Asthma in Michigan:
A Blueprint for Action

Strategic Plan 2014 – 2017

Fourth Edition

AIM Asthma Initiative of Michigan

Contents

STATE OF MICHIGAN
DEPARTMENT OF COMMUNITY HEALTH
LANSING

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GOVERNOR

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November 3, 2014

Dear Michigan Citizens:

The Asthma Initiative of Michigan was formed in 2000 to coordinate and enhance asthma initiatives in the State of Michigan, using the state asthma strategic plan as its guide. After considerable success in improving asthma care and reducing Michigan's burden of asthma, the members of Asthma Initiative of Michigan have updated the strategic plan for a third time in their continued effort to fine tune and enhance their initiatives.

It is my pleasure to support the Asthma Initiative of Michigan's fourth strategic plan, Asthma in Michigan 2017: A Blueprint for Action. The focus of the plan is to reduce asthma burden by concentrating on communities and populations enduring asthma disparities. Asthma Initiative of Michigan partners will be informed of current asthma data and identified best practice strategies. Collaborative implementation of the goals and objectives of this plan should result in improved quality of life and reduction of severe events for those with asthma.

I extend my thanks and gratitude to the individuals who contributed their time and expertise to the development of this plan. Together, we can work to improve the lives of people with asthma in Michigan.

Sincerely,

Nick Lyon

JH:vg

Introduction

The purpose of this plan is to provide direction to the Asthma Initiative of Michigan (AIM) and to guide the use of Michigan Department of Community Health (MDCH) Asthma Prevention and Control Program staff, resources and partnerships. The plan informs the work of agencies, organizations and programs around the state, by providing current asthma data and identifying best practice strategies towards specific goals.

Plan Parameters

The plan was intentionally designed to provide strategic, focused direction for AIM. Its intent is to guide decisions and actions for the greatest impact in reducing the morbidity and mortality due to asthma. The plan was developed using the following parameters:

Health Equity
In Michigan, disparities in asthma burden continue to exist. These inequalities are disproportionately distributed across age, race, income, and geographic region. AIM understands that differences in opportunity and access to resources explain much of why disparities exist. AIM is committed to addressing disparities through data collection, partnership development and collaboration, and interventions targeting those suffering disproportionately.

Healthy People 2020 Targets
The US Department of Health and Human Services' *Healthy People 2020* targets provide the framework for setting asthma goals and measurements.

The Michigan Coordinated Chronic Disease State Plan and the CDC National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) Action Domains.
The Michigan Coordinated Chronic Disease State Plan aligns with four key domains that NCCPHP has identified as essential to support Americans with equitable opportunities to take charge of their health. In addition to strategies involving epidemiology and surveillance, the state plan incorporates strategies that align with three statewide initiatives that specifically address domains 2-4. The following

paragraphs are excerpted, in part, from The Michigan Coordinated Chronic Disease State Plan.

- **Domain 1: Epidemiology and Surveillance: Gather, analyze, and disseminate data and information and conduct evaluation to inform, prioritize, deliver, and monitor programs and population health.**

- **Domain 2: Environmental approaches that promote health and support and reinforce healthful behaviors (statewide in schools and childcare, worksites, and communities).** The Michigan Health and Wellness 4x4 Plan – A statewide initiative that recommends the practice of four healthy behaviors (maintain a healthy diet, engage in regular exercise, get an annual physical exam, and avoid all tobacco use) and the control of four health measures (body mass index--BMI, blood pressure, cholesterol level, and blood sugar/glucose level), with the goal of reducing obesity and the subsequent development of chronic illnesses.

- **Domain 3: Health system interventions to improve the effective delivery and use of clinical and other preventive services in order to prevent disease, detect diseases early, and reduce or eliminate risk factors and mitigate or manage complications.** The Michigan Primary Care Transformation Project (MiPCT) - A 3-year, multi-payer, statewide demonstration project aimed at reforming primary care payment models and expanding the capabilities of patient-centered medical homes (PCMH) throughout the state. The goal of MiPCT is to improve overall population health via: a) risk reduction for healthy individuals, b) self-management support to prevent patients with moderate chronic disease levels from progressing to the complex category, c) care coordination and case management support for patients with complex chronic diseases, and d) appropriate, coordinated end-of-life care.

- **Domain 4: Strategies to improve community-clinical linkages ensuring that communities support and clinics refer patients to programs that improve management of chronic conditions. Such interventions ensure those with or at high risk for chronic diseases have access to quality community resources to best manage their conditions or disease risk.** Community Linkages - Pathways/Community

HUB Project – A demonstration project being implemented in Ingham, Muskegon and Saginaw Counties. The Community HUB Model uses lay Community Health Workers to address the social and economic determinants of health. The Community Health Workers focus their efforts on four activities: 1) find individuals at the greatest risk of falling between the cracks and developing or mismanaging chronic conditions, 2) assess their situation and identify potential barriers to receiving the services they need to achieve positive outcomes, 3) refer individuals to evidence-based health and social services (i.e. Pathways), and 4) document the results of referrals, evaluate progress, and report final outcomes.

Data-driven

The plan represents deliberate decisions based on the most currently available data and information. This includes Michigan surveillance data as well as asthma related best- and evidence- based practices.

Focused

Given limited resources, it is imperative to allocate resources in a focused and targeted manner. While AIM provides information and data statewide, specific strategies are focused on communities and populations enduring a disparate burden of asthma.

Applied Systems Change Approach

AIM recognizes the importance of a systems change approach to bring about distinct and sustainable outcomes to reach *Healthy People 2020* targets. The plan is a model of applied systems change in addressing the asthma burden in targeted communities.

AIM Partnership Model

This plan identifies the organizations that have critical information and expertise necessary to help carry out tasks necessary for successful implementation of asthma goals. Deliberate partner relationships with the Michigan Asthma Advisory Committee, community partners and strategic implementation partners are specifically defined as a result of this plan. This approach identifies and develops relationships with key organizations committed to directly addressing asthma in highest burden communities, rather than trying to partner with as many organizations as possible.

The Planning Process

The 2014-2017 Plan was based on previous strategic plans that were developed through partner meetings and guidance from the Michigan Asthma Advisory Committee (MAAC). MDCH Asthma Prevention and Control Program staff reviewed the previous plan, created a draft document and obtained input from the MAAC and strategic partners to develop the final plan.

Current AIM Strategic Partners

The role of MDCH Asthma Prevention and Control Program and AIM partners is to identify and promote the use of best practice interventions that are most appropriate and feasible for each community. MDCH Asthma Prevention and Control Program will work with the key organizations listed below to address the asthma burden in Michigan.

American Lung Association of Michigan
Asthma and Allergy Foundation of America – Michigan Chapter
Asthma Network of West Michigan
Henry Ford Health System – Department of Pediatrics
Henry Ford Health System – Division of Biostatistics and Research Epidemiology
Ingham County Health Department
Genesee County Asthma Network
Genesee Intermediate School District
Michigan Association of School Nurses
MDCH – Adolescent and School Health Program
MDCH – Community Linkages Project
MDCH – Michigan Primary Care Transformation (MiPCT) Project
MDCH – Healthy Homes Section
MDCH – Health Disparities Reduction and Minority Health
MDCH and Michigan Department of Education – State School Nurse Consultant
Michigan Department of Education Coordinated School Health and Safety Programs
Michigan State University – Department of Family Medicine
Michigan State University – Division of Occupational and Environmental Medicine
Saginaw County Department of Public Health
Wayne County Children's Healthcare Access Program
University of Michigan – Center for Managing Chronic Disease
University of Michigan – Pediatric Asthma Disease Management Program

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History

During the mid-1990s the growing recognition of asthma as a significant public health problem lead to the development of AIM. At the local level, individuals and organizations began forming asthma coalitions to address asthma in their communities. At the same time, the American Lung Association of Michigan (ALAM) made asthma one of its three top program priorities, and actively assisted in developing local asthma coalitions.

MDCH's initial involvement with asthma began with the development of surveillance reporting. MDCH, using hospital discharge and mortality data for asthma, realized asthma constituted a significant public health problem in certain areas of the state. MDCH began communicating findings from the data in these communities to raise the awareness that asthma is a serious disease. In 1998 Michigan received a CDC asthma surveillance grant that led to increased communication between local asthma coalitions, ALAM, MDCH, and other partners. The need for a coordination of these efforts to maximize the effects in those communities became apparent.

This communication and coordination resulted in AIM's first strategic plan, written in 2000. It addressed education of providers and patients, asthma management in clinical and community settings, and increasing awareness for the burden of asthma. The 2005 plan revision began a shift away from individual services and education to a systems and policy change approach with a heavier focus on disparity reduction.

The first plan also called for the development of the Asthma Initiative of Michigan, incorporating asthma coalitions, the MAAC, and the Michigan Asthma Communication Network, as well as many partner organizations. AIM is fortunate to have had continuing CDC support for asthma activities. The MDCH Asthma

Prevention and Control Program activities include surveillance, partnerships, interventions, disparities reduction, and evaluation.

The current plan builds on AIM's history but has more focused effort in high burden areas and an applied systems change approach. In addition to activities described in the plan, the MDCH Asthma Prevention and Control Program will continue to provide data, information and expertise and to promote best practices for asthma control and management.

Situation and Trends

Overview

In the last two decades, there have been revolutionary changes in asthma care. Advances in clinical asthma research have resulted in guidelines called the Expert Panel Report 3 - Guidelines for the Diagnosis and Management of Asthma, which have greatly improved the ability of people with asthma to control their disease. The Guideline's priority messages for clinical asthma care are enumerated in the figure to the right.

Great strides have been made in understanding best practices for implementation of the clinical guidelines and in improving self management practices and asthma-friendly environments from national efforts like National Cooperative Inner City Asthma Study, Allies Against Asthma, Controlling Asthma in American Cities, Community Guide to Asthma Control and National Asthma Control Initiative.

Priority Asthma Messages

1. *Use inhaled corticosteroids to control asthma.*
2. *Use asthma action plans to guide self-management.*
3. *Assess asthma severity at the first visit.*
4. *Assess and monitor asthma control at each follow-up visit.*
5. *Schedule follow-up visits.*
6. *Control exposure to allergens and irritants.*

Source: Guideline's Implementation Panel Report: www.nhlbi.nih.gov/guidelines/asthma/gip_rpt.htm

During the last decade, activities and data for specific communities and populations in Michigan have expanded what is known about asthma management and control in the state, including information on self-management behavior, factors related to mortality, asthma management in schools, as well as data for specific communities and populations. Many best practices and interventions have been developed and

implemented through AIM and partner efforts:

1. Managing Asthma through Case Management in-Homes (MATCH)
2. Michigan Asthma Resource Kit
3. FLARE emergency visit discharge instructions
4. Asthma Guidelines Implementation Steps and Tools (GIST)
5. Pharmacist's Asthma Report
6. Asthma Mortality Review Project
7. Asthma 1-2-3 school staff training
8. Healthy School Action Tool Asthma Assessment and Policy Module
9. Michigan State Board of Education Model Policy on the Management of Asthma in Schools
10. Michigan School Inhaler Law
11. Adoption of EPR-3 principles in the Asthma Guidelines of the Michigan Quality Improvement Consortium
12. Professional education about work-related asthma
13. Indoor Air Quality training

Asthma control in Michigan has also benefitted from improvements in environmental-related policy, education and interventions, such as the passage of the Dr. Ron Davis Smoke Free Air Law, implementation of smoke-free policies in multi-unit housing and availability of data and warnings about outdoor air quality issues through systems like MIair and EnviroFlash. In 2011, MDCH received a three-year grant that combines Healthy Homes principles and in-home case management using the MATCH model to improve asthma self-management and environmental exposures in certain multi-unit housing communities.

Several trends in primary care have contributed to increased awareness and implementation of guidelines-based asthma care. Asthma has become a focus of practices seeking to achieve or maintain patient-centered medical home status. Part of the patient-centered medical home concept includes development of community

resources, such as Managing Asthma Through Case-management in Homes (MATCH) and the Stanford Chronic Disease Self-management Program (in Michigan, PATH), which help to improve health efficacy among people with asthma and their caregivers. Inclusion of asthma programming in Michigan's Primary Care Transformation Project and HUB coordinated community care systems extends the reach of asthma messages to hundreds of primary care practices and communities where the asthma burden is significant. Resources and expertise from partners including the University of Michigan Health System Asthma Quality Improvement Steering Committee, and Children's Healthcare Access Programs have added to the wealth of shared asthma knowledge used to create improved systems of care. The Affordable Care Act offers opportunities to increase the number of citizens with health insurance and access to primary care, which can lead to improved asthma control.

All best practices come with a balance of benefit and cost. Best practices in asthma control, as cited from Guideline's Implementation Panel report, include use of action plans by all people with asthma; better use of appropriate medications; and case management with trained and certified asthma educators to assess and monitor asthma control and exposure to irritants. Certified asthma educators provide asthma education in a variety of settings. Some states authorize reimbursement of asthma education services by certified asthma educators, and some third-party payers also have recognized a need for asthma education by qualified professionals. In Michigan, five MATCH programs exist in high burden areas of the state, and four are receiving reimbursement from at least one health plan. A recent evaluation of the MATCH model of case management has demonstrated its efficacy, particularly with the Medicaid population, with an 83% decrease in hospitalizations, and a 60% in Emergency Department visits from January 2009 through June 2011. Home visits can be a high-cost intervention and are therefore targeted to individuals at highest risk of adverse asthma events.

The fiscal challenges in state and local government continue, federal budget cuts to asthma initiatives, and the impact of the general economic environment on asthma stakeholders necessitates new approaches to addressing chronic disease issues. Asthma is a complex disease and does not stand alone – it is related to tobacco use, associated with environmental quality and housing conditions, and complicated by other common co-morbidities, such as obesity. Not surprisingly, the areas of highest asthma burden in Michigan are in populations with lower socioeconomic and education status, with less access to care, and poorer home and work environmental conditions. Asthma programming must address the disease from the perspective of

social determinants of asthma control and, for the most impact, apply a systems change approach at the highest levels.

Asthma Control in Michigan

Asthma is an under-managed chronic disease in the state of Michigan, as evidenced by data on self-management behaviors and health care utilization. Of the 750,000 adults with asthma in Michigan in 2011,[1] just over 42% reported that their disease was well controlled and nearly 30% reported their disease was poorly controlled.[2] Of the 230,000 children with asthma in Michigan in 2011,[1] 18.0% had two or more emergency department or urgent care visits for asthma in the last year and 4% had a hospitalization for asthma.[2]

Michigan is also not meeting federal targets for asthma control (Table 1). Although most asthma deaths are considered preventable, in Michigan there were roughly 110 deaths due to asthma each year from 2008 through 2010.[3] Asthma mortality impacts black persons and people living in low income households disproportionately. The asthma mortality rate for black persons was nearly four times that for white persons in 2008-10. Furthermore, more than 70% of children and 40% of young adults (18-34 years) who died due to their asthma were enrolled in Michigan Medicaid Programs at the time of their death.[4]

Table 1: Comparison of US Healthy People 2020 Objectives with Michigan data.

US Healthy People **2020** Objective[5]	Target[5]	Michigan
(RD-1) Reduce asthma deaths (deaths/million people)	0-34 Years: NA[a] 35-64 Years: 6.0 ≥65 Years: 22.9	7.4[6] 8.4[6] 28.5[6]
(RD-2) Reduce hospitalizations for asthma (hospitalizations/10,000 people)	< 5 Years: 18.2 5-64 Years: 8.6 ≥65 Years: 20.3	25.3[7] 11.2[7] 25.4[7]
(RD-3) Reduce emergency department visits for asthma (visits/10,000 people)	< 5 Years: 95.6 5-64 Years: 49.7 ≥65 Years: 13.8	[b]
(RD-4) Reduce activity limitations among persons with current asthma	10.3	[c]
RD-5.1 Reduce proportion of children aged 5-17 years with asthma who miss school days.	48.8	52.7[2]
RD-5.2 Reduce proportion of adults aged 18 to 64 years with asthma who miss work days.	26.7	[c]
RD-6 Increase proportion of people with current asthma who receive formal patient education (% of persons with current asthma who have ever taken a course or class on how to manage their asthma)	14.5	9.3[2]
RD-7.1: Increase the proportion of persons with current asthma who receive written asthma management plans from		

their health care provider	36.8	35.2[2]
RD 7.2: Increase % of persons w/ current asthma w/ prescribed inhalers who receive instruction on their use	NA[a]	97.4[2]
RD-7.3 Increase the proportion of persons with current asthma who receive education about appropriate response to an asthma episode, including recognizing early signs and symptoms or monitoring peak flow results	68.5	71.3[2]
RD-7.4 Increase the proportion of persons with current asthma who do not use more than one canister of short-acting inhaled beta agonist per month	90.2	97.0[2]
RD-7.5 Increase the proportion of persons with current asthma who have been advised by a health professional to change things in their home, school, and work environments to reduce exposure to irritants or allergens to which they are sensitive	54.6	49.8[2]

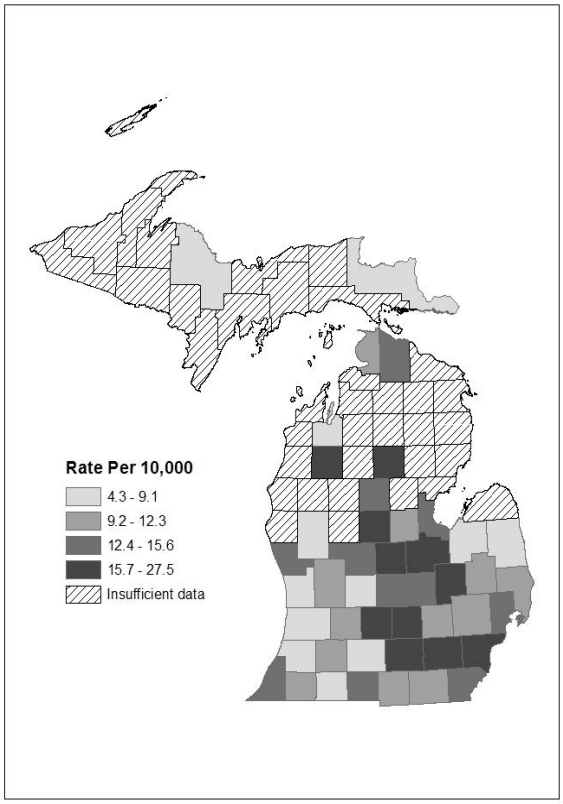
[a] No target set as of this writing.

[b] The U.S. target for this objective was the total U.S. population; ED visit data in Michigan were available for the population of residents on Medicaid but not for the total resident population.

[c] Survey questions used to calculate the U.S. target for this objective were not comparable to the questions available to estimate this indicator at the state level.

Hospitalization due to asthma is common, with 14,464 asthma hospitalizations in Michigan in 2011and an age-adjusted rate of 14.1hospitalizations per 10,000 people.[7] The age-adjusted asthma hospitalization rate for black persons was 4.4 times the rate for white persons. Michigan counties with rates of asthma hospitalization (all ages) that were significantly higher than the rate for the state as a whole in 2011 were Genesee, Ingham, Monroe, Saginaw, and Wayne Counties. Except for Monroe County, these counties, as well as Eaton, Gratiot, Isabella, Jackson, Roscommon, Washtenaw and Wexford Counties, also had the highest hospitalization rates for asthma among children (Figure 1).[8]

Figure 1: Age-Adjusted^ Asthma Hospitalization Rates, Michigan Residents Age < 18 Years, 2009-2011



^Age-adjusted to the 2000 U.S. standard population.
Source: Hospitalization data were obtained from the 2009-2011Michigan Inpatient Data Base files.
Population data are from the National Center for Health Statistics bridged-race estimates, vintage 2012

Michigan does have a surveillance system for asthma-related emergency department visits for children (0-18 years) in Michigan Medicaid programs. There were 207.4 asthma visits per 10,000 children in the program in 2012,[9] significantly higher than any of the Healthy People 2020 age-specific targets for this indicator. Even among this low income population, racial and geographic disparities in emergency department use persist. Rates were 3.5 times higher among black children than among white children and are 2.1 times higher in urban areas than in rural.

Most of the national objectives for asthma care and self-management are not currently being met in Michigan. The largest discrepancies between state indicators and national targets are for asthma mortality, hospitalizations, use of asthma

management classes and provision of advice on modifying environments to reduce exposure to asthma triggers (see Table 1).

There are clear linkages between adverse asthma events and the lack of asthma action plans, adequate medication, primary care follow up and other elements described above. For example, the most frequent causal factors associated with asthma deaths among children and young adults are:

- Issues with self-management behaviors such as inadequate use of inhaled corticosteroids, overuse of rescue medications, and persistent exposure to asthma triggers,
- Inadequate prescription of inhaled corticosteroids by health care providers,
- Need for specialist referral and patient follow-up, pulmonary function testing, and case management for high-risk patients, and
- Lack of regular medical care with primary care providers.

Conclusion

Despite medical advances, the national objectives for asthma treatment are not being met for many people in the state of Michigan, with severe consequences. There continue to be significant economic, racial and geographic disparities in asthma burden that must be addressed. A clear need exists for a coordinated system of care in the state that enables follow up and routine care. This strategic plan is an effort to improve the coordination of asthma care, the use of action plans and long term controllers in the state.

Data Sources:

[1] 2011 Michigan Behavioral Risk Factor Survey (http://www.michigan.gov/documents/mdch/2011_MiBRFS_Annual_Report_FINAL_402710_7.pdf) and MDCH population webpage (http://michigan.gov/mdch/0,4612,7-132-2944_5325---,00.html) accessed 1/8/14

[2] 2011 Asthma Call-Back Survey – combined land-line and cell-phone samples

[3] Michigan resident death files, MDCH, 2008-2010

[4] Asthma Mortality Review Project, 2002-2006.

[5] HP2020 objectives and targets taken from: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=36, accessed 1/8/14

[6] Michigan resident death files, MDCH, 2010

[7] 2011 Michigan Inpatient Data Base

[8] 2009-11 Michigan Inpatient Data Base

[9] Michigan Medicaid files, MDCH Data Warehouse

Strategic Framework

This strategic framework outlines the core decisions used to develop the goals, objectives, and strategies in this plan. The framework focuses on high burden areas and develops a coordinated applied systems change approach.

Mission

To effectively improve asthma outcomes by reaching or surpassing the targets cited in the Healthy People 2010 document. The Asthma Initiative of Michigan aims to provide:

Impact

- Improve health status and asthma control in high burden areas
- Decrease hospitalizations and emergency visits
- Enhance self-reporting on individuals with poor-control or not-well-controlled asthma

Guiding Principles

- Provide relevant data to stakeholders on best practices
- Ensure ongoing efficiency and effectiveness improvements within MDCH
- Commit to measurable health outcomes
- Continue function as a strategic partner
- Optimize impact using available resources

Roles

- Leadership (set agenda, facilitate, empower)
- Expertise (data, best practices, standards and guidelines, certification)
- Resources (access to statewide datasets)

Target Populations

- Focus on communities with higher rates of asthma hospitalization and mortality
- Focus on populations experiencing higher burden of asthma, specifically African Americans and low-income residents.

Position

- Advocate for asthma as a chronic disease that requires management
- Develop a focused, integrated approach to addressing issues relating to asthma

Areas of Strategic Focus

- Epidemiology and surveillance
- Environmental approaches
- Health systems
- Community-clinical linkages

Partners Role and Responsibilities

Michigan Asthma Advisory Committee (MAAC)

The MAAC brings unsurpassed subject matter expertise, experience and credibility. MAAC is composed of individuals representing organizations involved in asthma treatment, interventions, research, and coalitions throughout Michigan, many of whom have a broad, statewide perspective. Membership consists of the co-chairs for the Asthma in Schools Subcommittee, the Quality Improvement in Asthma Care Subcommittee, the Asthma Epidemiology and Surveillance Subcommittee, the Environmental Quality Subcommittee, and the Consortium of Asthma Coalitions Chair.

Primary responsibilities for MAAC include:

- Provide advice and expertise toward the implementation of the Asthma Strategic Plan
- Review and advise on evaluation plans and findings
- Coordinate and facilitate activities between sub-committees/project teams
- Address membership/sustainability issues
- Provide advice on Michigan Asthma Communication Network (MACN) as needed. MACN will coordinate and facilitate communication between subcommittees and project teams

Strategic Partners

To be successful in achieving its strategic goals, AIM must work in partnership with a deliberately chosen group of collaborators. These partners represent high burden areas (i.e., Genesee, Ingham and Saginaw counties and the city of Detroit) or represent other state agency programs and organizations that influence asthma care and management.

The primary role for these partners is to work closely with AIM to accomplish specific strategic goals. The partners are the community and program experts, act as the liaison to key stakeholders such as local clinics or physicians, and have influence to bring about systems change. Primary responsibilities include:

- Facilitate the accomplishment of strategic goals through implementing specific action steps as mutually determined with AIM
- Serve as the community advocate for asthma initiatives
- Provide community knowledge and access
- Work with AIM to utilize resources towards measureable results

Community Coalitions

The 11 Michigan asthma coalitions vary in size and scope of activities. Coalition members generally represent the stakeholders and service providers in their particular community, which can include representatives from local hospitals and clinics, health plans, universities, local public health, and school personnel. The coalitions work to raise awareness of asthma, advocate on behalf of community members with asthma, provide training, education and direct services where appropriate, and employ asthma best practices to reduce the local burden of asthma.

Stakeholders

The Michigan Asthma Prevention and Control Program collaborates with a number of stakeholder groups to incorporate asthma best practices within their programs. Many of Michigan's asthma partners are in a unique position to communicate accurate information to appropriate target populations and leverage resources (staff, financial, in-kind) to support AIM strategic goals.

The partners within AIM include those in government agencies and programs such as academic and research institutions, community and nonprofit groups. AIM also collaborates from many agencies from outside of chronic disease, such as environmental health organizations, and maternal child health programs. In addition, AIM is committed to continuing work and innovative collaboration with the private sector, including hospitals, pharmaceutical companies, and corporate work environments.

State Role and Responsibilities

Functions

The plan has implications for the roles, functions and responsibilities of MDCH Asthma Prevention and Control Program staff. State and affiliate personnel must carry out the roles of leadership, expertise and resource development by working together with partners to define the issues and needs, translate and apply best practices, and attract and allocate resources to achieve goals.

To implement the plan, primary functions include:

- Surveillance of asthma prevalence, triggers, management, and morbidity
- Evaluation of activities and progress to reaching goals
- Identify and address disparities in asthma
- Program development and implementation
- Project management
- Partner relations
- Communication
- Public relations and marketing
- Resource development

Staff will use applied systems strategies to maximize their effectiveness with a more integrated team approach, bringing a variety of expertise and skills to particular communities and achieve goals.

Goals, Objectives and Collaborative Partners

Listed below are the goals, objectives and strategies and associated community partners. See pages 17-19 for partners and MDCH Asthma Prevention and Control Program roles and responsibilities.

Goal 1: Reduce asthma emergency visit rates in at least two high burden communities by 15% by December 2017.	***Key Collaborative Partners***
Objective 1: In at least 2 high burden communities, improve communication and coordination of asthma care to promote patient centered medical homes in accordance with national asthma guidelines.	
Strategy 1: Promote guideline-based quality improvement activities in health systems.	Michigan Asthma Prevention & Control Program (APCP), Michigan Asthma Advisory Committee (MAAC), Quality Improvement in Asthma Care Subcommittee
Strategy 2: Establish and maintain in-home case management for high-risk individuals.	APCP, MAAC, Managing Asthma Through Case Management in Homes (MATCH) Program Coordinators
Strategy 3: Investigate the use of health information exchange (HIE) data as components of asthma surveillance.	APCP, MAAC, Michigan Department of Community Health (MDCH) Lifecourse Epidemiology and Genomics Division, MDCH Division of Chronic Disease & Injury Control, Epidemiology & Surveillance Subcommittee
Strategy 4: Increase communication between health care professionals and collaborative partners	APCP, MAAC, Michigan Primary Care Transformation Project (MiPCT) Coordinator, Community Linkages Project Coordinator
Strategy 5: Ensure coordination and integration of asthma activities in Healthy Homes	APCP, MAAC, MDCH Healthy Homes Program

Goal 2: Improve asthma self-management as reflected by the use of inhaled corticosteroids by 15% statewide by December 2017.	***Key Collaborative Partners***
Objective 1: Foster best practice interventions for asthma care among community partners.	
Strategy 1: Train and incentivize strategic partners to endorse and promote use of identified best practices.	APCP, MAAC, Asthma & Allergy Foundation of American-Michigan Chapter
Strategy 2: Identify and disseminate current data and best practices in asthma management and education, including trigger reduction.	APCP, MAAC
Strategy 3: Increase role of certified asthma educators (AE-C) as part of standard of care in Michigan.	APCP, MAAC, Michigan Society for Respiratory Care,

	MATCH Program Coordinators
Strategy 4: Identify and promote community self-management resources such as Stanford Chronic Disease Self-Management Program (PATH), Wee Breathers and Asthma 1-2-3.	APCP, MAAC, MDCH Arthritis Program, Asthma & Allergy Foundation of American-Michigan Chapter, American Lung Association of Michigan
Strategy 5: Promote tools and resources to assist schools in developing asthma friendly policies that allow students to successfully manage their asthma.	APCP, MAAC, Michigan Department of Education (MDE) Coordinated School Health and Safety Programs Unit, Asthma in Schools Subcommittee, Michigan Association of School Nurses
Objective 2: Identify and coordinate dissemination of compelling asthma management messages to the general public.	
Strategy 1: Develop and maintain relationships with schools, businesses and other community organizations to promote and disseminate key messages.	APCP, MAAC, MDE Coordinated School Health and Safety Programs Unit, Asthma Coalitions, Asthma in Schools Subcommittee, Asthma & Allergy Foundation of American-Michigan Chapter, American Lung Association of Michigan, Michigan Association of School Nurses
Strategy 2: Develop and utilize dissemination modes, including social media, for key asthma messages.	APCP, MAAC, MDCH Communications
Strategy 3: Collaborate with MDCH and community partners to develop and disseminate strategic asthma messages to the general public	APCP, MAAC, MiPCT Coordinator, Community Linkages Project Coordinator, MDCH Adolescent School Health Unit, Asthma & Allergy Foundation of American-Michigan Chapter, American Lung Association of Michigan

Goal 3: Diversify resources for asthma activities at state and local levels.	***Key Collaborative Partners***
Objective 1: Obtain two additional funding sources for asthma initiatives.	
Strategy 1: Build relationships with existing and new partners to secure additional resources.	APCP, MAAC
Strategy 2: Seek private sector funding for sponsorship of AIM Partnership Forum.	APCP, MAAC
Objective 2: Integrate AIM asthma activities in at least two state-level programs.	
Strategy 1: Identify opportunities for integrating asthma management activities into MDCH, MDE, Michigan Department of Licensing and Regulatory Affairs (Michigan Occupational Safety and Health Administration) programs	APCP, MAAC, Coordinated School Health and Safety Programs Unit, MDCH Division of Chronic Disease & Injury Control, MDCH Division of Family and Community Health, Michigan State University - Division of Occupational and Environmental Medicine
Strategy 2: Partner with MDCH programs to increase primary care access to asthma resources.	APCP, MAAC, MDCH Adolescent School Health

	Unit, MiPCT Coordinator, Community Linkages Project Coordinator
Strategy 3: Partner with Michigan Department of Environmental Quality outdoor air quality programs to increase awareness of effects of air quality on asthma among the public and stakeholders	APCP, MAAC, Michigan Department of Environmental Quality Air Quality Division

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