Asthma Best Practices Across Settings Collective Impact – Clinical and Community Partners Raise the Bar for Asthma Care	Astrimis Result		
Ben Francisco, PhD, PNP, AE-C Teaching Professor	Ø Communi		
Teaching Professor Pulmonary Medicine & Allergy, Child Health University of Missouri, Columbia, School of Medicine	ies. Beni Fran		
University of Missouri, Columbia, School of Medicine Asthma Ready® Communities	cisco 3/5/22		
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Asthma Ready® Goals		_	
▶ Promote best practices based on national	stroma Recod		
standards, Expert Panel Report 3 (w/updates) Guidelines for Diagnosing & Managing Asthma	-(B Commun		
 Reduce asthma burden – target geographic areas with greatest need, by school & town 	lie), Sen Fran		
► Establish asthma leaders in the clinics, schools, hospitals and community agencies	ciseb 3/5/72		
► Keep workforce current w/asthma advances			
		•	

Goals and Learning Objectives

- ▶ Identify opportunities and resources to adopt new best asthma practices in your clinical setting
- ▶ Describe the rationale behind actionable metrics for asthma outcomes at provider and regional levels
- ➤ Describe key steps for optimizing deposition of MDI aerosol medications
- ▶ Identify best asthma practices for other settings of care including home, school, insurers and agencies
- ▶ Review possible elements of and indications for asthma telehealth encounters





	ACF, AHRQ, CDC, EPA, HRSA, HUD and NIH
YAN	Reduce barriers to adopting expert asthma guidelings
	Comprehensive care for children with disparities
	Increase capacity to identify disparate populations
Coordinated Federal Action Plan to Reduce Recial and Ethnic Asthma Disparities	Test interventions to prevent asthma onset

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,

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

THE TRANSFORMATIVE I EDUCATION AND CARE D https://www.youtube.com/v	ELIVERY
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.	Agrand Boogle Community of the Transport Communi

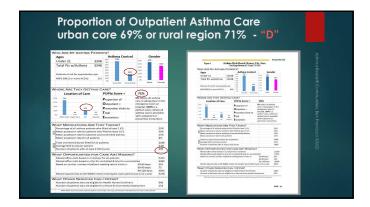
The AIR Doctrine (Asthma In Remission)

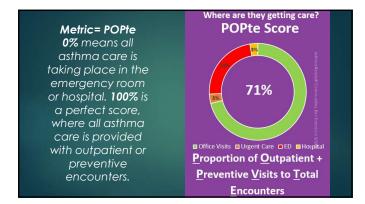
- ▶ Born with the genetic potential to develop asthma
- ▶ Epigenetics determine the expression of disease ETS and air quality, what you eat and your weight status, viral infections, problems with your nose, GERD, other
- ▶ Intrinsic factors gaining weight, lipid metabolism, activation of the inflammatory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

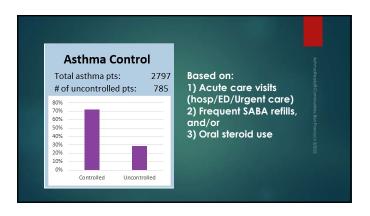
The AIR Doctrine (Asthma In Remission)

- ▶ 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

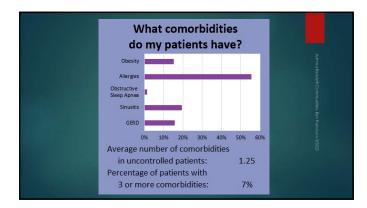
Assign a grade to the US Health System for Asthma Care Quality and Value A - excellent B - good C - average D - poor F - failing	Authoria Brassiy® Communities, Ben Transision 3/5/22	
 Asthma Risk Panel Reports Based on payer claims data: Med refill hx (inhaled steroids, rescue meds, oral steroids) Use of montelukast Visits for asthma (PCP, UC/ER, hospital stays) Inhaler instruction provided (94664) Comorbidities 	Adhma Brooyili Communities, Benfrancisco 3/5/22	
 ❖ 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 	Asimos Readyll Communios, Bus francisco NSCZZ	



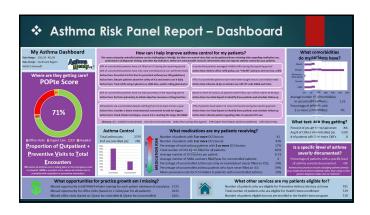




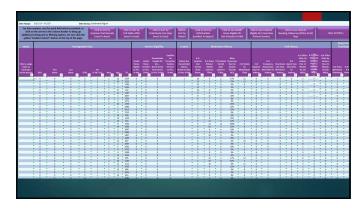
	What medications are my patients receiving? Number of patients with 5 or more OCS bursts:	41
7		478
	Number of patients with 2 or more OCS bursts: Percentage of total asthma patients with 2 or more OCS bursts:	179
	Total number of OCS bursts filled for all patients:	205
	Average number of OCS bursts per patient:	0.7
	Average number of SABA canisters filled/year for uncontrolled patients:	4
	Percentage of uncontrolled asthma pts only on montelukast (never filled an ICS):	249
	Percentage of uncontrolled asthma patients who have never filled an ICS:	599
	Mean possession rate for ICS inhalers in patients with uncontrolled asthma:	149



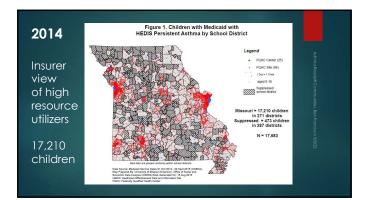




Asthma Risk Panel Reports - PHI Detailed report listing individual patient data Report can be worked by staff to follow up with high utilizers Lists data for each eligible patient in spreadsheet format Columns can be sorted to display the data in different ways (such as sorting to see who has the most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



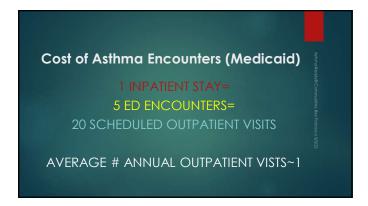
C	Challenges an	d Assets	
	children with asthmo	a enrolled in Medi	caid,
▶ One thi	rd experiencing unc	ontrolled asthma i	today 🌷
core ED	isparities, African Am Orate 16 times the sto	ate average	urban Octoon
► Rurai p	ersons have worse as	inma outcomes	
	CDC Centers for Disease Control and Prevention CCC N/7 Seving Uses, Patenting Process*	Search Q. Advanced Search	
	Morbidity and Mortality Weekly Report (MMWR)		
	coc	€ ○ ◎	
1 0000	Asthma Surveillance — United States and Surveillance Surv	ates, 2006–2018	





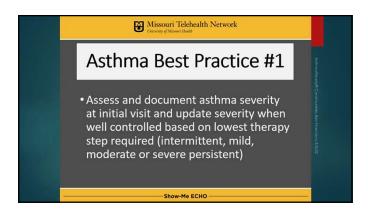


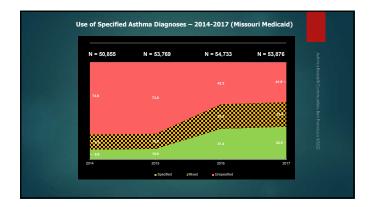


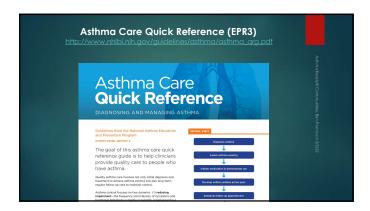


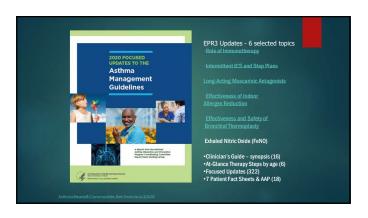


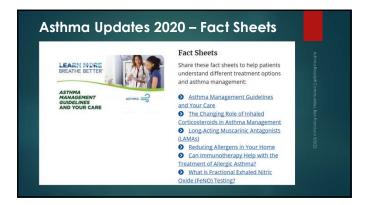




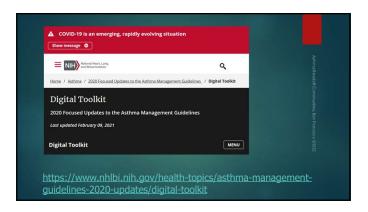


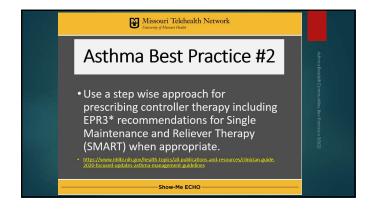




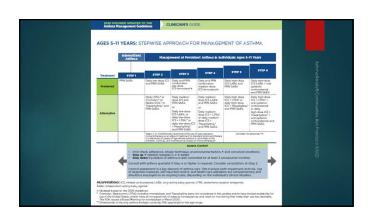












➤ SMART Dosing Tips (steps 3 & 4, >4 yr) A strategy allowing patients on low or medium dose ICS/formaterol to use this inhaler to relieve symptoms resulted in fewer asthma exacerbations*, lower total ICS consumption and better growth than fixed dose ICS/LABA and ICS groups. **max dally putfs (5-11)=8, [>11)=12 ➤ Applies to Symbicorl 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/ Arthrio Roody® Communifies, Ben francisco 3/5/22	

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/	



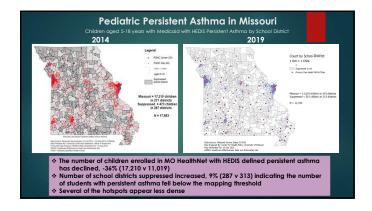
The Missouri ECHO Experience

- ▶ 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

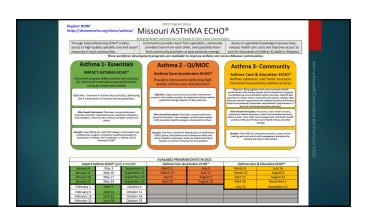
MO ECHO® Key Purposes

- ▶ "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"

1243 Asthma ECHO Participants 2015-2020 Figure Claim on This as in a construction of the construction of

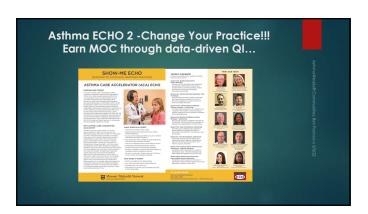








Get On Board!!! Primary Care Health Home Support IMPACT Asthma® ECHO® – 4 weeks, Tuesdays, noon until 1:00 pm, 4 hours Category One CME. Aim - use de-identified case studies and didactics to review the essentials of guidelines-based care for health care providers and other members of the clinical team Series is offered 6 times annually, January, February, May, June, September, October



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

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

Earning Points in Five-Year Cycles

Fo 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 5year 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

To see your specific MOC requirements and deadlines, log into your ABP Portfolio.

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 Catricia Tillord

 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







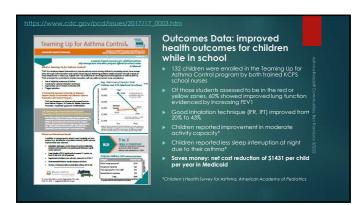
Reducing the Burden of Childhood Asthma Through Local QI & Physician Engagement for Maintenance of Certification (MOC) A 3 years study showed providers who adopted best practices after participating in asthma ECHO® and earning MOC reduced asthma burden for their panel of patients and saw an increase 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. Adaption of Best Practices Increases Proportion of Dulpatient to Acute Dare Pediatric Asthma Visits. abstract ATS. May 2020.



Build Your Team!!! Clinical <u>and</u> Community Partners

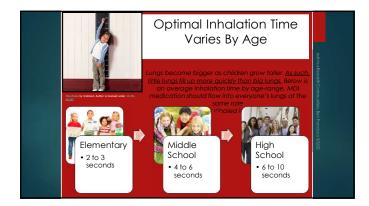
➤ Asthma Care & Education ECHO® – Pharmacists, care managers, clinical and community disease management providers RN, LPN, MA, RT, CHW, etc. (asthma educators, home environmental assessors, school nurses). Cross-pollinate, share strategies

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



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 deposable valved holding chamber (VHC). It is critical students have a personal abuterol and a valved holding chamber (VHC) at school to have quick-rieler medicine easily accessible. (CDC, AAP, see Reference Slides: 64, 65, 78, 79)





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

https://youtu.be/Ge3kQerMDDQ

Southwest MO (7	1%) vs SW Asthm tate Champion		6%)
WHO ARE MY ASTRHAR PATEUROT Ages Author Control Contro	WYSO ARE MY ACTIONAL PATROTTEST Ages Linder 23 120 Total Patrol Markets 120 Ages Total Ages Ages Ages Ages Ages Ages Ages Ages	WHY AND MAY ARPHAN PATIENTS Androne Greek Err Ages 224 Total 224 Total 15 A Northwar 224 Total 15 A Northwar 224 MAY 288 (200 Rose M2/10) M M MAY 288 (200 Rose M2/10) M M	ili
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WWAY OTHER SERVICES CAN I OFFER! Some of patients also are eligible for Machinisms Environment Sundar of patients also are eligible for a flame Environmental Assessment 54	Missed apparamity to bit 54664 inhale training for each petient just and a year. WHAT OTHER SERVICES CAN I DEPEND Business of potential and an angles for elegan-terms (another). National of patients who are adjusted for colleges in biomorphical parameter.	136 Mand opportunity to hill MANA shaler training for each patient WHAT OTHER SERVICES CAN I OFFER? 38 Sunfair of patients also are adjust to traper-transformer: Sunfair adjusted plate partial register from processing to the patients of	9

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

MFH AWARD: Community Asthma Care and Education Regions or CACE Regions Six multi-county rural regions identified with Medicaid clain 6 date: 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

The End Game – Sustainable, Regional Initiatives Growing asthma ECHO® and local coalitions Who was are the standard and another than the standard and anot

· · · · · · · · · · · · · · · · · · ·	ory Group enables asthma g for diverse populations
▶ Dr. Shelley Coope	r monthly "check-in" with families
► Key Asthma Mess	ages: what families need to hear and understand
Home Remedies: anti-inflammatory Spacer (Asthma R	relative humidity checks, nosal saline treatment, diet, and ICS inhaler coaching with Flo-View eady® Home)
▶ Dr. Catricia Tilford	
Spanish: https://youtu.be/ist05-b01siw English: https://youtu.be/i8197in/53g	

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 We Can Do Ist Audit Do Ist We Can Do Ist Audit Do



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	We Can Do It!

■ 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

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 **This://www.scholar.schools/eliable/after-albuterol/publications/eliable/af





