

What EXHALE Can Look Like in a State: An Example from Michigan

For Public Health Professionals Working on Asthma

The Centers for Disease Control and Prevention's (CDC's) National Asthma Control Program (NACP) and its partners help Americans with asthma achieve better health and improved quality of life. NACP developed EXHALE, a set of six strategies that each contribute to better asthma control.

What are the EXHALE strategies?



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Education

on asthma self-management

X-tinguishing

smoking and exposure to secondhand smoke

Home

visits for trigger reduction and asthma self-management education

Achievement

of guidelines-based medical management

Linkages

and coordination of care across settings

Environmental

policies or best practices to reduce asthma triggers from indoor, outdoor, or occupational sources

Each EXHALE strategy is proven to reduce asthma-related hospitalizations, emergency department visits, and healthcare costs

Learn how the Michigan Asthma Prevention and Control Program has carried out EXHALE-related activities to help children and adults with asthma



Centers for Disease
Control and Prevention
National Center for
Environmental Health

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State public health departments, working in close collaboration with state and local partners, have the unique capacity to coordinate the implementation of activities related to all six EXHALE strategies. The **Michigan Asthma Prevention and Control Program (MiAPCP)**, in the Michigan Department of Health and Human Services (MDHHS), is funded by CDC's National Asthma Control Program. Here are some MiAPCP accomplishments, listed by strategy:

Education on asthma self-management

MiAPCP has helped health center staff provide hands-on, personalized asthma self-management education (AS-ME) to people with asthma. In this work, MiAPCP helped health centers receive asthma medication on the same day healthcare professionals prescribed medication to patients. Thus, health center staff could use this medication to provide AS-ME tailored to each patient's particular medication regimen.

This AS-ME included:

- Informing the patient how to use medication correctly.
- Reviewing patient asthma action plans.
- Observing how the patient uses an inhaler.
- Helping the patient improve their inhaler technique.

More information is available below in [Achievement of guidelines-based medical management](#).

MiAPCP has increased access to and delivery of AS-ME through home visits. More information is available in [Home visits for trigger reduction and AS-ME](#) (right column of this page).

X-tinguishing smoking and exposure to secondhand smoke

MiAPCP has worked with partners to increase referrals to tobacco cessation programs. MiAPCP has worked with partners, including the MDHHS Tobacco Section, to increase referrals to guidelines-based tobacco cessation treatments for people with asthma, their families, and their caregivers.

Home visits for trigger reduction and asthma self-management education

In the Michigan's Managing Asthma Through Case Study Management in Homes (MATCH) model, a certified asthma education (AE-C) case manager (such as a registered nurse or respiratory therapist) has provided home visits to people with asthma. The AE-Cs evaluate asthma symptoms, assess asthma triggers, and provide AS-ME, including how to reduce identified asthma triggers. These activities are typically accomplished over 3 to 6 visits.

People with asthma are eligible for home visits based on their number of asthma-related hospitalizations, emergency department (ED) visits, unscheduled physician visits, and missed days of school or work.

MiAPCP has contributed to MATCH success by providing technical assistance to new and existing programs. This assistance has included monthly calls with local programs to discuss updates, promote MATCH model consistency across programs, share best practices about implementing contracts, and engage in problem solving. Also, MiAPCP has worked with the Michigan Medicaid Quality Improvement Section to raise MATCH awareness among all Medicaid managed care organizations in the state. Further, MiAPCP has started new MATCH programs in high burden areas by identifying potential partners, providing surveillance data, sharing the model and reimbursement strategies, and connecting new programs to existing programs. The MATCH model has shown a 70% decrease in asthma-related hospitalizations, a 51% decrease in ED visits, a 40% decrease in missed school days, and a 57% decrease in missed work days. More information is available in this [white paper](#).

What EXHALE Can Look Like in a State: An Example from Michigan (continued)

Achievement of guidelines-based medical management

MiAPCP has provided funding and technical assistance to quality improvement activities in multiple health centers, including federally qualified health centers. For example, MiAPCP has provided funding, implementation, and evaluation support for the Asthma Medication Delivery Project Pilot (AMDPP) in Child and Adolescent Health Centers (CAHCs), which provide medical care to people older than 21 years who are uninsured, underinsured, or receiving Medicaid.

The AMDPP has provided an opportunity for two CAHCs to modify and use a system for asthma medication delivery successfully implemented by another CAHC. When asthma medication was prescribed during outpatient visits, the pharmacy delivered the medication to the CAHC that same day. This allowed CAHC staff to provide hands-on AS-ME; more information is available above in [Education on asthma self-management](#). When an individual's asthma was well controlled, medication refills could be changed to home mail delivery. While neither pilot site was completely successful in replicating this model, there were many lessons learned, and a toolkit to help additional CAHCs implement this approach is planned.

MiAPCP has improved access to spacers/valved holding chambers (VHCs) for people with asthma in Michigan. Previously, the 11 Medicaid managed care organizations (MMCOs) in Michigan varied in their interpretation of state Medicaid policy stating that MMCOs must reimburse for up to four spacers per year at the pharmacy or durable medical equipment facility. As part of CDC's [618 Initiative](#), MiAPCP worked with partners (including the Michigan Medicaid Quality Improvement Section) to survey MMCOs about their spacer policies and has worked with MMCOs to improve these spacer policies.

As a result of these efforts, all MMCOs now allow four spacers/VHCs per year at the pharmacy, with no prior authorization. Also, spacer/VHC brands were added to the Medicaid Health Plan Common Formulary, making prescribing easier for healthcare professionals and stocking easier for pharmacies. Improvements to this policy affected all people with asthma covered by Medicaid, including 107,428 children and adults with persistent asthma (2016 data). Obtaining spacers/VHCs has become easier in most Michigan communities. More information is available [here](#).



Linkages and coordination of care across settings

MiAPCP has provided funding and technical assistance to quality improvement activities led by the Michigan Primary Care Association, known as the Linking Clinical Care with Community Supports (Linkages) Project. This project added 29 community health workers (CHWs) to healthcare teams in 16 federally qualified health centers. CHWs focused on serving the non-clinical needs of people with asthma and their families, such as linking them to community resources that could help improve medication adherence. MiAPCP's technical assistance included developing CHW training materials, translating printed asthma materials into Spanish, and providing CHWs informational material about available home visit services (such as the MATCH model described in [Home visits for trigger reduction and AS-ME](#) above) to share with communities.

MiAPCP has increased statewide access to the MATCH model of in-home asthma case management. Activities have included linking organizations interested in starting MATCH in a community (such as a local community coalition, public health department, or healthcare system) to well-established MATCH programs that offer mentoring, including home visit "ride-along" opportunities. In addition, MiAPCP has coordinated monthly calls involving all local MATCH programs. More information is available above in [Home visits for trigger reduction and AS-ME](#).

Environmental policies or best practices to reduce asthma triggers from indoor, outdoor, or occupational sources

Michigan's Smokefree Air Law (implemented in 2010) prohibits smoking in workplaces and public places, including restaurants, bars, shopping malls, education facilities, and childcare facilities. Within the first year after Michigan implemented this law, asthma-related hospitalizations decreased among adults (more information [here](#)). In support of the law, MiAPCP has informed partners (including asthma coalitions and MATCH programs) about the public health importance of reducing exposure to secondhand smoke.

The 2019 Michigan Clean Diesel Grant Program (administered by the Michigan Department of the Environment, Great Lakes, and Energy using state and federal funds) provided funding to eight school districts to buy 28 new school buses, which will use either clean diesel or propane technology. These improvements can reduce air pollution and help children with asthma avoid hospitalizations and ED visits. More information is available [here](#).

For more information, visit:

<https://www.cdc.gov/asthma/exhale/>

