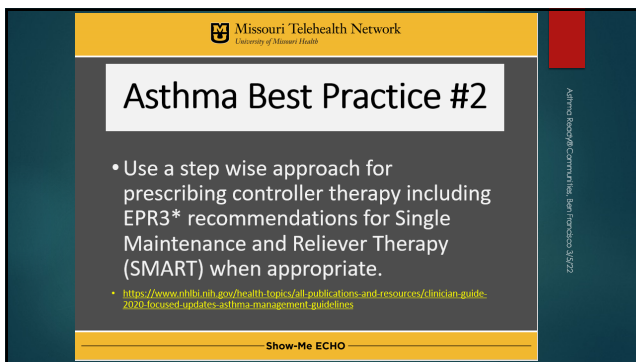
Asthma Updates 2020 Patient Fact Sheets

Asthma Research, Communication, and Education 3/16/22

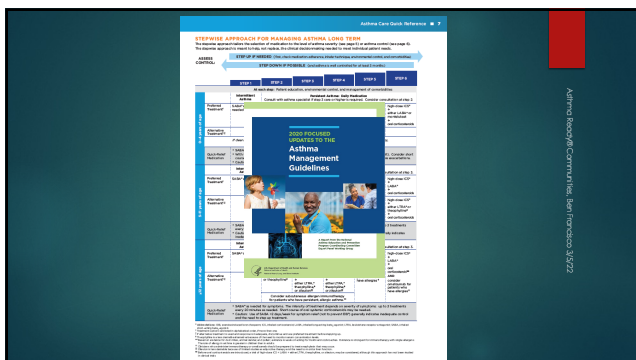
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AGES 5-11 YEARS: STEPWISE APPROACH FOR MANAGEMENT OF ASTHMA

Intermittent Asthma

Management of Persistent Asthma in Individuals Ages 5-11 Years

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	
Preferred	Daily low-dose ICS and PRN SABA	Daily low-dose ICS/formoterol and PRN SABA	Daily low-dose ICS/formoterol, medium-dose ICS, or formoterol	Daily high-dose ICS/LABA or PRN SABA	Daily high-dose ICS/LABA or PRN SABA	Daily high-dose ICS/LABA or PRN SABA with systemic corticosteroid (oropharyngeal or inhaled)
Alternative	Daily LABA or Combination of Formoterol ^a or Resonator ^b and PRN SABA	Daily medium-dose ICS and PRN SABA ^c or ICS/LABA	Daily medium-dose ICS/LABA or PRN SABA	Daily high-dose ICS/LABA or PRN SABA	Daily high-dose ICS/LABA ^d or PRN SABA	Daily high-dose ICS/LABA ^d or PRN SABA ^d with systemic corticosteroid ^e or high-dose ICS (combination with LABA ^f) ^g or systemic corticosteroid and PRN SABA

Assess Control

1. If not in good control, consider stepping up, downgrading to Step 1, or consider conditions.
 2. Step up if needed (steps 3-5) or
 3. Step down if needed (steps 5-2-5 weeks)

Consult with asthma specialist if Step 6 or higher is required. Consider consultation at Step 5.

Control assessment is key element of asthma care. This includes daily symptoms, and risk. Use of objective measures, such as reported control, and health care utilization are complementary and should be employed in an integrated way, depending on the individual clinical situation.

ASSUMPTIONS: ICS, inhaled corticosteroid; LABA, long-acting beta₂-agonist; LTRA, leukotriene receptor antagonist.
 SABA, short-acting beta₂-agonist
 LABA, LABA used with only beta₂-agonist
 SABA, SABA used with only beta₂-agonist
 LABA, LABA used with only beta₂-agonist
 LABA, LABA used with only beta₂-agonist
 LABA, LABA used with only beta₂-agonist
 LABA, LABA used with only beta₂-agonist

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▶ **SMART Dosing Tips (steps 3 & 4, >4 yr)**

A strategy allowing patients on low or medium dose ICS/formoterol to use this inhaler to relieve symptoms resulted in fewer asthma exacerbations, lower total ICS consumption and better growth than fixed dose ICS/LABA and ICS groups.

***max daily puffs (5-11) = 0, 1, 1, 1, 1, 1**

- ▶ Applies to Symbicort 80/4.5 or 160/4.5 (generic available, not always less expensive)
- ▶ Applies to Dulera 50/5 or 100/5
- ▶ Not Advair (contains salmeterol, no data for this use)


<https://pubmed.ncbi.nlm.nih.gov/17166990/>

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How Do We Implement Best Practices for Asthma Management

- ▶ Learning together (ECHO®)
- ▶ Academic Detailing (supplies, routines)
- ▶ Performance feedback (claims data)
- ▶ Practice facilitation (seeing patients)



Implementing Asthma Guidelines Using Practice Facilitation and Local Learning Collaboratives: A Randomized Controlled Trial

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4018371/>

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THE TRANSFORMATIVE MODEL IN MEDICAL EDUCATION AND CARE DELIVERY
<https://www.youtube.com/watch?v=VAMaHP-tEwk>



Project ECHO® (Extension for Community Healthcare Outcomes) helps democratize medical knowledge and develops specialty care capacity in underserved communities.

Using a revolutionary model of tele-mentoring, collaborative medical education and care management, Project ECHO empowers front-line primary care professionals to provide the right care, in the right place, at the right time.

Albino Beatty/Community Health 3/22

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The Missouri ECHO Experience

- ▶ MD/legislator visited ECHO Albuquerque
- ▶ Sponsored a bill for 6 ECHO hubs: asthma, chronic pain, autism, dermatology, hepatitis C, and endocrinology
- ▶ Funded (\$1.5 M) by projected savings from the Medicaid transportation budget (2015), now \$4.5 M, MCOs supporting, >30 ECHOs

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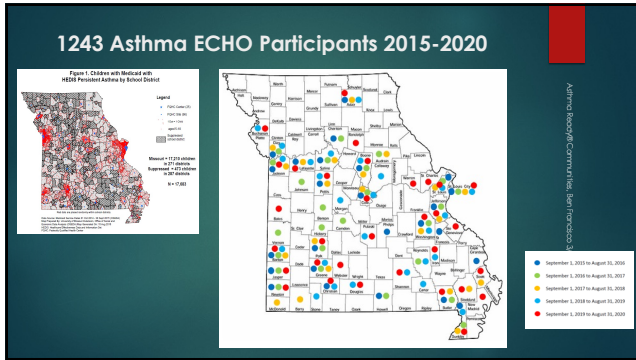
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MO ECHO® Key Purposes

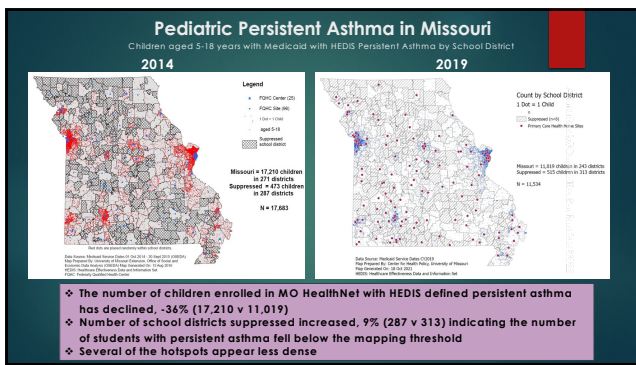
- ▶ "Safely & effectively treat common & complex conditions in rural & underserved areas"
- ▶ "Decrease treatment delays and the need for patients to travel to see specialists"
- ▶ "Utilize community health care workers to address social determinants, improve adherence and health outcomes"

Albino Beatty/Community Health 3/22

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(52)

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Register NOW!
<https://showecho.org/directus/asthma/>

2022 Program Dates

Missouri ASTHMA ECHO®

Bringing Better Asthma Care to People in Their Local Communities

Through teleconferencing ECHO® creates access to high-quality specialty care and expert resources in local communities. These workforce development programs are available to improve asthma care across Missouri communities.

Community providers learn from specialists, community providers learn from each other, and specialists learn from community providers as best practices emerge.

Access to specialist knowledge improves care, reduces health care costs and improves access to care for thousands of children & adults in Missouri.

Asthma 1- Essentials

IMPACT ASTHMA ECHO®

Entry-level program defines asthma best practices for children and community-based professionals caring for people with asthma.

Who Should Participate: Physicians, nurse practitioners, respiratory therapists, respiratory nurses, respiratory therapists, care managers, clinical educators, community health workers and others.

Benefits: Free CME (30 CE), 4000 PBA Credits (10 for health care professionals, program completion credits), participation in Asthma Care Accelerator or Asthma Care & Education ECHO®.

Asthma 2 - QI/MOC

Asthma Care Accelerator ECHO®

Providers interested in delivering high-quality asthma care and education.

Who Should Participate: Physicians, nurse practitioners, physician assistants, care managers, quality improvement (QI), population health managers, pharmacists & others.

Benefits: Free PBA (100) and PBA Accreditation of Certification (AOC) (200) Hours. Free online tools for creating asthma and QI/MOC projects, access to Asthma Care Accelerator or Asthma Care & Education ECHO®.

Asthma 3- Community

Asthma Care & Education ECHO®

Asthma educators and home assessors interested in preventive asthma services.

Who Should Participate: Physicians, Public health workers, community health workers, home care coordinators, case managers, nurses, etc. All are welcome! High school workers in Missouri Primary Care Health Homes and other settings.

Benefits: Free PBA (100) credits for essential services in the training and curricula for asthma management education for children and adults with asthma.

AVAILABLE PROGRAM DATES IN 2022

Impact Asthma ECHO® (paid or receipt)			Asthma Care Accelerator ECHO®			Asthma Care & Education ECHO®		
Start Date	End Date	Registration	Start Date	End Date	Registration	Start Date	End Date	Registration
January 22	May 2	September 13	March 15	July 19	August 2	March 22	July 19	August 2
January 22	May 2	September 20	April 5	August 2	August 2	April 26	August 2	August 2
January 22	May 2	September 27	April 19	August 2	August 2	April 26	August 2	August 2
February 1	June 7	October 4				July 13	November 15	
February 1	June 7	October 11						
February 1	June 7	October 18						
February 1	June 7	October 25						

Asthma Program Committee, St. Louis, Missouri 31622

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Asthma ECHO 1 - Welcome - Get On Board!!!
 Enroll, participate, evaluate, implement...

SHOW-ME ECHO

IMPACT ASTHMA ECHO



IMPACT ASTHMA COLLABORATION

Missouri's leading asthma coalition

ASTHMA CARE ACCELERATOR

Quality improvement and MOC project

ASTHMA CARE & EDUCATION

Community health workers and home assessors

NEW ECHO 1 WORKER

IMPACT ASTHMA ECHO

ASTHMA CARE ACCELERATOR

ASTHMA CARE & EDUCATION

IMPACT ASTHMA COLLABORATION

MISSOURI TALKSHOW NETWORK

Asthma Program Committee, St. Louis, Missouri 31622

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Get On Board!!!
Primary Care Health Home Support

▶ **IMPACT Asthma® ECHO®** – 4 weeks, Tuesdays, noon until 1:00 pm, 4 hours Category One CME.

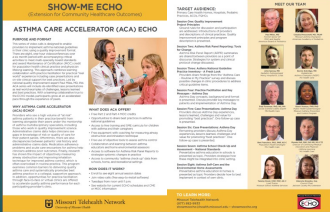
Aim - use de-identified case studies and didactics to review the essentials of guidelines-based care for health care providers and other members of the clinical team

Series is offered 6 times annually, **January**, February, May, June, September, October

Asthma Program Committee, St. Louis, Missouri 31622

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Asthma ECHO 2 - Change Your Practice!!! Earn MOC through data-driven QI...



The flyer titled 'SHOW-ME ECHO' and 'ASTHMA CARE ACCELERATOR (ACA) ECHO' provides details about the program. It includes sections for 'ABOUT THE PROGRAM', 'WHAT YOU WILL LEARN', 'MEET YOUR TEAM' (listing various professionals like physicians, nurses, and pharmacists), and 'HOW TO ENROLL'. Logos for the American Board of Pediatrics, American Board of Family Medicine, and American Board of Internal Medicine are visible at the bottom.

Asthma ECHO® Curriculum | San Francisco, CA 2022

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Change Your Practice!!! Data Driven, Local Quality Improvement

- ▶ **Asthma Care Accelerator ECHO®**
For clinic-based asthma champions - pediatricians, family physicians and internists seeking maintenance of certification & NPs or PAs who lead local asthma quality improvement;

8 sessions per calendar year, March – August, Tuesday, noon until 1 pm, focus - quality improvement with 3 data sources and activities as required by ABP, ABFM and ABIM, cohorts of asthma champions

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Earn 25 points Part 4 Earn Part 2 points, too.

Earning Points in Five-Year Cycles

To receive credit for Part 2 and Part 4 activities and maintain certification, you must earn a **total of 100 points** — a minimum of 40 for Part 2 and a minimum of 40 for Part 4 every five years. The additional 20 points may be earned in either Part 2 or Part 4 activities. You can complete your Part 2 and Part 4 activities any time during your 5-year MOC cycle. At the end of each cycle, you will enroll again, pay the fee to begin your next MOC activity/points cycle, and submit attestation of your valid, unrestricted medical license.

To see your specific MOC requirements and deadlines, log into your [ABP Portfolio](#).

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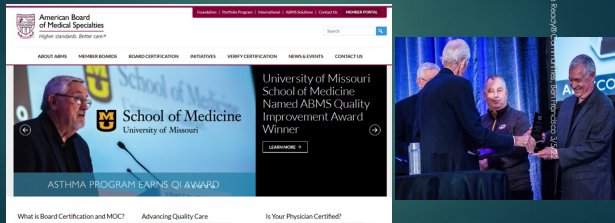
Asthma Care Accelerator ECHO: improved health outcomes for children served in clinics

- ▶ Pediatrician asthma champions at Swope Health Services & Samuel U. Rodgers FQHCs, and Children's Mercy Hospital urban safety net clinic Operation Breakthrough demonstrated rapid and sustained adoption of asthma best practices from National Heart, Lung, Blood Institute: **Dr. Ning Haluck, Dr. Rupal Gupta, Dr. Catriona Tilford**
- ▶ These adopted best practices included standardized asthma education delivery, consistent coaching for better inhalation technique, routinely confirming ICS medication adherence, **dispatching home and school asthma preventative services** for high-risk patients
- ▶ Medicaid claims data analysis for 664 children served by ACA providers shows significantly less systemic oral steroids per patient (asthma exacerbations), improved ICS dispensing rates (refills of asthma control medication), **25% decrease in uncontrolled asthma**



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American Board of Medical Specialties National Quality Achievement Award 2019-20 Asthma Care Accelerator ECHO



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Reducing the Burden of Childhood Asthma Through Local QI & Physician Engagement for Maintenance of Certification (MOC)

- ▶ A 3 years study showed providers who adopted best practices after participating in asthma ECHO® and earning MOC reduced asthma burden for their panel of patients and saw an increase in patients. <https://asthmaready.org/data/>
- ▶ A 5th provider cohort will begin in March of 2022. We use collective impact, implementation science, learning health system frameworks to maximize impact through local QI.

Adoption of Best Practices Increases Proportion of Outpatient to Acute Care Pediatric Asthma Visits, abstract ATS, May, 2020.

Asthma Ready® Communities, San Francisco 3/5/22

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Asthma ECHO 3 - Build Your Team!!! Clinic & community teams for better outcomes...

Missouri Telehealth Network
University of Missouri

Asthma 3-Community: Asthma Care and Education

Asthma Care and Education (ACE)

COVID-19 Network Assessment

ASTHMA 3 ECHO CONTACTS

Mark Hocking, Brian Eastman, [Other team members listed]

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Build Your Team!!! Clinical and Community Partners

- ▶ **Asthma Care & Education ECHO®** – Pharmacists, care managers, clinical and community disease management providers RN, LPN, MA, RT, CHW, etc. (asthma educators, home environmental assessors, school nurses). Cross-pollinate, share strategies

10 sessions a year, noon until 1 pm, 0.8 CEUs, focus on health home touches, clinic-based education, and reimbursable community preventive asthma services

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https://www.cdc.gov/pdq/issues/2017/17_0003.htm

Outcomes Data: improved health outcomes for children while in school

- ▶ 132 children were enrolled in the Teaming Up for Asthma Control program by both trained KCPS school nurses
- ▶ Of those students assessed to be in the red or yellow zones, 50% showed improved lung function evidenced by increasing FEV1
- ▶ Good Inhalation technique (IFR, IFT) improved from 20% to 43%
- ▶ Children reported improvement in moderate activity capacity*
- ▶ Children reported less sleep interruption at night due to their asthma*
- ▶ **Saves money: net cost reduction of \$1431 per child per year in Medicaid**

*Children's Health Survey for Asthma, American Academy of Pediatrics

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Coaching for Optimal MDI Technique

- ▶ Flow-Vu with Trainhaler infant, preschool, school-age/adult
- ▶ "old air out, aim up, fill-up in your "target time" (FEV1 x 2 seconds or by grade group)
- ▶ Breath starts with MDI compression
- ▶ Whistle? Slow down, but keep breathing

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Asthma Treatments at School, Changed Recommendations

- ▶ During the COVID-19 Pandemic, **asthma treatments using Metered Dose Inhalers (MDIs) are preferred over nebulizer treatments** (CDC, AAP)
 - ▶ Routine and emergency use of albuterol should be in the form of metered dose inhaler (MDI) with individual or disposable **valved holding chamber (VHC)**.
 - ▶ It is critical students have a personal albuterol and a **valved holding chamber (VHC)** at school to have quick-relief medicine easily accessible.
- (CDC, AAP, see Reference Slides: 64, 65, 78, 79)



Asthma Incentive Commercial, last updated: 3/2/22

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Keep it Simple (3 Steps)–



With **Flow-Vu®** it is possible to see if the student is really breathing in and assess whether the breath takes several seconds and results in filling the lungs (chest rises slowly with no whistle heard)

Asthma Incentive Commercial, last updated: 3/2/22

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Optimal Inhalation Time Varies By Age

Lungs become bigger as children grow taller. As such, little lungs fill up more quickly than big lungs. Below is an average inhalation time by age-range. MDI medication should flow into everyone's lungs at the same rate inhaled.

Elementary
• 2 to 3 seconds

Middle School
• 4 to 6 seconds

High School
• 6 to 10 seconds

Asthma Research Community, San Francisco 3/2/22

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Coach at Home and School for Optimal MDI Technique – Get the Most From Your Inhaler Medications (7:20)

<https://youtu.be/Ge3kQerMDDQ>

Asthma Research Community, San Francisco 3/2/22

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Where Do We Go From Here? Here – Raising the Asthma Quality Bar

Southwest MO (71%) vs SW Asthma Champion (86%) vs State Champion (93%)

Asthma Research Community, San Francisco 3/2/22

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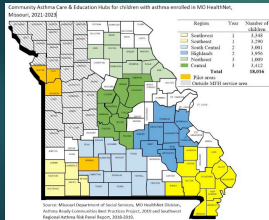
Three Funded Projects – One Mission

- ▶ **April 1, 2021** 3 years award by Missouri Foundation for Health, \$618,000, "Community Partnerships for Reducing Asthma Disparities; Community Asthma Care and Education Hubs" 6 rural, multicounty regions of 3,000 Medicaid asthma patients, 2 hub start-ups/year, 18,000 people, 57 counties
- ▶ **July 1, 2021** Missouri Telehealth Network ~\$190,000 for three asthma ECHOs: 4 MU staff, 8 contractor faculty and 5 contractor practice facilitators
- ▶ **September 1, 2021** DHSS/CDC \$267,782: 6 MU staff, 3 contractors, equipment, travel, AS-ME development

Asthma Resource Center, Inc. | 10/15/22

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MFH AWARD: Community Asthma Care and Education Regions or CACE Regions



- ▶ Six multi-county rural regions identified with Medicaid claims data: 18,000 children
- ▶ High-volume providers/clinics are targeted for improving asthma care using ECHO
- ▶ Two regional asthma coordinators (asthma provider champion plus asthma educator)
- ▶ Collective Impact model: BreatheUP Coalitions. Parents

Asthma Resource Center, Inc. | 10/15/22

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The End Game – Sustainable, Regional Initiatives

Growing asthma ECHO® and local coalitions

Our problem

- 1. 2019 School Closure: Decrease of asthma
- 2. 2 more children have died annually from asthma with no significant improvement
- 3. Annual asthma deaths in Missouri are 1,000
- 4. Annual asthma deaths in Missouri are 1,000

Who we are

We are a coalition of diverse community partners, including health care providers, educators, parents, and advocates united in high asthma, low mortality in our state.

We believe collective impact is the right solution for asthma care in the region. We are committed to the mission of asthma care in the region.

- 1. Increase our capacity to provide asthma care in the region
- 2. Increase our capacity to provide asthma care in the region
- 3. Increase our capacity to provide asthma care in the region
- 4. Increase our capacity to provide asthma care in the region

We believe collective impact is the right solution for asthma care in the region. We are committed to the mission of asthma care in the region.

Our Bold Goal

Cut Kansas City's uncontrolled asthma rate for children in half by 2030.

How we will solve this

- 1. Partner with families to address the root causes
- 2. Asthma-friendly homes must be livable
- 3. Medications are affordable
- 4. Asthma Action Plans are developed for everyone
- 5. Schools and providers/clinicians, parents support our families

Our plan of action

1. Launch a regional coalition. Support coalitions that address the root causes of asthma in our region.
2. Increase our capacity to provide asthma care in the region.
3. Increase our capacity to provide asthma care in the region.
4. Increase our capacity to provide asthma care in the region.
5. Increase our capacity to provide asthma care in the region.
6. Increase our capacity to provide asthma care in the region.
7. Increase our capacity to provide asthma care in the region.
8. Increase our capacity to provide asthma care in the region.

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Family Advisory Group enables asthma key messaging for diverse populations



- ▶ Dr. Shelley Cooper monthly "check-in" with families
- ▶ Key Asthma Messages: what families need to hear and understand
- ▶ Home Remedies: relative humidity checks, nasal saline treatment, anti-inflammatory diet, and ICS inhaler coaching with Flo-View Spacer (Asthma Ready® Home)
- ▶ Dr. Catrícia Tilford:

Asthma Ready® Community, San Francisco, CA 2022

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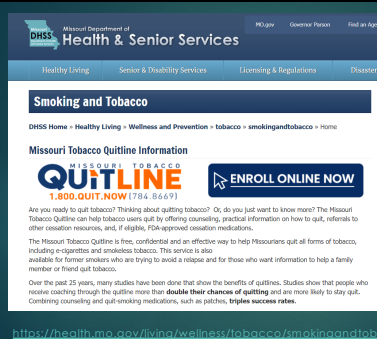
Four Best Practices for Families

- ▶ 1) Eliminate ETS and VOCs, RH at 40% (30-50%)
- ▶ 2) Consume prescribed ICS (MDI – BID)
- ▶ 3) Observe and coach each ICS dose
- ▶ 4) Use hypertonic saline for open & clear nose

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Online referral

New text-based vaping cessation

Parental support

Nicotine replacement

Cessation counseling

Posters, cards, social media messages

Asthma Ready® Community, San Francisco, CA 2022

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Know what's in the outdoor air

- ▶ NAB AAAAI

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Four Best Practices for Clinics

- ▶ 1) Use objective measures of airflow
- ▶ 2) Confirm dispensing dates/intervals for ICS
- ▶ 3) 94664 – provide inhalation instructions
- ▶ 4) Severity and control drive therapy




Asthma Beyond Control? Let's Talk About It.

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Tell Me About My Lung Number Today?

- ▶ Percent personal best FEV1 preferred over %predicted
- ▶ Is an FEV1 of 100% predicted good?
- ▶ Growing kids should keep their FEV1% predicted rank over time. Impaired lung growth is widespread when asthma under treated
- ▶ Your lungs on steroids – watch for it, back off, healthy lungs absorb ICS and systemic effects are likely at high doses

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Do you speak asthma?

- ▶ Severity, control, therapy step, adequacy of adherence inhalation technique, co-morbidities and control status
- ▶ Assessment: Moderate persistent asthma, not well controlled on step 4, poor adherence, suboptimal inhalation technique, with known ETS and mold in the home; allergic rhinitis, not well controlled, not using hypertonic saline or nasal steroids; severe GERD, improving with HS famotidine; overweight, improving with Tigers on Track participation

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Talk to me! Prescribe like you mean it.

- ▶ budesonide/formoterol 160/4.5 2 puff twice daily by Aerochamber Flow-Vu with a 7 second inspiratory time, take up to 2 puffs every 4 hours for a week with flares
- ▶ add ½ vial ipratropium to a full vial of albuterol every 4 hours as needed for symptoms not relieved by albuterol alone (<12 years), full vial of ipratropium for 12 and older
- ▶ fluticasone nasal spray, one spray each nostril after clearing your nose with hypertonic saline twice daily during peak allergy seasons
- ▶ famotidine 20 mg once or twice daily for reflux symptoms including nocturnal cough and nasal congestion

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Use Telehealth to Link Clinic & Home


- ▶ Who might benefit – living a long distance from clinic, history of poor adherence or poor inhalation technique, stable and needing refills
- ▶ Key elements – review last clinic findings, seeing the home and family dynamics, check inhalers, expiration date, doses remaining, "how do you use this one?", watch MDI w/spacer technique, coach, elicit teach back – bad asthma week, worse attack ever, what do you think in your home makes asthma worse? Goals for next time

Asthma: Basic Clinical, Benji Mendez, 3/22

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Four Best Practices for Schools

- ▶ 1) Document FEV1 before/after albuterol
- ▶ 2) Assess and report impairment (CHSA*)
- ▶ 3) Coach to improve VHC MDI technique
- ▶ 4) Use color chart to support inhaler use



<https://www.scholar.northwestern.edu/e/publications/relcblt/validity-of-healthcare-provider-survey-for-asthma>


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Four Best Practices for Home Environmental Assessments

- ▶ 1) Level of understanding and use of an AAP
- ▶ 2) Room-by-room CO, CO2, Temp &RH, PM 2.5
- ▶ 3) Family trigger reduction plan
- ▶ 4) Clinician report with 2 actionable items



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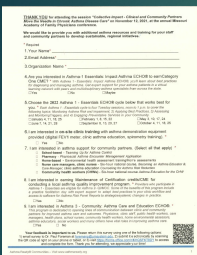
<http://www.asthmabridge.com/>




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Complete "Interest Survey" – MTN table, get a free kit



Nose Care Kit



MDI Care Kit



<https://forms.office.com/r/KHQSFKT8DY>

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Nose care

- ▶ Nose check – easy to breathe through each side? No? Then use hypertonic saline first
- ▶ Hypertonic mist or rinses
- ▶ At the beginning and end of your evening shower or bath
- ▶ Sniff a long spray

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www.asthmaready.org



Improving Pediatric Asthma
Researching children with asthma

Goal of Care
The overarching goal of asthma care is to achieve asthma control, enabling a patient to live without functional impairment, improvement in quality of

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Asthma Ready® Goals

- ▶ Promote best practices based on national standards, Expert Panel Report 3 (w/updates) *Guidelines for Diagnosing & Managing Asthma*
- ▶ Reduce asthma burden – target geographic areas with greatest need, by school & town
- ▶ Establish asthma leaders in the clinics, schools, hospitals and community agencies
- ▶ Keep workforce current w/asthma advances

Asthma Ready® Community Self-Assessment 3/22
