



Green & Healthy Homes Initiative®

EMHOME Publication Overview

Green & Healthy Homes Initiative

Recommendations for Evaluation Metrics for Asthma Home Visiting Programs **Measuring Environmental Management & Health Outcomes**

September 4, 2019 1:00-2:00 PM EST

Ruth Ann Norton, Michael McKnight, Brendan Brown, Kiersten Sweeney and Elsie Andreyev.

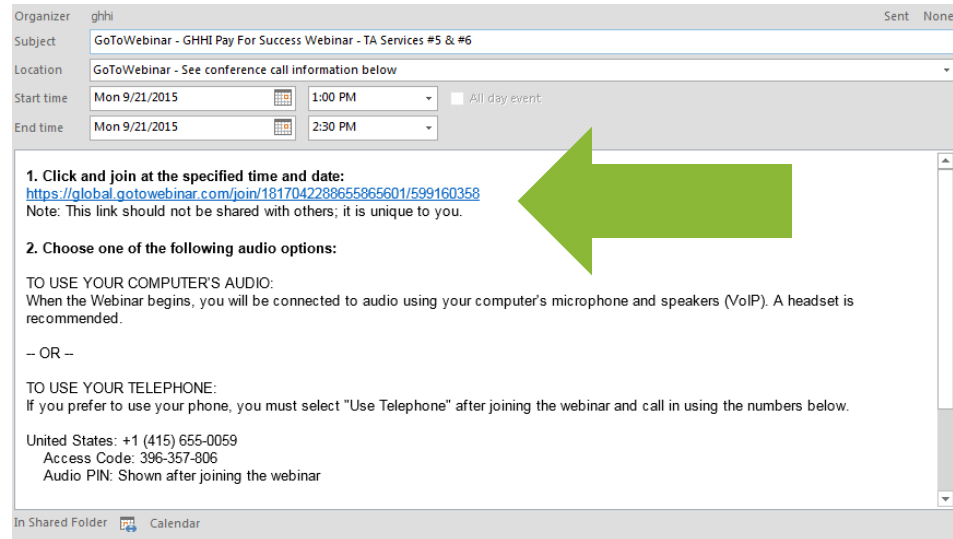
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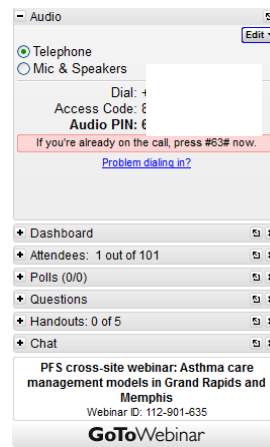
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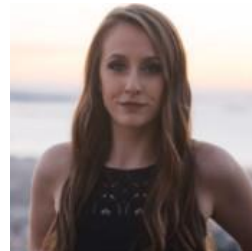
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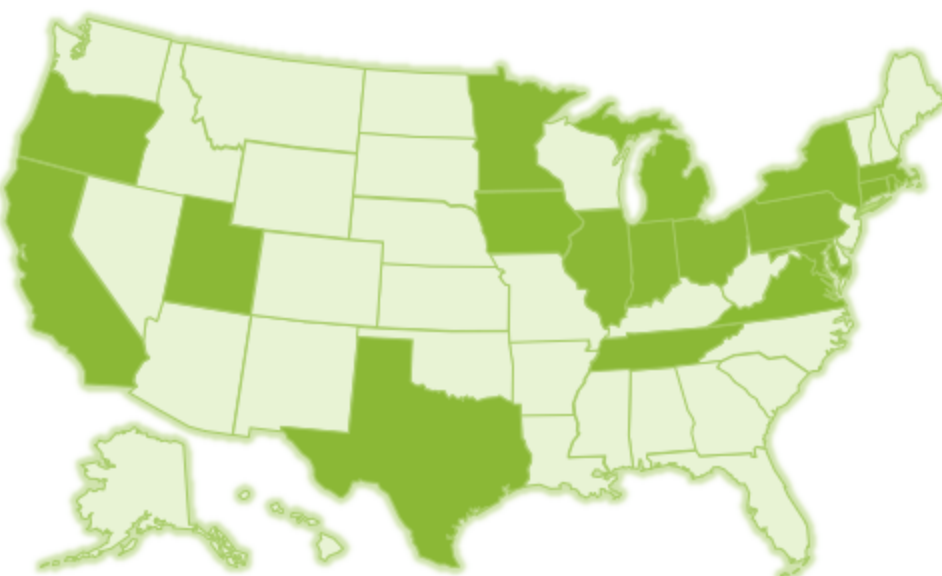
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20 projects working to develop health care financing to support healthy homes

Innovative Healthcare Financing Partners



- Allegheny County - UPMC and Allegheny Co. Health Department
- Baltimore - Priority Partners MCO
- Buffalo - Oishei Children’s Hospital and IHA MCO
- Chattanooga - green|spaces and Erlanger Children’s hospital
- Chicago - Presence Health, Elevate Energy, & NextLevel MCO
- Cincinnati - People Working Cooperatively
- Contra Costa Health Services
- Connecticut Medicaid and CT Greenbank
- Grand Rapids - Priority Health MCO, Healthy Homes Coalition of West Michigan, HealthNet of West Michigan
- Houston - UnitedHealthcare & Baylor; Community Health Choice MCO
- Indiana - 2018: Indiana Joint Asthma Coalition 2019: Memorial Hospital South Bend
- Iowa – Healthy Homes Des Moines
- Marin - Contra Costa Health Services & MCE
- Memphis - Le Bonheur Children’s Hospital & UnitedHealthcare, Amerigroup, and BlueCare
- Minneapolis - MN Energy Efficiency For All
- New York City - Affinity Health Plan, AIRnyc, & AEA; LISC; Medicaid and NYSERDA
- Oregon - Community Services Consortium
- Philadelphia - National Nursing Care Consortium
- Richmond City Health District
- Rhode Island - State Medicaid and Integra Accountable Entity
- San Antonio - SA Asthma Collaborative
- Salt Lake - University of Utah Health Plans and Salt Lake County
- Springfield - Health New England MCO, Baystate Health, Public Health Institute of Western Mass
- Worcester - UMass Memorial Hospital

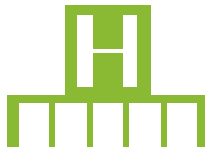


Funders



In each of the sites, we are working towards building an evidence-based, in-home comprehensive asthma intervention to **improve patient experience of care**, **improve health outcomes** and **reduce healthcare utilization costs**.

Based on independent systematic reviews of scientific literature, CDC's Community Preventative Task Force and NIH's Expert Panel *recommend home-based interventions for patient care and remediation of environmental triggers.*



Clinical care

Patients receive the existing standard of care for asthma, including medications and assessment & monitoring



Education

Patients receive education on how to self-manage their specific environmental triggers in context.



Environment

The causes and triggers of asthma in the home are addressed to ensure immediate improvement.

Comprehensive asthma intervention example

Purpose of Recommending a Set of Standardized Evaluation Metrics for Asthma Home Visiting Programs:

1. Build Credible Evidence

2. Support Reimbursement

3. Comparability of Results

EMHOME Work Group

Name	Title	Organization
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EPA'S ASTHMA PROGRAM

Protecting Public Health and the Environment through Health Care Collaboration and Reimbursement of Preventive Asthma Control Strategies

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U.S. Environmental Protection Agency
Indoor Environments Division

Agency Mechanisms

- Regulatory Measures
- Research
- Guidance Development
- Outreach & Education
- Partnerships; Leveraging systems

IED Asthma Program Aim

Get environmental controls into all elements of asthma management.

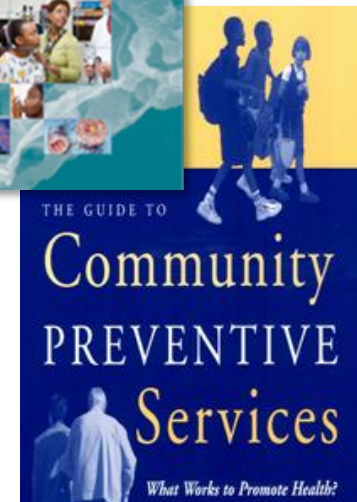
- Health care
- Housing
- Schools
- Community Systems, with a special focus on EJ



Environment Plays a Critical Role in Asthma Control



- Federal asthma guidelines recognize environmental trigger reduction as a critical component of comprehensive asthma care.*
- The evidence base demonstrates that in-home environmental interventions are effective at improving asthma control in children and adolescents.†



EFFECTIVE IN-HOME ENVIRONMENTAL INTERVENTIONS

Home-Based

- Includes at least one home visit by trained personnel to improve the home environment
- Examples: community health workers, clinicians, health care providers

Multi-Component

- Includes at least two components, including at least one environmental component
- Activities may include asthma-related education, self-management training, environmental assessment and remediation, social services, coordinated care

Multi-Trigger

- Targets two or more potential asthma triggers, including mice, cockroaches, dust mites, excess moisture and mold, household pets, tobacco smoke

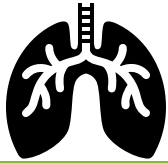
* NHLBI. Guidelines for the Diagnosis and Management of Asthma (EPR-3). 2007. <https://www.nhlbi.nih.gov/health-pro/guidelines/current/asthma-guidelines>

† CDC. The Guide to Community Preventive Services. 2005. <https://www.thecommunityguide.org/>

Evolution of IED's Asthma Program



Building the Evidence Base by Implementing Best Practices



Tobacco Use

- Reduce the proportion of nonsmokers exposed to secondhand smoke
- Increase the proportion of smoke-free homes



Environmental Health Education

- Environmental health education in the home setting
- Duration of environmental health education
- Proportion of home visits completed by type of educator



Environmental Health in the Home

- Environmental Remediation
- Environmental Health Assessment
- Environmental Control Supplies



Composite Measures

- Environmental Scoring System

The National Initiative for Asthma Reimbursement has three main goals.

The 2018-19 EMHOME Work Group focused on achieving the third goal which is the key to achieving the second goal of reimbursement.

1

Increase the number of home visiting programs providing comprehensive asthma (including environmental remediation of asthma triggers) interventions.

2

Increase the number of health plans serving Medicaid populations and/or state Medicaid programs that reimburse for these comprehensive services.

3

Increase the use of standardized environmental management & health outcomes metrics for evaluation (EMHOME)

Federal Standards & Recommendations

Most of the measures in the paper were selected from existing efforts at metric standardization, specifically:

- **Healthy People 2020**
- **Asthma Outcomes Workshop (2012)**
- **Standards Subcommittee of the Asthma Disparities Workgroup (2016)**
- **A Roadmap for Promoting Health Equity and Eliminating Disparities: The Four I's for Health Equity**
- **CDC 6|18 Initiative**
- **CDC's EXHALE: A Technical Package to Control Asthma**

Categories of Measures

These measures are presented in six categories:

1. Outcomes

2. Assessment & Monitoring of Asthma Severity and Control

3. Control of environmental factors and co-morbid conditions that affect asthma

4. Education for a partnership in care/patient self-management education

5. Medication adherence

6. Coordination of care

Classification of Measures

The measures selected for inclusion in each category were then classified according to use, validation, and standardization of the methodology, as follows:

Core Measures

- *A set of measures that are validated and standardized and should be included for purposes of evaluation.*

Supplemental Measures

- *A set of measures that are validated and standardized, optional for inclusion.*

Emerging Measures

- *A set of measures with potential to expand or improve certain aspects of disease monitoring that are not yet standardized, require further validation, optional for inclusion.*

Core Measures: Outcomes, Assessment & Monitoring of Asthma and Control of Environmental Factors

Domain	Metric
Outcomes	
Health Care Utilization	Reduce hospitalizations for asthma; asthma hospitalization rate
	Reduce emergency department (ED) visits for asthma; asthma emergency department (ED) visits
Quality Improvement	Asthma Medication Ratio (AMR)
	Medication Management for Asthma (MMA)
Assessment & Monitoring of Asthma Severity and Control	
Composite Measures	Asthma Control
	Asthma Severity
Control of Environmental Factors and Comorbid Conditions	
Tobacco Use	Reduce the proportion of non-smokers exposed to secondhand smoke
	Increase the proportion of smoke-free homes

Reimbursement payments are often linked to Health Care Utilization and Quality Improvement but need to include other measures across the guideline-based categories to ensure health equity.

Core Measures: Education, Medication Adherence, and Care Coordination

Domain	Metric
Education for a Partnership in Care/Patient Self-Management Education	
Health Care Quality	Increase the proportion of persons with current asthma who receive formal patient education
	Asthma Action Plan
Medication Adherence	
Medication Utilization	Increase the proportion of persons with current asthma with prescribed inhalers who receive instruction on their use
	Increase the proportion of persons with current asthma who do not use more than one canister of short-acting inhaled beta agonist per month
Care Coordination	
Primary Care Connection	Increase the proportion of persons with current asthma who have had at least one routine follow-up visit in the past 12 months
	Primary Care Connection after Emergency Department Visits for Asthma

Reimbursement payments also need to include the capacity to track the performance of programs using other standardized measures that explain the resultant outcomes.

Supplemental Measures

Domain	Metric
Outcomes	
Health Care Costs	Asthma-specific cost of care
	Total Cost of Care
Quality of Life – Productivity Loss	Reduce the proportion of persons with asthma who miss school or work days; missed school/work days due to asthma
Quality of Life – Composite	Quality of Life – Patient
	Quality of Life - Caregiver
Assessment & Monitoring of Severity & Control	
Composite Measures	Optimal Asthma Control
Care Coordination	
Maternal, Infant, and Child Health	Increase in the proportion of children with special health care needs who receive care in family-centered, comprehensive, and coordinated systems

Use of more patient-centered measures provide programs the capacity to ensure the quality of care, promote health equity and link the resultant outcomes of health care utilization and cost to guidelines-based care measures.

Emerging Measures

Domain		Metric
Control of Environmental Factors and Co-morbid Conditions that Affect Asthma		
Environmental Health	Environmental remediation (minor vs. moderate/major)	
	Environmental health assessment	
	Environmental control supplies	
Composite Measures	Environmental Scoring System	
Education for a Partnership in Care/Patient Self-Management Education		
Self-Management Strategies	Environmental health education in the home setting	
	Duration of environmental health education	
	Proportion of home visits completed by type of educator (nurse, respiratory therapist, community health worker etc.)	

Use of the recommended environmental health measures will allow for continuing to build the evidence base, greater comparability of program results and most importantly makes possible the reimbursement of services.

In each category there are existing measures which are standardized measures that can be collected in addition to the recommended measures.

Domain	Type	Measure	Source
Indoor Allergens	Core	Reduce indoor allergen levels: cockroaches	Healthy People 2020 EH-13.1
	Core	Reduce indoor allergen levels: mouse	Healthy People 2020 EH-13.2
Tobacco Use	Core	Reduce the proportion of nonsmokers exposed to secondhand smoke	Healthy People 2020 TU-11
	Core	Increase the proportion of smoke-free homes	Healthy People 2020 TU-14
	Supplemental	Tobacco smoke exposure: screening ^{lxxvii}	American Academy of Allergy Asthma & Immunology Measure #2
	Supplemental	Tobacco smoke exposure: intervention ^{lxxviii}	American Academy of Allergy Asthma & Immunology Measure #3
Environmental health	Emerging	Environmental health assessment	Crocker (2011), Matsui et al. (2016), Krieger (2010)
	Emerging	Environmental remediation (Tier 1 - minor vs Tier 2 - moderate/major)	Crocker (2011), GHHI (2017)
	Emerging	Environmental control supplies	American Lung Association (2015) + Crocker (2011)
Composite Measures	Emerging	Environmental Scoring System	Dong et al. (2018)

Recommended measures were selected with the goal of supporting reimbursement.



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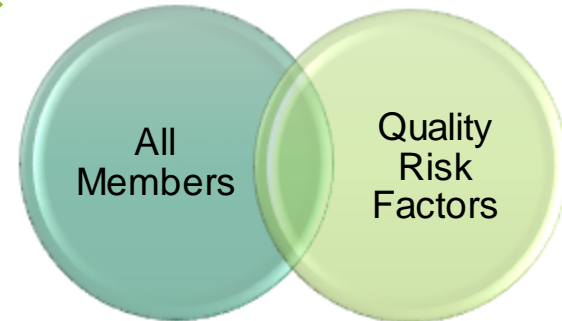
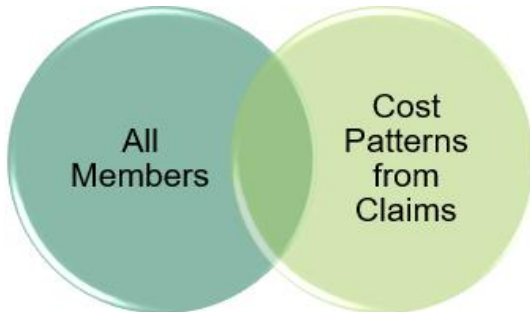
Value of Recommended Metrics

Traditional Cost Utilization Saving Model

Traditional Quality Improvement Model



Integrated Model for Cost & Quality Outcomes

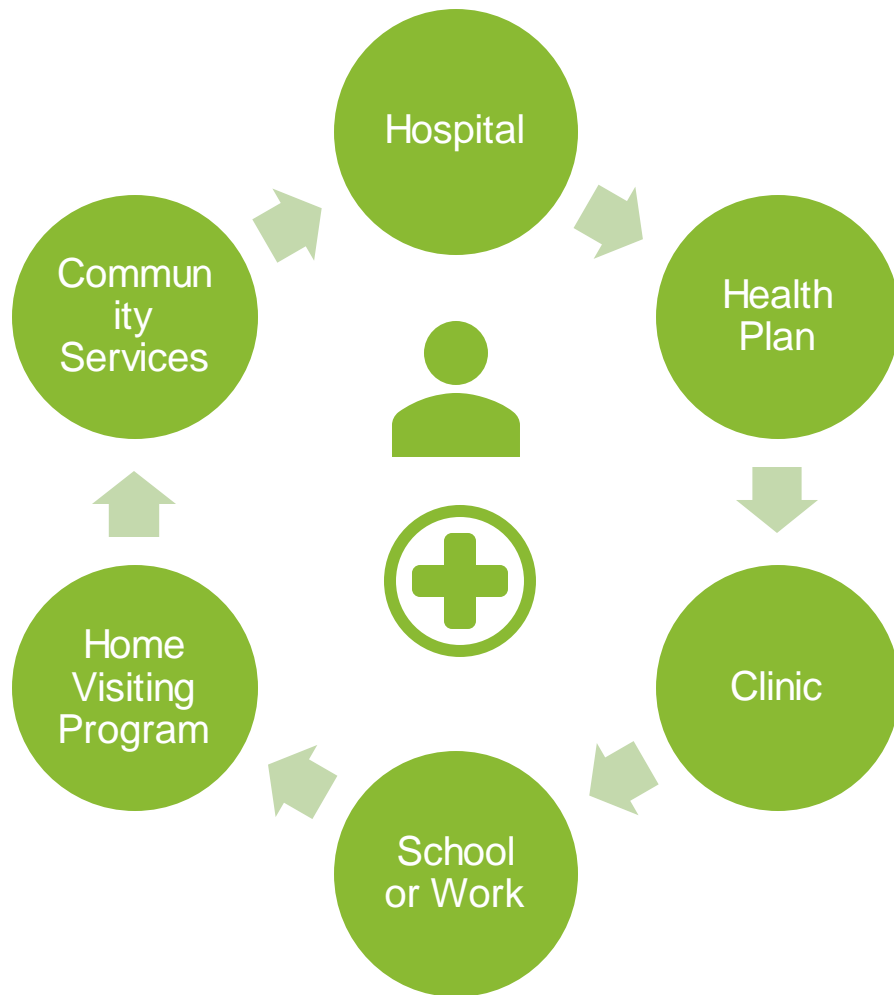


Race/ Ethnicity
Poverty Status
Parental educational attainment
Exposure to environmental factors inside homes
No usual source of healthcare
Personal Doctor
Weight status
Lack of health insurance coverage
Type of health insurance coverage
Unable to pay medical bills

High utilization
Multiple chronic diseases
Complex medical conditions
Variable program costs
Insurance Plan Churn Rate



Care Coordination Measures



Goal

- Identify patient's specific needs
- Create a personalized plan
- Ensure plan adheres to guidelines and is followed at every step
- Use data sources
- Leverage infrastructure
- Readily communicate with providers

Value

- Reduce duplication of effort
- Connect services efficiently
- Limit gaps between providers
- Positive outcomes, enhanced quality of life, reduced disparities, costs, and utilization
- Increased trust and adherence



50 *National
Association of
School Nurses*
1968 - 2018



Using the Metrics

Erin D. Maughan PhD, MS, RN, PHNA-BC, FNASN, FAAN
Director of Research

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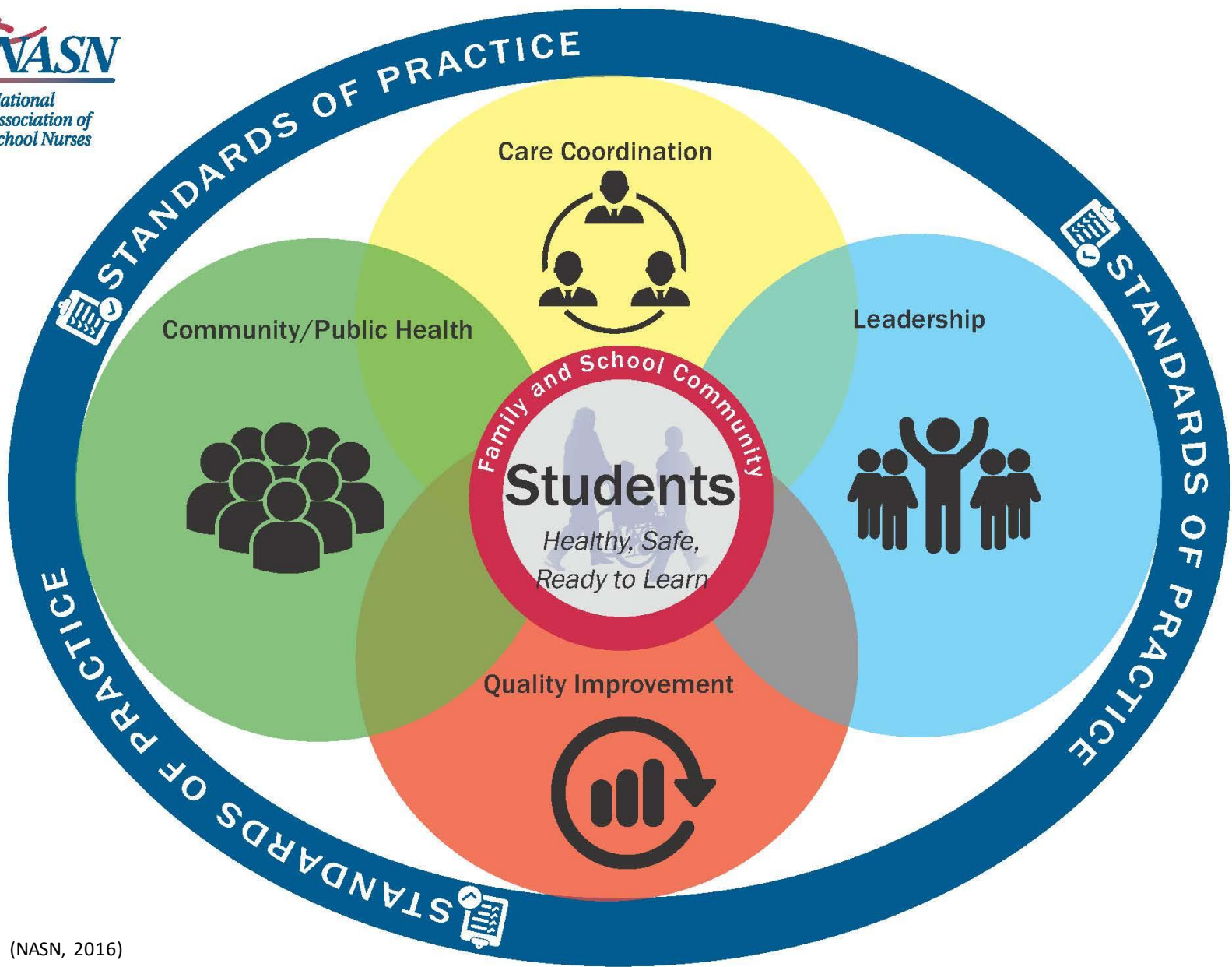
National
Association of
School Nurses

NATIONAL SCHOOL HEALTH DATA SET:
EVERY STUDENT COUNTS!



50
1969-2019
National
Association of
School Nurses

Framework for 21st Century School Nursing Practice™



(NASN, 2016)

Metrics

- Missed days of school
- Persons who receive formal patient education
- Asthma Action Plan
- Care Coordination

“It is easier to build strong children than to repair broken men”

-Frederick Douglass



The Houston Integrated Intervention Targeting Better Asthma Control (HIITBAC) *Program Evaluation Metrics*



Baylor
College of
Medicine®

ENVIRONMENTAL
HEALTH SERVICE

Rebecca Jensen Bruhl, DrPH, MPH, MEM

Rebecca.Bruhl@bcm.edu

EMHOME Webinar

Wednesday, September 4, 2019

BCM Environmental Health: Overview

- Recent Asthma HV Research Initiatives
 - PCORI HIITBAC
 - NIEHS HIITBAC2-HH (Hurricane Harvey)
 - HUD Breathe Easy (multifamily housing)
- Clinically based, multicomponent, home intervention program
 - Clinical assessment
 - Home assessment
 - Follow-up home visits (5 visits total, 1 year)



Asthma Program Metrics, Research Context

- Primary Outcomes
 - Quality of Life (Juniper mAQLQ)
 - Asthma control (ACT)
 - Healthcare utilization (ED visits)
- Secondary Outcomes
 - Symptom-free days, past 2 weeks
 - Pulmonary function (spirometry)
- Other (examples)
 - Trigger exposure (e.g., dust, cockroaches)
 - Exposure-reduction behavior (e.g., use of pillow/bedding covers, discontinued use of air fresheners)

Data Collected	HIITBAC1		HIITBAC2-HH		Breathe Easy	
	01/01/15–01/26/18		05/01/18–09/30/19		10/01/19–12/31/20	
	Baseline	Exit	Baseline	Exit	Baseline	Exit
Questionnaires						
Exposure history	X	X	X	--	X	X
Asthma control	X	X	X	X	X	X
CRS symptoms	--	--	--	--	X	X
Quality of Life	X	X	X	X	X	X
Healthcare utilization	X	X	X	X	X	X
Social support	X	X	X	X	X	X
Medication adherence	X	X	--	--	X	X
Clinical Measures						
Blood pressure	X	X	X	--	X	X
Spirometry	X	X	--	--	--	--
Atopy (IgE, Zone 6)	X	--	--	--	X	--
Exhaled nitric oxide	--	--	X	--	X	X
Home Measures						
Temperature	X	X	X	--	X	X
Relative humidity	X	X	X	--	X	X
Carbon dioxide	X	X	X	--	X	X
Particulate matter	X	X	X	--	X	X
Mold	--	--	X	--	X	--
VOCs	--	--	--	--	X	--
Biospecimens						
Blood	X	--	X	--	X	--
Sputum	--	--	--	--	X	--

Abbreviations: IgE, immunoglobulin E; VOCs, volatile organic compounds; Zone 6, a panel of 29 aeroallergens common to southcentral U.S.

Metrics for Program Sustainability

Outcomes

- Improve asthma control
- Improve quality of life
- Reduce healthcare utilization (ED visits, hospitalizations, total cost of care)
- Reduce in-home triggers, improve composite assessment score
- Improve PCP handoff, increased knowledge (guidelines-based care)
- Improve medication adherence

Process Measures

- ACT, protocols completed at visits
- Duration of visit
- Remediation tier, supplies provided
- Information shared with PCP
- Identified goals, barriers with motivational interviewing
- Education protocols completed (asthma self-management and environmental health)
- Referrals received, referrals provided

Program Quality

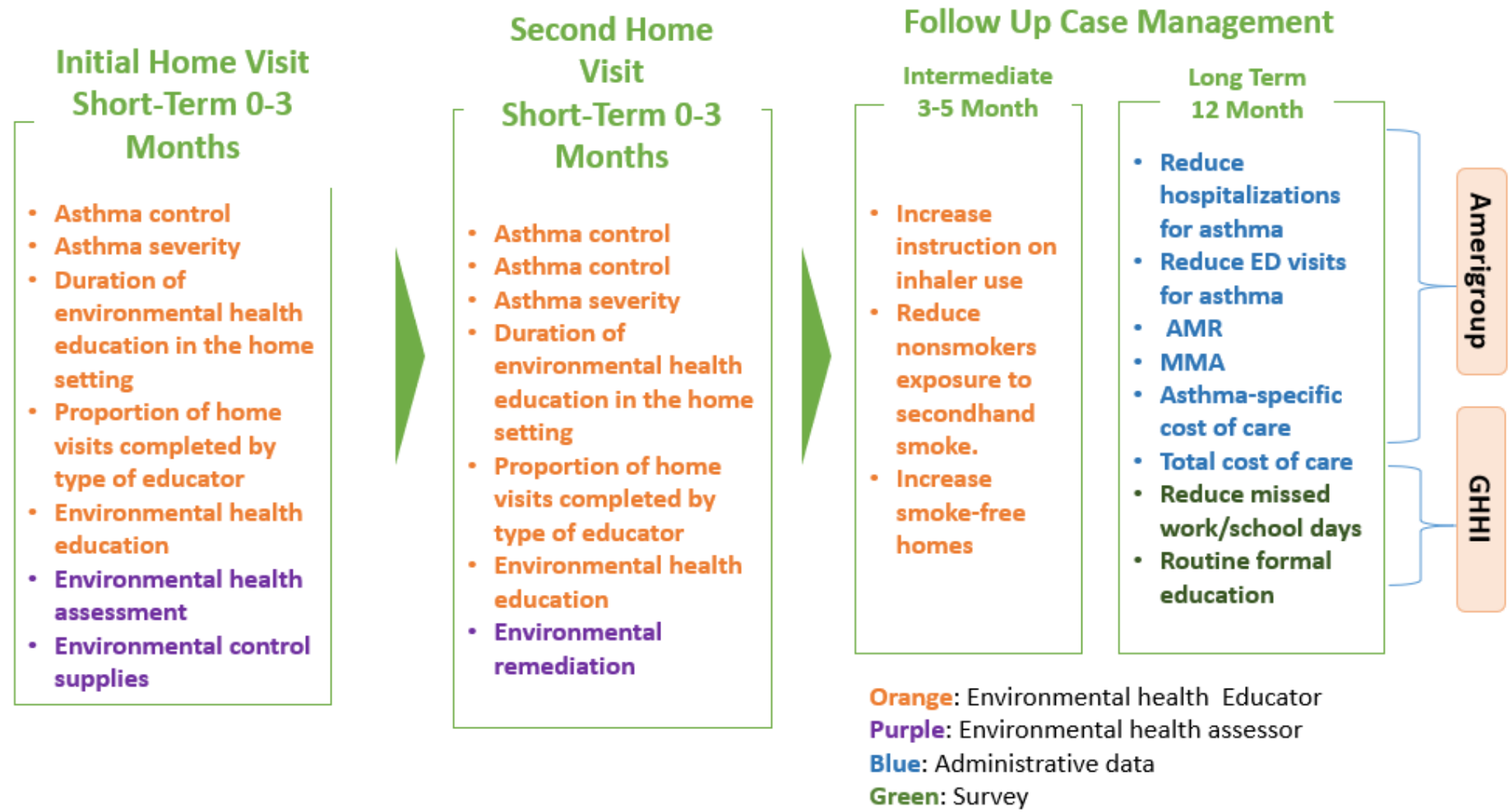
- Education modules (current standard curriculum)
- Staff training in protocols, continuing education
- Credentials of staff
- QA/QC process
- Oversight systems

Bottom line: metrics matter for researchers, healthcare providers, payers... and patients!

Intersection with Amerigroup Process Flow



Maryland Process Flow with EMHOME Activities and Metrics

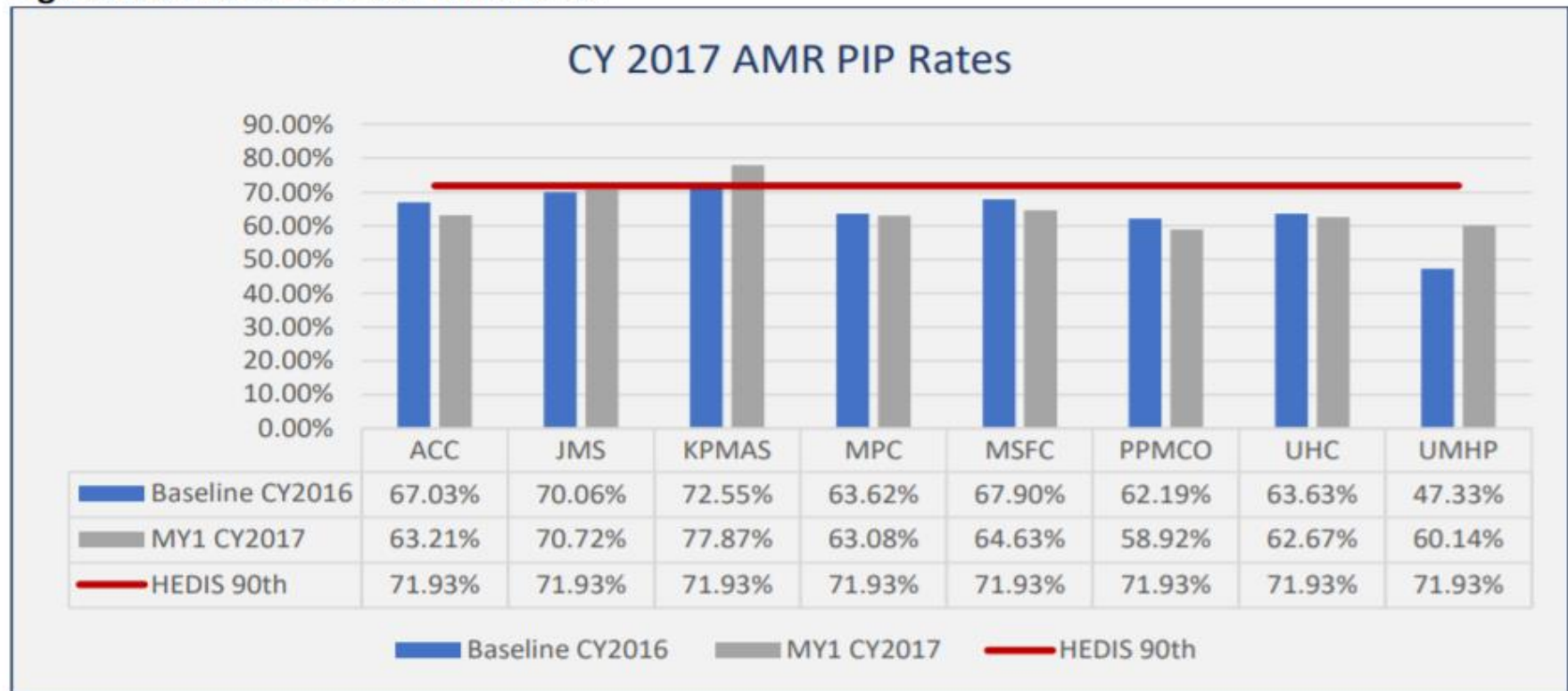


Performance Improvement Projects

Asthma Medication Ratio Indicator Results CY 2017 is the first remeasurement year of data collection for the Asthma Medication Ratio PIP in the State of Maryland.

Figure 1 represents the Asthma Medication Ratio PIP indicator rates for all MCOs. Figure 1. CY 2016 - CY 2017 AMR Rates

Figure 1. CY 2016 - CY 2017 AMR Rates



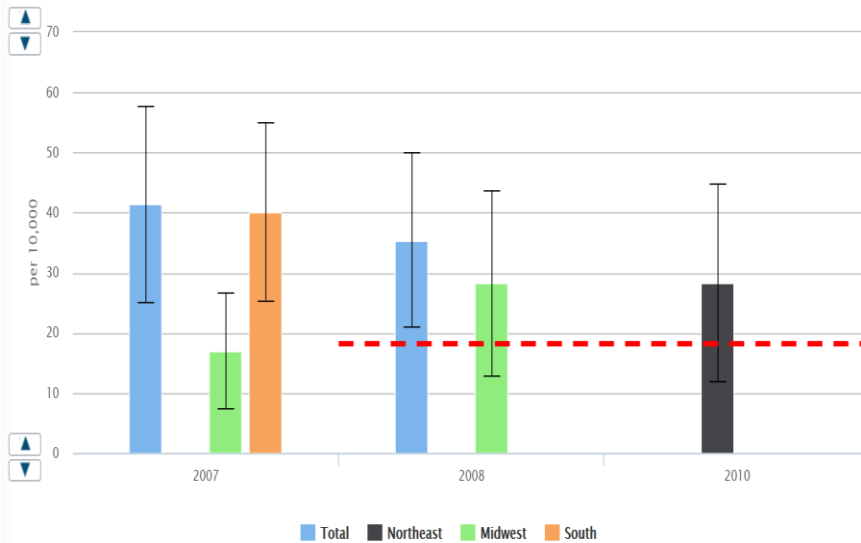
Historical Benchmarking with Healthy People 2020

Description	Baseline (2007)	Measure	Target Setting Method	Target (2020)
Reduce hospitalizations for asthma among children under age 5 years	41.4	per 10,000	Minimal statistical significance	18.2
Reduce hospitalizations for asthma among children and adults aged 5 to 64 years	11.1	per 10,000	Minimal statistical significance	8.7
Reduce hospitalizations for asthma among adults aged 65 years and older	25.3	per 10,000	Minimal statistical significance	20.1

Hospitalizations for asthma among children (per 10,000 population, <5 years) By Geographic Region (Of Hospital)

2020 Baseline (year): 41.4 (2007) --- 2020 Target: 18.2 Desired Direction: ↓ Decrease desired

Auto Scale



Data Source: National Hospital Discharge Survey (NHDS); Centers for Disease Control and Prevention, National Center for Health Statistics (CDC/NCHS)

Population Estimates; U.S. Census Bureau (Census)

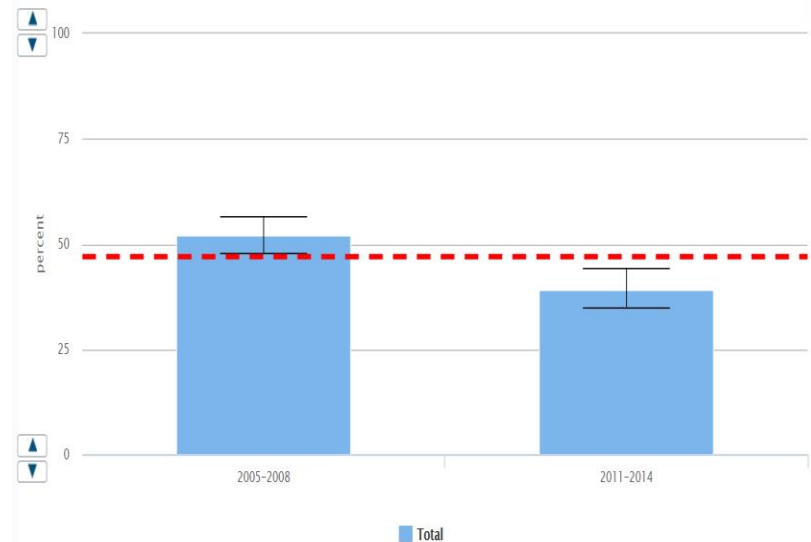
Error Bar (I) represents the 95% confidence interval

Additional footnotes may apply to these data. Please refer to footnotes below the data table for further information.

Children exposed to secondhand smoke (percent, nonsmokers, 3–11 years) By Total

2020 Baseline (year): 52.2 (2005–08) --- 2020 Target: 47.0 Desired Direction: ↓ Decrease desired

Auto Scale



Data Source: National Health and Nutrition Examination Survey (NHANES); Centers for Disease Control and Prevention, National Center for Health Statistics (CDC/NCHS)

Error Bar (I) represents the 95% confidence interval

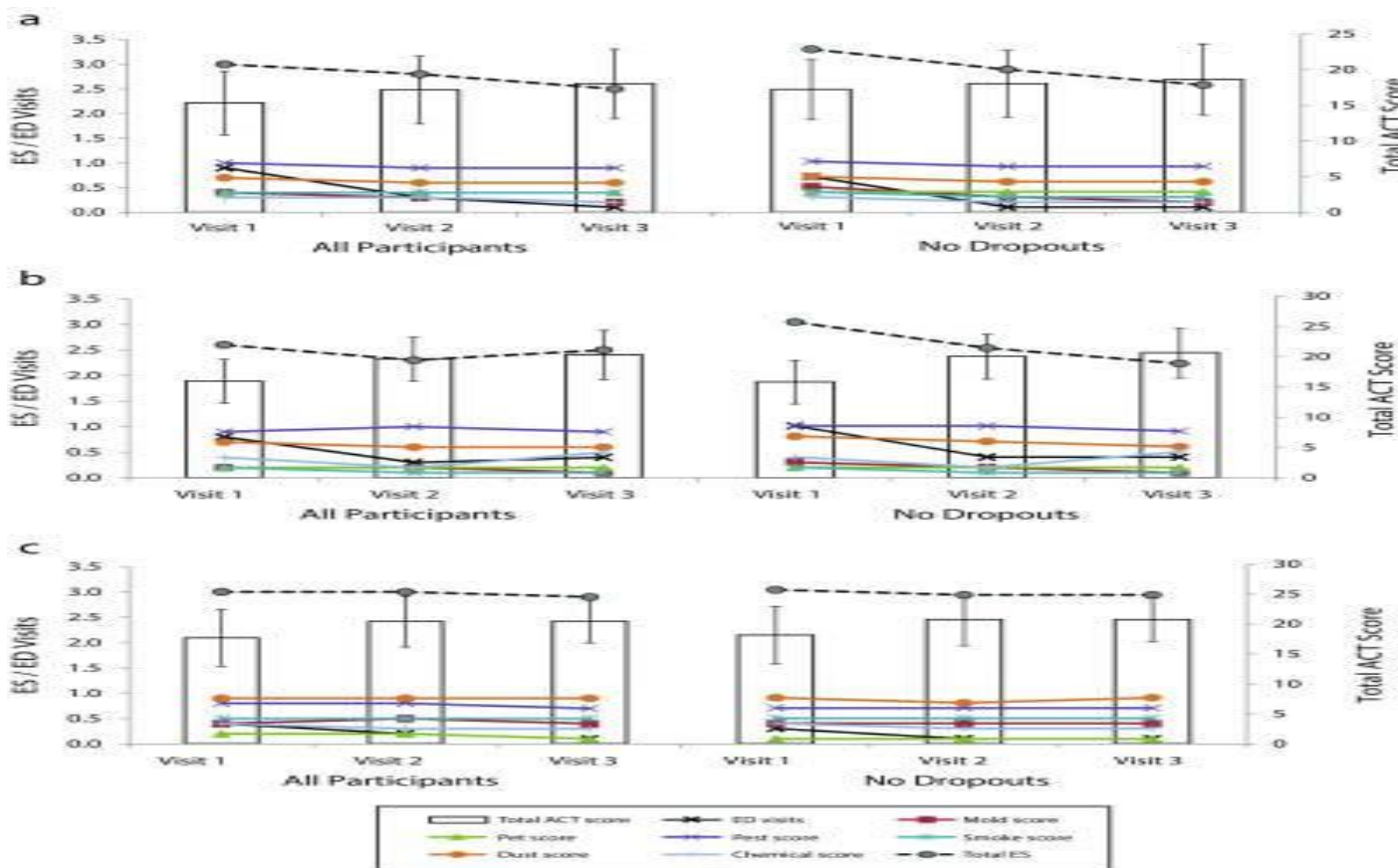
Additional footnotes may apply to these data. Please refer to footnotes below the data table for further information.

Performance Benchmarking with Patient-Centered Measures

Validated Instruments and Minimally (Clinical) Important Difference

Assessment & Monitoring of Asthma Severity and Control			
Domain	Core Measure	Score Ranges	Target
Composite Measures	Asthma Control Test (ACT) or Childhood Asthma Control Test (C/ACT)	ACT – ranges from 5 to 25	ACT MCID = 3
	Asthma Control Test (C/ACT)	CACT – ranges 0 to 27	CACT MCID = 2
	Composite Asthma Severity Index (CASI)	Ranges from 0-20	MID = 0.9

Environmental Score
And
ED Visits



Total Asthma Control Test Scores

Value-Based Purchasing Contracts

VBP METHODOLOGY EXAMPLE #1 – Shared Savings allocated by Quality Points				
Measure Domain	Metric	Target Year 1	Target Year 2	Quality Points
Quality Gate (applicable both Years 1 & 2)	Percentile in medication management for asthma or asthma medication ratio	50%	60%	1
Success Measures (Year 2 targets over Year 1, not cumulative)	Optimal Asthma Control (Composite of Asthma Control and ED Visits)	20%	10%	1
	Decrease in Inpatient Days for asthma-related admissions	20%	10%	1
	Increase the proportion of persons with current asthma who receive formal patient education	20%	10%	1
	Reduce the proportion of non-smokers exposed to secondhand smoke	10%	20%	1
Total Possible Quality Points				5
Shared Savings by Total cost of care reductions		100%	50%	5
		80%	40%	4
		60%	30%	3
		40%	20%	2
		20%	10%	1
Bonus	If total % decreases in Year 2 when summed for all measures are greater than 60% = 60% savings			



Green & Healthy Homes Initiative®

Question & Answers

Questions?

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Twitter: [@HealthyHousing](https://twitter.com/HealthyHousing)

Facebook: [GHHInational](https://www.facebook.com/GHHInational)

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Upcoming Opportunities

GHHI's 10th Annual Executive Leadership Institute

- Baltimore, MD – September 15th-17th, 2019
- [Register Here](#)

National Initiative for Asthma Reimbursement:

[Request For Proposals](#)

- [Business Development](#)
- [Reimbursement Support](#)

Publication Release:

Recommendations for Evaluation Metrics for Asthma Home Visiting Programs

- Publication will be released in September and located on our website at [National Initiative for Asthma Reimbursement](#)

Count of Recommended Measures by Classification

Evaluation Components	Core Measures	Supplemental Measures	Emerging Measures
Outcomes	4	5	0
Assessment & Monitoring	2	1	0
Control of Environmental Factors & Comorbid Conditions	2	0	4
Education for a Partnership in Care	2	0	3
Medication Adherence	2	0	0
Care Coordination	2	1	0
Total	14	7	7

Asthma Working Groups and Taskforces

Link

[The National Asthma Education and Prevention Program](#)

[Guidelines for the Diagnosis and Management of Asthma \(EPR-3\)](#)

[Presidential Task Force on Asthma](#)

[Coordinated Federal Action Plan to Reduce Racial and Ethnic Asthma Disparities](#)

[Asthma Disparities Subcommittee](#)

[Immunotherapy Options for Treatment of Allergic Asthma Workgroup \(PCORI\)](#)

[American Academy of Allergy Asthma & Immunology](#)

[Something new in the air: Paying for community-based environmental approaches to asthma prevention and control](#)

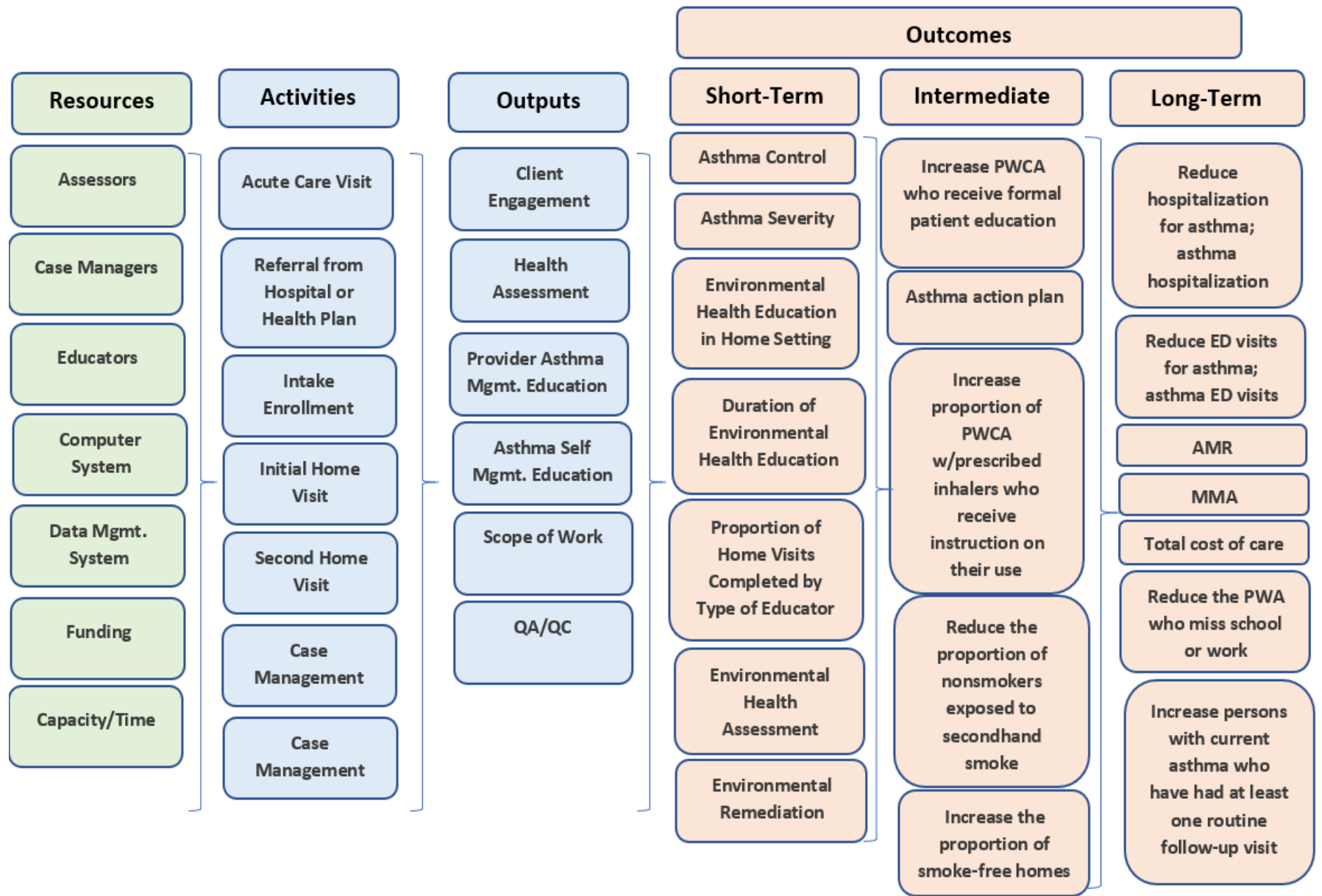
[Creation and implementation of SAMPRO™: A school-based asthma management program](#)

[Federal Healthy Homes Workgroup: Advancing Healthy Housing - A Strategy for Action](#)

CDC Quality Measures Table

Measure Type	Metric	Domain
Process Measure	Asthma Medication Ratio	Medication
	New Asthma Medication Delivery Device	Medication
	Rate of Emergency Department Use	Utilization
Composite measures	Optimal Asthma Control*	Not Categorized
Patient-Centered	Primary Care Connection after Emergency Department Visit	Care Coordination

LOGIC MODEL: GHHI Maryland



Works Cited

Slide 12

- Crocker**, D. D., Kinyota, S., Dumitru, G. G., Ligon, C. B., Herman, E. J., Ferdinands, J. M., ... & Task Force on Community Preventive Services. (2011). Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a community guide systematic review. *American journal of preventive medicine*, 41(2), S5-S32. ;
- Coffman**, J. M., Cabana, M. D., Halpin, H. A., & Yelin, E. H. (2008). Effects of asthma education on children's use of acute care services: a meta-analysis. *Pediatrics*, 121(3), 575-86. ;
- Krieger**, J. (2010). Home is where the triggers are: increasing asthma control by improving the home environment. *Pediatric Allergy, Immunology, and Pulmonology*, 23(2), 139-145. ;
- Akinbami**, L.J. et al. (2012 March). Asthma outcomes: Healthcare utilization and costs. *Journal of Allergy and Clinical Immunology*, 129(3), S49 – S64. ;
- Gardner**, A., Kaplan, B., Brown, W., Krier-Morrow, D., Rappaport, S., Marcus, L., ... & Aaronson, D. (2015). National standards for asthma self-management education. *Annals of Allergy, Asthma & Immunology*, 114(3), 178-186.
- Green and Healthy Homes Initiative** (2017 December). Healthy Homes and Asthma: A healthy housing blueprint to improving asthma outcomes. ;
- Matsui**, E. C., Abramson, S. L., & Sandel, M. T. (2016). Indoor environmental control practices and asthma management. *Pediatrics*, 138(5). ;
- American Lung Association** (2015). Asthma Guidelines-Based Care Initiative: Benchmarks for Key Aspects of Optimal Coverage. 1-13.
- Dong**, Z., Nath, A., Guo, J., Bhaumik, U., Chin, M. Y., Dong, S., Marshall, E., ... Adamkiewicz, G. (January 01, 2018). Evaluation of the Environmental Scoring System in Multiple Child Asthma Intervention Programs in Boston, Massachusetts. *American Journal of Public Health*, 108, 1, 103-111.

Slide 17

Healthy People 2020 RD-2;

Healthy People 2020 RD-3;

Healthy People 2020 TU-11

Healthy People 2020 TU-14

- Standards Subcommittee of the Asthma Disparities Workgroup (2016). Measures to Identify and Track Racial Disparities in Childhood Asthma: Asthma Disparities Workgroup Subcommittee Recommendations. Atlanta: Centers for Disease Control and Prevention.;**
- Akinbami**, L.J. et al. (2012 March). Asthma outcomes: Healthcare utilization and costs. *Journal of Allergy and Clinical Immunology*, 129(3), S49 – S64;
- National Asthma Education and Prevention Program** (2007). Expert Panel Report 3 (EPR-3): Guidelines for the Diagnosis and Management of Asthma: full report. Bethesda, Md.: U.S. Dept. of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute.
- Centers for Medicare & Medicaid Services** (2019 May 31c). NQF #1800 Asthma Medication Ratio: Ages 5-18 (AMR-CH); Centers for Medicare & Medicaid Services (2019 May 31d). NQF #1800 Asthma Medication Ratio: Ages 19-64 (AMR-AD).
- Centers for Medicare & Medicaid Services** (2019 May 31b). NQF #1799 Medication Management for People with Asthma (MMA).
- Reddel**, H.K. et al. (2009). An official American Thoracic Society/European Respiratory Society statement: asthma control and exacerbations: standardizing endpoints for clinical asthma trials and clinical practice;
- Dinakar**, C., & Chipps, B. E. (2017). Clinical tools to assess asthma control in children. *Pediatrics*, 139(1). ;
- Wildfire**, J. J., Gergen, P. J., Sorkness, C. A., Mitchell, H. E., Calatroni, A., Kattan, M., ... & Liu, A. H. (2012). Development and validation of the Composite Asthma Severity Index—an outcome measure for use in children and adolescents. *Journal of Allergy and Clinical Immunology*, 129(3), 694-701 ;
- Koshak** E. A. (2007). Classification of asthma according to revised 2006 GINA: evolution from severity to control. *Annals of thoracic medicine*, 2(2), 45–46.

Works Cited

Slide 18

Healthy People 2020 RD-6;

Standards Subcommittee of the Asthma Disparities Workgroup (2016). Measures to Identify and Track Racial Disparities in Childhood Asthma: Asthma Disparities Workgroup Subcommittee Recommendations. Atlanta: Centers for Disease Control and Prevention.);

Akinbami, L.J. et al. (2012 March). Asthma outcomes: Healthcare utilization and costs.

Healthy People 2020 RD-7.2

Healthy People 2020 RD-7.4

Healthy People 2020 RD-7.6

Mount Sinai Collaboration for Advancing Pediatric Quality Measures (n.d.). Section 1. Basic Measure Information: CAPQuaM PQMP Asthma IV: Primary Care Connection After Emergency Department Visits for Asthma. Pediatric Quality Measure Program (PQMP).

Slide 19

Akinbami, L.J. et al. (2012 March). Asthma outcomes: Healthcare utilization and costs. *Journal of Allergy and Clinical Immunology*, 129(3), S49 – S64.

National Quality Forum (2017 August 30). Cost and Resource Use 2016-2017. Department of Health and Human Services. Healthy People 2020 RD-5;

Standards Subcommittee of the Asthma Disparities Workgroup (2016). Measures to Identify and Track Racial Disparities in Childhood Asthma: Asthma Disparities Workgroup Subcommittee Recommendations. Atlanta: Centers for Disease Control and Prevention.);

Giese, J. K. (2019). Evidence-based pediatric asthma interventions and outcome measures in a healthy homes program: An integrative review. *Journal of Asthma*, 56(6), 662-673.

Centers for Medicare & Medicaid Services (2019). Quality ID #398: Optimal Asthma Control – National Quality Strategy Domain: Effective Clinical Care

Healthy People 2020 MICH-31

Slide 20

Crocker, Deidre D., Stella Kinyota, Gema G. Dumitru, Colin B. Ligon, Elizabeth J. Herman, Jill M. Ferdinands, David P. Hopkins, Briana M. Lawrence, Theresa A. Sipe, and Task Force on Community Preventive Services. (2011). "Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a community guide systematic review." *American journal of preventive medicine* 41, no. 2: S5-S32.

Green and Healthy Homes Initiative (2017 December). Healthy Homes and Asthma: A healthy housing blueprint to improving asthma outcomes.

Matsui, E. C., Abramson, S. L., & Sandel, M. T. (2016). Indoor environmental control practices and asthma management. *Pediatrics*, 138(5), e20162589.

Krieger, J. (2010). Home is where the triggers are: increasing asthma control by improving the home environment. *Pediatric Allergy, Immunology, and Pulmonology*, 23(2), 139-145.

American Lung Association (2015). Asthma Guidelines-Based Care Initiative: Benchmarks for Key Aspects of Optimal Coverage. 1-13.

Dong, Z., Nath, A., Guo, J., Bhaumik, U., Chin, M. Y., Dong, S., Marshall, E., ... Adamkiewicz, G. (January 01, 2018). Evaluation of the Environmental Scoring System in Multiple Child Asthma Intervention Programs in Boston, Massachusetts. *American Journal of Public Health*, 108, 1, 103-111.

Works Cited

Slide 21

Healthy People 2020 EH-13.1

Healthy People 2020 EH-13.2

Healthy People 2020 TU-11

Healthy People 2020 TU-14

American Academy of Allergy Asthma & Immunology (n.d.). Asthma: Spirometry Evaluation. American Medical Association.

American Academy of Allergy Asthma & Immunology (2014a). Measure #2: Tobacco Smoke Exposure: Screening.

Crocker, D. D., Kinyota, S., Dumitru, G. G., Ligon, C. B., Herman, E. J., Ferdinands, J. M., ... & Task Force on Community Preventive Services. (2011). Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a community guide systematic review. *American journal of preventive medicine, 41*(2), S5-S32.

Matsui, E. C., Abramson, S. L., & Sandel, M. T. (2016). Indoor environmental control practices and asthma management. *Pediatrics, 138*(5).

Krieger, J. (2010). Home is where the triggers are: increasing asthma control by improving the home environment. *Pediatric Allergy, Immunology, and Pulmonology, 23*(2), 139-145.

Green and Healthy Homes Initiative (2017 December). Healthy Homes and Asthma: A healthy housing blueprint to improving asthma outcomes.

American Lung Association (2015). Asthma Guidelines-Based Care Initiative: Benchmarks for Key Aspects of Optimal Coverage. 1-13.

Dong, Z., Nath, A., Guo, J., Bhaumik, U., Chin, M. Y., Dong, S., Marshall, E., ... Adamkiewicz, G. (2018 January 01). Evaluation of the Environmental Scoring System in Multiple Child Asthma Intervention Programs in Boston, Massachusetts. *American Journal of Public Health, 108, 1, 103-111.*

Slide 23

Wellframe (2018 January). Optimize targeting & outreach to set up for HEDIS success.

Slide 24

Centers for Medicare & Medicaid Services (2014 September). Making Connections: Strengthening Care Coordination in the Medicaid Benefit for Children & Adolescents. Department of Health & Human Services.

Janevic, M. R., Stoll, S., Wilkin, M., Song, P. X., Baptist, A., Lara, M., ... & Lesch, J. K. (2016). Pediatric asthma care coordination in underserved communities: a quasiexperimental study. *American journal of public health, 106*(11), 2012-2018.

Kelly, R. P., Stoll, S. C., Bryant-Stephens, T., Janevic, M. R., Lara, M., Ohadike, Y. U., ... & Malveaux, F. J. (2015). The influence of setting on care coordination for childhood asthma. *Health promotion practice, 16*(6), 867-877.

National Quality Forum (2014 August 15). Priority Setting for Healthcare Performance Measurement: Addressing Performance Measure Gaps in Care Coordination. Department of Health and Human Services.

Slide 35

Figure 1. **HealthChoice**, Maryland Department of Health. (October 2018). Medicaid Managed Care Organization performance Improvement Project Annual Report. Qlarant.

Works Cited

Slide 36
Healthy People 2020

Slide 37
Dong, Z., Nath, A., Guo, J., Bhaumik, U., Chin, M. Y., Dong, S., Marshall, E., ... Adamkiewicz, G. (2018 January 01). Evaluation of the Environmental Scoring System in Multiple Child Asthma Intervention Programs in Boston, Massachusetts. *American Journal of Public Health, 108*, 1, 103-111.
Nathan, R. A., Sorkness, C. A., Kosinski, M., Schatz, M., Li, J. T., Marcus, P., ... & Pendergraft, T. B. (2004). Development of the asthma control test: a survey for assessing asthma control. *Journal of Allergy and Clinical Immunology, 113*(1), 59-65.
Schatz, M., Kosinski, M., Yarlas, A. S., Hanlon, J., Watson, M. E., & Jhingran, P. (2009). The minimally important difference of the Asthma Control Test. *Journal of Allergy and Clinical Immunology, 124*(4), 719-723.
Wildfire, J. J., Gergen, P. J., Sorkness, C. A., Mitchell, H. E., Calatroni, A., Kattan, M., ... & Liu, A. H. (2012). Development and validation of the Composite Asthma Severity Index—an outcome measure for use in children and adolescents. *Journal of Allergy and Clinical Immunology, 129*(3), 694-701.

Slide 38
Source: Example by GHHI & Health Management Associates

Slide 45
Centers for Disease Control and Prevention (n.d.). Review and Selection of Core Asthma Quality Measures. Retrieved from https://www.cdc.gov/asthma/pdfs/White_paper_508.pdf