Background: A key component of Practice-Informed Research and Training for Health Equities (PERTHE) is support for adoption of best practices through lifelong learning and self-assessment through Maintenance of Certification (MOC) Part 2. MOC Part 2 modules will be produced to help practicing providers such as pediatricians, family practitioners and advance practice nurses assess and enhance clinical knowledge and skills essential to implementing asthma best practices. Please visit website: <https://asthmaready.org/>

PERTHE Part 2 Modules will provide practical asthma training to help health professionals implement best practices in homes, clinics, schools and community agencies in alignment with National Heart, Lung, Blood Institute guidelines and in response to emerging evidence from the field. Module development will parallel curricula integration in schools of medicine, nursing and allied health professions with the aim of introducing students and trainees to ways to promote health equity through a collective impact framework. MOC Part 2 modules will be accessed through the MU Office of Continuing Medical Education through a Canvas learning management system licensed for use by both practicing physicians and nurse practitioners and health professional students across institutions (medical students, medical residents, nursing students, respiratory therapists, nurse practitioners, school nurses, asthma educators, community health workers, and home environmental assessors).

PERTHE MOC Part 2 Components, Content, Faculty Teams and Production Timeline

I. Title of Module

II. Introductory Video-frames the significance and potential impact on health equity

III. Brief Review of ABMS and ACCME MOC Part 2 Standards

 IV. Best Asthma Practice Exemplar Cases (1, 2, 3, etc.)

V. Evidence base with citations

VI. Attestation and Acknowledgement of Lesson and Video Engagement

VII. MOC Part 2 Self-Reflection Assignment (2 Steps)

VIII. Curricula Integration Recommendations (for inclusion in student and trainee experience)

IX. Successful Curricula Linkages (annual report, how is this content be used across programs)

X. Access and Impact for professional and continuing education (annual report)

 **Modules to Be Produced**

* Module 1: PDSA Cycles: Quality Improvement for the Clinician

**Faculty - Paul Miles, Bernie Eskridge, Ning Haluck and Ben Francisco**

* Module 2: Asthma Risk Panel Report – Actionable Administrative Claims Indicators

**Faculty - Paul Foreman, Bhawani Mishra, Michelle Dickens and Ben Francisco**

* Module 3: Precision ICD-10 coding for Asthma Visits

**Faculty - Tammy Rood and Ben Francisco**

* Module 4: Measuring Airflow In Assessment of Asthma Severity & Control

**Faculty - Chris Oermann, John Spivey and Ben Francisco**

* Module 5: Inhalation Instructions (94664) and Pharmacokinetics of Inhaled Medications

**Faculty - Michelle Dickens, John Spivey, Tammy Rood and Ben Francisco**

* Module 6: Pharmacology of Inhaled Corticosteroids: Nuts & Bolts of Prescribing

**Faculty - John Spivey, Bernie Eskridge, Michelle Dickens and Ben Francisco**

* Module 7: Inhalant Sensitivity – Testing and Abatement

**Faculty - Michelle Dickens, Erica Forrest and Ben Francisco**

* Module 8: Home Environmental Assessment: Risk, Process and Results

**Faculty - Erica Forrest, Bernie Eskridge, John Kramer and Ben Francisco**

* Module 9: National Asthma Self-Management Education Standards – SME Training and Curricula

**Faculty - Melissa Penkalski, Tammy Rood and Ben Francisco**

* Module 10: Key Asthma Messages Patients Need to Hear – Providers and Patient Teach Back

**Faculty - Bernie Eskridge, Renee Roosa, Catricia Tilford and Ben Francisco**

* Module 11: Managing Asthma Exacerbations

**Faculty - Ning Haluck, Bernie Eskridge, John Spivey and Ben Francisco**

* Module 12: Uncontrolled Asthma: Linkages to Community Care

**Faculty - Luke Harris, Elizabeth Friedman, Helen Murphy, Rebecca Brown and Ben Francisco**

* Module 13: Pharmacology of SABA and Anticholinergics - Managing Asthma Exacerbations in Missouri Schools

**Faculty - Deb Cook, Rebecca Brown, Chris Oermann and Ben Francisco**

* Module 14: Asthma Health Home Touches – using the “Childhood Asthma Risk Assessment Tool” to guide special care

**Faculty - Suzanne Kennedy, Rebecca Brown, Elizabeth Friedman, Kristy Van Gilder and Ben Francisco**

**MOC Part 2 Module and Curricula Integration Timeline**

**February-April, 2021: Module 13 (Pilot)**

**May-July, 2021: Module 10 (Pilot)**

**September-October, 2021: Module 1**

**November-December, 2021: Module 2**

**January-February, 2022: Module 3**

**March-April, 2022: Module 4**

**May-June, 2022: Module 5**

**July-August, 2022: Module 6**

**September-October, 2022: Module 7**

**November-December, 2022: Modules 8**

**January-February, 2023: Module 9**

**March-April, 2023: Module 11**

**May-June, 2023: Module 12**

**July-August, 2024: Module 14**

In addition, three companion Asthma Ready® ECHO® programs will offer Category One and American Academy of Family Medicine-approved CME credit. that provides expert support for adopting asthma best practices in a virtual learning network with peers and multidisciplinary asthma specialists across the state of Missouri through the Missouri Telehealth Network <https://showmeecho.org/>. These programs meet at noon to 1:00 PM most Tuesdays during the year. All these ECHO programs will promote ARC Part 2 Module courses as critical content that accompany a survey called “Asthma Care –Routine in My Practice” that is designed to inventory thirty-four best practice guidelines in the areas of high quality medical care, clinical operations, administration, and school and community services. <https://fs2.formsite.com/openform/form30/index.html>

 *Impact Asthma Essentials ECHO®* (Asthma ECHO 1) combines case-based learning with didactics that cover the four components of the national guidelines in a four-week track offered six months per year. These components include 1) diagnosing and managing asthma 2) stepwise pharmacotherapy 3) identifying and mitigating environmental risks and 4) asthma self-management in community partnerships for care. Four deidentified cases are presented by providers each month that complement the component content for optimal collaborative learning. <https://showmeecho.org/clinics/asthma/>

*Asthma Care Accelerator ECHO®* (Asthma ECHO 2) uses Expert Panel Report 4 asthma guidelines to implement best practices including: collaborative learning, academic detailing, performance feedback, and practice facilitation2. This eight-month quality improvement (QI) project using ECHO® aims to reduce the rate of uncontrolled asthma for patients of participating providers. Intervention activities include: 1) pre-post inventory of asthma guideline practice routines using the “Asthma Care –Routine in My Practice” survey based on National Heart, Lung, and Blood Institute guidelines, 2) analyze and act on Asthma Risk Panel Report using Medicaid administrative claims data findings to better serve at risk patients and assess impact of quality improvement activities, 3) dispatch school and/or home asthma education or home environmental services as appropriate to patients with uncontrolled asthma, 4) present at least two de-identified cases for peer learners in an Impact Asthma ECHO® session, 5) conduct an “Asthma Day” as a practice facilitation event with 3-5 patients (see below), and 6) document objective measures of airway obstruction for children 5 years and older and 94664 for all ages in the Electronic Medical Record.

During the project period, a series of quality improvement changes are supported in the primary care office by an ARC expert clinical team physically or virtually. These changes culminate in *Asthma Day*, a concentrated effort to manage asthma in accordance with the Guidelines for the Diagnosis and Management of Asthma: Expert Panel Report 4. A sample of patients with uncontrolled asthma are identified and invited to participate in Asthma Day. Prior to the visit,

a web-based Missouri Medicaid tool (CyberAccess) is used to verify patient medication and emergency room utilization. On the day of the visit, patients complete a validated survey to assess asthma control (TRACK for children 0 to 4 years, Childhood Asthma Control Test for children 4 to 11 years, Asthma Control Test for children 12 and older). Children 5 years and older also are given FEV1 testing and assessment of spacer use with the In-check DIAL handheld inspiratory flow measurement device. Asthma severity and control are assessed using the results of their Asthma Control Test, FEV1, and medication and ED or hospital utilization as viewed on CyberAccess. Run charts are used to establish routine documentation patterns in conjunction with electronic health records. Recommendations for managing asthma are given based on these results. Families are educated on proper medication administration and common allergens: allergy testing is done as indicated. All patients receive an updated, written Asthma Action Plan and appointment for follow up visit. <https://showmeecho.org/clinics/asthma-accelerator/>

*Asthma Care and Education ECHO®* (Asthma ECHO 3) addresses the need for aligned health professionals outside the clinic walls to work together to better coordinate services, promote asthma control, and effectively disseminate current and pertinent critical information. Care managers, health plans, home environmental assessors, school nurses, community health workers and social workers play vital roles in the collective impact model. The collective impact model is based on the commitment of a group of partners from different sectors within a community to solve together the multifactorial problem of asthma disparities. Asthma Care and Education ECHO® is guided by the “Coordinated Federal Action Plan for Reducing Racial and Ethnic Asthma Disparities” and serves as a regional hub venue for regions across the State of Missouri. It provides structured training programs for asthma education, home and school asthma environmental assessment and risk abatement, school-based asthma check-ups both in-person and through telehealth, addressing social determinants of health through the use of the validated Child Asthma Risk Assessment Tool <https://www.asthmacommunitynetwork.org/carat> , adolescent tobacco cessation, and many other types. Case presentations by school nurses, environmental assessors, and care managers are also supported by this ECHO program. <https://showmeecho.org/clinics/ace/>