

Dayton Asthma Alliance

2019 — annual report to the community





our story

Research suggests that a significant portion of a child's health can be attributed to his or her environment. For certain chronic conditions, such as asthma, the area in which a child lives, learns and plays needs to be free from asthma triggers for a child to achieve optimal health. Creating a healthy environment requires collaboration among a broad variety of organizations outside of health care, such as education, business and community development.

The Dayton Asthma Alliance aims to positively impact the health and wellness of children with asthma in the Dayton area, focusing on the most at-risk populations. Using the collective impact framework, the Alliance engages local, state and national members, as well as other partner organizations, to collaboratively implement a variety of strategic actions to improve outcomes for children with asthma. This report outlines some of the Alliance's initiatives over the last year.

the asthma challenge

Recent data from the 2018 Ohio Department of Health Asthma Report:

- In Ohio, it is estimated that **one in ten children** have asthma.
- There were **18,885 asthma emergency department visits** reported among children in Ohio.
- Asthma emergency department visit rates have been consistently **highest in children younger than the age of 5** – over 25 percent higher than other age groups.
- Asthma-related emergency room visits are **four times higher** and hospital admissions are **five times higher** for black children than white children.
- The child asthma emergency department visit rate was **significantly higher among boys**, with 13.8 visits per 10,000 residents, compared to 9.3 for girls.
- Montgomery County has emergency room rates **significantly above** the state average for patients with a primary diagnosis of asthma.

The Dayton Asthma Alliance supports the Ohio State Health Improvement Plan and the Montgomery County Community Health Improvement Plan by addressing the chronic disease of asthma by supporting interventions that reduce exposure to secondhand smoke.

Open Airways in Dayton Public Schools

Children with asthma became a major focus of Dayton Public Schools (DPS) Health Services Department when data showed asthma and breathing problems as the number one reason for Emergency Medical Services (EMS) calls in 2014. Also, 14 percent of the student population has parent- or physician-identified asthma. Poorly controlled asthma symptoms can lead to limits on activity, missed school for children, missed work for caregivers, psychological troubles and social issues. In addition, children with asthma have frequent visits to the school clinic, at times requiring 911 calls, emergency department visits and hospital admissions.

In response, Dayton Public Schools started a comprehensive school-based asthma program, partnering with Wright State University, Cedarville University, Sinclair Community College and

Dayton Children's. The program has five major components:

- Training school staff
- Teaching students
- Educating parents
- Updating school asthma procedures
- Supplementing asthma care with Dayton Public School's Mobile Health Unit

As a result of this far-reaching program, school nurses provide yearly asthma education for staff. Community partners teach Dayton students in fourth grade with asthma using the American Lung Association's Open Airways for Schools which is an evidence-based asthma-management program for children. Through a partnership with Dayton Children's, six parent sessions were held at three locations at various times of day in the fall of 2018. Parents learned about

asthma management and asthma triggers. Parents were then invited to receive a home visit by a community health worker to identify asthma triggers in the home. To further improve health outcomes, the community health worker also screened the family for other social needs they might have.

Dayton Public Schools continues to update asthma procedures. School nurses now routinely assess students' asthma inhaler techniques and have albuterol available at school to use if students do not already have a rescue inhaler available. The Mobile Health Unit visits schools and provides asthma education, prescriptions, medication forms, asthma action plans and referrals, as needed.

"This partnership provides our staff, students and families with the basic information they need to effectively manage asthma,"

says Dawn Abbott, RN, director of health services, Dayton Public Schools. "The more we can proactively address asthma, the greater likelihood we have in making sure children with asthma can spend more of their time in the classroom."

our impact 2018-19:

53 children coached in Open Airways

15 parents educated

1,098 Dayton Public Schools staff trained annually

asthma care on wheels

For the past two years, Dayton Public Schools and the Community Health Centers of Greater Dayton have partnered to provide unprecedented care to students with asthma and related conditions. The Mobile Health Unit, a clinic on wheels, is staffed by a licensed school nurse, medical assistant, family nurse practitioner and a driver. The Mobile Health Unit offers care to students with asthma in all 26 Dayton schools on a rotating basis. Although the primary focus is on asthma care, additional health care services including assessments of illness are available after the student is pre-screened by the school nurse. “The Mobile Health Unit removes common barriers that families

encounter like transportation and time away from work by bringing health care to children during the school day,” says Dawn Abbott, RN, director of health services, Dayton Public Schools. It now sees about 50 children with asthma each month. In the past, obtaining consent to treat every year had been a real challenge, but now the consent continues in effect as long as the student remains enrolled in Dayton Public Schools.” “The Mobile Health Unit goal is to enhance asthma self-management skills in students,” says Tiffany Brown, family nurse practitioner for the Mobile Health Unit.

Mobile Health Unit visits for asthma focus on:

- Sequential age-appropriate asthma lessons
- Correct use of an inhaler/spacer
- School medication forms
- Asthma action plans
- Prescriptions for inhaler/spacer at school
- Referrals as indicated
- Regular communication with primary care provider and parent

“The Mobile Health Unit is just one example of how a unique partnership can improve access to health care for children,” says Gregory Hopkins, executive director, Community Health Centers of Greater Dayton. “This

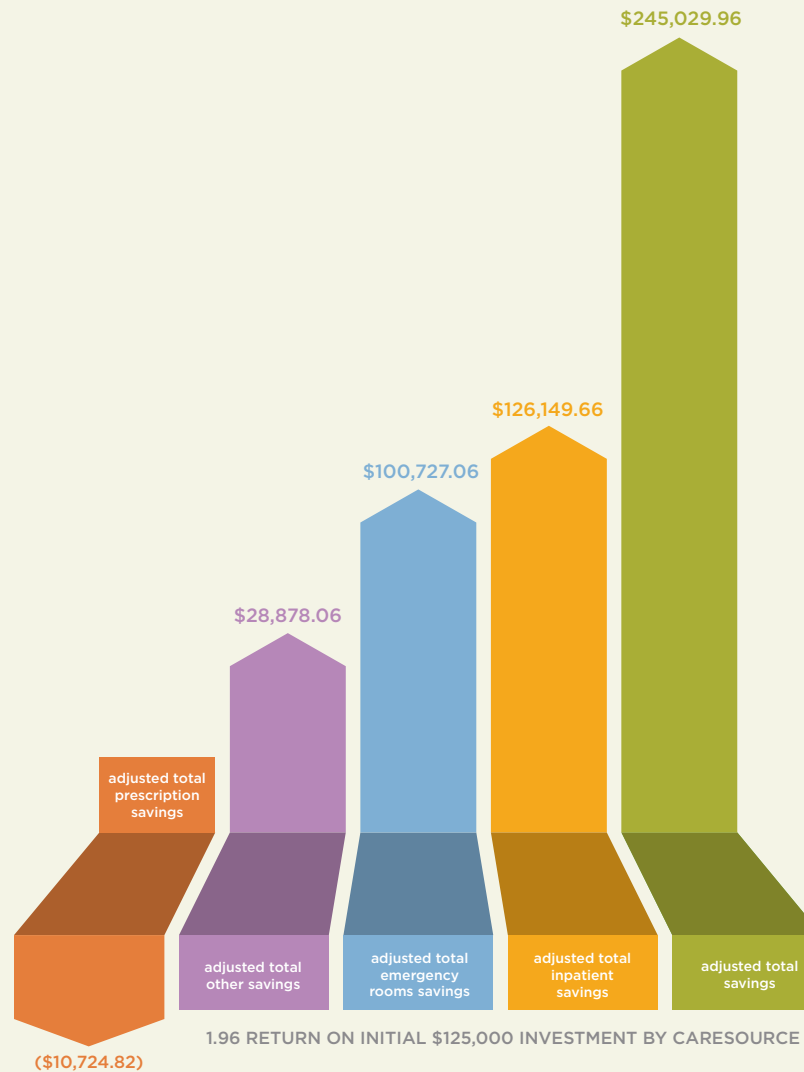
program supplements the health care children with asthma may already be receiving through their primary care physician.”

The Mobile Health Unit utilizes Plan-Do-Study-Act cycles to identify what strategies are effective at reaching the desired outcomes.

“Although students seen on the Mobile Health Unit receive a prescription for an inhaler to use at school, the inhaler doesn’t always make it to school,” says Lisa Montgomery, school nurse. “The goal for the 2019-20 school year is to increase the number of students with asthma who have a rescue inhaler available at school.”

In 2017, the CareSource Foundation provided a \$125,000 grant to Community Health Centers of Greater Dayton to help launch and staff the Mobile Health Unit at Dayton Public Schools. This past year, CareSource undertook a research student to identify outcomes of the program.

By comparing records from 12 months before and after the Mobile Health Unit launch, the final numbers showed a dramatic cost savings for members of the intervention group while the control group showed none. Partnerships are key to improving exploring new models of care and ultimately improving the health of children in our community.



Jeremiah's story

Jeremiah is an energetic 13-year-old who loves wrestling, video games and going to the library. He is excited to be a freshman this fall at Belmont High School. He was just 6 months old when he was diagnosed with asthma.

"From a very early age, we have been to the hospital and the emergency department many times for Jeremiah's asthma exacerbations – he's even been admitted on occasions," says Katrena, Jeremiah's mom.

Working to manage asthma can be a challenge for many families, and Katrena's family is no exception. She has three other kids but works the night shift because it allows her to take Jeremiah to his frequent medical appointments. "I want to make sure Jeremiah reaches his highest level of health and well-being," she adds.

His chronic condition doesn't keep him down but he does have to take certain precautions. He

finds local activities to participate in, and when the pollen count is high, he looks for things to do indoors. "Now that Jeremiah is getting older, he is starting to take responsibility for his own health and wellness," says Katrena. "I'm proud that he can recognize and avoid his asthma triggers, which include cigarette smoke, dust, pets and pollen. Jeremiah also understands his asthma medications and how and when to use them to stop or prevent an asthma attack."

Managing asthma takes a team. Synthia Copher, a community health worker at Dayton Children's makes visits to Jeremiah's home. She asks how he is doing with his medications, reminds him of his triggers and how to avoid them, and goes over ways to stay healthy. "Synthia has also helped Jeremiah manage his asthma by providing dust covers for his mattress and a bucket of "asthma-friendly" cleaning

supplies. Strong chemicals can be a trigger for an asthma attack," says Katrena.

Together with Jeremiah's physician, Dr. Gary Mueller and care team, including Synthia, Jeremiah is reaching his optimal

health and learning how to manage his asthma well into adulthood. Katrena adds, "It takes a village to raise a child with a medical condition and Dayton Children's is a big part of our village."



Nurses Mary Kern, Ellen Grabill and Chelsea Frantz with Jeremiah.

first annual asthma education day



Dayton Children's Hospital hosted the first annual asthma education day in April 2019 at the KROC Center. The pulmonary division, and three parent partners planned a fun-filled educational day for children and caregivers.

You may wonder who these parent partners are. Parent partners are caregivers of patients we serve at Dayton Children's. The parent partners who participated in this event are a vital part of ensuring that hospital programs remain family and patient-centered. Some

of the roles of a parent partner in the pulmonary department are serving on the advisory committee and providing feedback to improve the care of patients with asthma.

"We wanted to make sure the children who attended the event learned more about their disease and how to manage it," says Jessica Sallee, one of the program planners. "The children who attended this event learned about asthma through a series of interactive activities.

They watched an educational video about asthma and played games like "LUNGO" instead of Bingo and "pin the lungs" instead of pin the tail on the donkey. Participants also had the opportunity to make mucus, bronchial binoculars and a pair of their own lungs."

"The event was helpful because I am a smoker and I didn't know it was a trigger," says Christine Schipper who participated in the event.

The event was graciously sponsored by the McAfee Foundation and vendors included ABLE Medical Legal Partnership, Greater Dayton Premier Management Group, Dayton Metro Library, CareSource, Monahan, Think TV, the American Lung Association, Dayton Public Schools, the Salvation Army KROC Center, the Dayton Dragons, Kona Ice, Rainmate and Dayton Children's Hospital.



the Medical Legal Partnership for Children

ThinkTV text alerts

[Asthma air quality forecasts](#)

Public Media Connect – ThinkTV Channels 16 & 14 in Dayton and CET, Channel 48 in Cincinnati – provide asthma air quality forecasts on a daily basis. To sign up for these text alerts:

For Dayton area:

Text *dayair* to 49798

For Cincinnati area:

Text *PMC* to 49798

With children living in Montgomery County and the greater Dayton area experiencing higher rates of asthma and asthma-related conditions than most other communities in the country, the need for medical and legal support can mean the difference between life and death. Many of these children live in rental properties that are not asthma-friendly. They harbor some of the common asthma triggers such as pests (cockroaches), mold, dust mites, chemical vapors from cleaning products, improperly vented fireplaces, dirty HVAC filters and second-hand smoke. These triggers can aggravate asthma symptoms, require more medication to control symptoms,

and lead to more frequent doctor's appointments, emergency room visits and increased hospital admissions. All of these things can lead to physical, mental and financial strain for the entire family.

Through the Medical Legal Partnership for Children (MLPC) doctors and lawyers work together to identify legal and social issues which negatively impact child health and well-being, and address these issues through individual and systemic advocacy. Since 2012, the partnership has served Montgomery County and surrounding counties in Ohio. The partnership is a collaboration of Dayton Children's Hospital, Five Rivers Health Center

and The Community Health Centers of Greater Dayton. These community organizations are committed to protecting the medical and legal rights of children and their families.

The Medical Legal Partnership for Children can help ensure that unsafe living conditions are remedied and that the indoor air quality is safe for a child with asthma. Lawyers and other professionals are knowledgeable about the rights of children and willing to advocate on their behalf. Each year, the Partnership receives referrals for children who have asthma and often need advocacy to ensure their homes and schools are safe.

Dayton Children's Health Partners, LLC

The Dayton Asthma Alliance is also working closely with the Dayton Children's Health Partners, LLC – a clinically integrated network focused on aligning evidence-based practices within primary care offices to improve population health. Through this network, best practices in asthma management in primary care settings will be shared and evaluated in order to improve population health for children with asthma.

One of the key initiatives for Dayton Children's Health Partners, LLC is to build co-management programs between Dayton Children's and local primary care physicians to improve communication and coordination for better health outcomes. Currently, the group is working on an asthma co-management agreement for children with asthma. This agreement would ensure continuity of care between primary care physicians and hospital specialists.

collaborations in care: co-management agreements example: asthma



Dayton Children's Health Partners, LLC by the numbers:

150,000 patients

12 independent primary care practices

30 locations

135+ primary care providers

155+ specialists

1 payer contract

2 co-management programs (constipation & asthma)

how can you be part of the solution?

Ensuring an asthma friendly environment for children with asthma requires a community effort. Here are some ways that you can work within your circle of influence to improve the outcomes for children with asthma.

1 Raise awareness about the high risk of poor asthma outcomes among children younger than 5 years old.

2 Emphasize the importance of asthma action plans, medication adherence and routine check-ups in controlling children's asthma symptoms.

3 Keep in mind and remind others, there are two peak times for asthma-related emergency department visits, May and September.

4 Get your flu shot and encourage others to do the same. Patients with asthma are at a high risk of developing complications if they contract influenza.

a special thank you to Purity Home Products



Purity Home Products, a Columbus, Ohio, manufacturer of high quality air filters, donated 50 air filters to Dayton Children's to support the hospital's community health worker program serving children with asthma in spring 2018.

"We are glad to continue to make deliveries of the Purity home air filters to families who are part

of our asthma home visiting program," says Jessica Saunders, director, community engagement at Dayton Children's. "Families who have been using the filters over the past year are telling us that they can see the filters are working. They say they notice less dust in their homes and the filter is making a difference and doing its job."

Tobacco 21 passes in Ohio



The Dayton Asthma Alliance thanks the Ohio Legislature for passing Tobacco 21, raising Ohio's legal smoking age to 21 as a provision in the state budget bill. The law applies to rolling papers, filters, blunt wrappers, liquid and

other accessories involved in both smoking or vaping. Tobacco 21 laws across the country have shown positive health outcomes for children and young adults.

Dayton Asthma Alliance Partners

Allergy and Asthma Associates
Allergy and Asthma
Centre of Dayton
CareSource
Dayton Children's Center for
Community Health and Advocacy

Dayton Children's division of
allergy and immunology
Dayton Children's Health
Partners, LLC
Dayton Children's pulmonary
division
Dayton Public Schools

Greater Dayton Premier
Management
Community Health Centers of
Greater Dayton
Medical-Legal Partnership for
Children
Miami Valley Child Development
Centers, Inc.

Ohio Pediatrics
PriMed Physicians
Public Health Dayton &
Montgomery County
ThinkTV
WSU College of Nursing & Health



Dayton Asthma Alliance

Dayton Children's Center for Community Health and Advocacy

One Children's Plaza
Dayton, OH 45404

(937) 641-3385