Medicaid Coverage of Asthma Self-Management Education: A Ten-State Analysis of Services, Providers and Settings

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Introduction

It is estimated that 24.6 million Americans have asthma, including over six million children.\(^1\) Asthma is responsible for $56 billion in annual healthcare costs, including $5.9 billion of indirect costs (i.e., lost productivity).\(^2\) Asthma has also led to 13.8 million missed school days\(^3\), 10.1 million missed days of work\(^4\) and is the third leading cause of hospitalizations for children under the age of 15.\(^5\) With millions of Americans living with asthma, increased coverage for asthma management treatments and services will help reduce the burden of asthma and improve asthma health outcomes.

A key component of asthma management is self-management education, during which patients and families learn to use prescribed asthma-control medicines and equipment correctly, recognize early symptoms of an asthma episode and respond appropriately, and mitigate asthma triggers in homes and other environments.\(^6\) This education empowers patients to proactively manage asthma symptoms throughout their daily routines.

Children and adults diagnosed with asthma should receive initial instruction in clinical settings, but best practices call for repeated sessions of education, demonstration and practice to reinforce treatment recommendations.\(^7\) The 2007 National Asthma Education Prevention Program (NAEPP) Expert Panel Guidelines ("Guidelines") place a strong emphasis on asthma self-management education as a critical component of evidence-based care.\(^8\)

Despite the importance of asthma self-management education, many people with asthma do not receive adequate education to control their disease. For example, in 2008, fewer than half of patients with asthma reported being taught how to avoid asthma triggers in their homes.\(^9\) Lack of coverage for these services continues to be a barrier for many patients.\(^10\) As low-income individuals are significantly more likely to have asthma\(^11,12,13\) and less likely to have well-controlled asthma,\(^14,15,16\) it is important to examine Medicaid coverage for these services.

This issue brief takes an in-depth look at Medicaid coverage for asthma self-management education, examining the range of services, providers and settings covered by Medicaid plans across ten states. In addition, an in-depth case study of one of the states—Indiana—illustrates the state’s efforts to improve asthma education in the Medicaid program.

“...low-income individuals are significantly more likely to have asthma and less likely to have well-controlled asthma...”
Background: American Lung Association Asthma Guidelines-Based Care Coverage Project

This document is part of an ongoing Medicaid coverage analysis project by the American Lung Association. In 2015, the Centers for Disease Control and Prevention (CDC) National Center for Environmental Health awarded the Lung Association funding to evaluate Medicaid coverage of asthma services based on the Guidelines in the 23 states that receive National Asthma Control Program (NACP) funding. The NACP funds states, cities, and non-governmental organizations to help improve asthma-related efforts including surveillance, education and training for health professionals. The Lung Association tracked coverage and barriers to coverage for seven different areas of asthma care supported by the Guidelines: quick relief medications, controller medications, devices, allergy testing, allergen immunotherapy, home visits and interventions, and self-management education.

With advice from a range of experts, the Lung Association developed a plan to evaluate state Medicaid programs against the Guidelines and to set consensus benchmarks for coverage of the seven areas. With regard to asthma self-management education, the Lung Association used the Guidelines to determine which services qualify as self-management education services (see further description below). The Lung Association then analyzed state Medicaid plan documents (member handbooks, coverage information, etc.) to determine whether the Medicaid plans in each state covered these services.

It should be noted that while the Guidelines provide guidance for asthma management, they do not provide implementation specifications for services. For example, the Guidelines recommend “ongoing education at each encounter with patients to develop a partnership in asthma management.” However, absent requirements detailed by a state Medicaid program, implementation including duration, frequency, curriculum and mode are left up to health plans to decide.
Researchers from the Milken Institute School of Public Health at the George Washington University (GW) conducted a comprehensive review of Medicaid plan documents for each fee-for-service (FFS) and managed care organization (MCO) plan in ten states to analyze:

- The kinds of asthma self-management education services that are available to Medicaid beneficiaries;
- The range of providers that provide these services to Medicaid beneficiaries; and
- The variety of settings in which these services are being provided to Medicaid beneficiaries.

GW analyzed 47 plans across its ten state analysis. For purposes of this issue brief, each "plan" is either a FFS program or a specific MCO. The ten states are as follows:

- Connecticut
- Indiana
- Maine
- Massachusetts
- Montana
- Ohio
- Rhode Island
- Utah
- Vermont
- Wisconsin

Building upon the plan documents the Lung Association had gathered for its Asthma Care Coverage Project, GW reviewed member handbooks, provider manuals, health management program descriptions, and other publicly available information in these ten states for the following terms:

- asthma
- asthma action plan
- self-management
- education
- health education
- management
- disease management
- chronic disease management
- care management
- respiratory management
- counseling
Findings are presented by the categories mentioned above: services, providers, and settings. Each section first provides a brief overview of the relevant Guidelines recommendations and Medicaid requirements, and then describes relevant findings.

This review has two limitations. First, because the Lung Association believes that transparency of coverage information is critical to providers and patients, it only includes information contained in publicly available plan documents. There are some plans that may provide these services without mentioning them in their plan documents. Second, most MCO plan documents that discuss asthma self-management education services do not specify whether these services are reimbursable services or programs paid for with administrative dollars. Therefore, it is not possible to determine if the services are available for all enrollees, or only for those reached by a targeted program.

Findings: Services, Providers & Settings

This section describes the range of services, settings and providers of asthma self-management education in the ten states reviewed for this project. Each section describes the Guidelines; outlines relevant Medicaid requirements; and then presents findings on coverage policies and practices in the ten states.

Range of Services Offered

**NAEPP Guidelines**

The Guidelines* serve as a framework for the diagnosis and management of asthma, providing information to be used when determining the best asthma treatment based on individual needs, including level of asthma control.19 The Guidelines recommend education begin at diagnosis and continue through follow-up care. A multi-faceted approach to asthma management is recommended including asthma information and training in management skills, self-monitoring, and development of an asthma action plan. The Guidelines recommend a written asthma action plan and regular assessment by the same clinician. The asthma action plan should include information about: 1) daily management of the person’s asthma and 2) how to deal with worsening asthma. Providers are encouraged to develop an ongoing relationship with patients and their families and to consistently update the asthma action plan.

**Medicaid**

Medicaid requires that every state program offer Early, Periodic, Screening, Diagnosis and Treatment (EPSDT) services to children and adolescents under age 21, which covers a broad range of preventive, acute care, and diagnostic and treatment services. The statute specifically requires that this benefit include “health education (including anticipatory guidance).”20 While the statute does not specifically require states to cover asthma self-management education, it should be a part of EPSDT under health education.

Federal regulation defines “preventive services” as services recommended to not only prevent disease and disability, but to also prevent the progression of

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* Although the NAEPP Guidelines were developed in 2007 and the scientific literature has since evolved, the Guidelines remain a widely used resource for setting standards in asthma management.
disease and disability. The state Medicaid manual requires that reimbursable preventive services involve direct patient care and be provided for the purpose of diagnosing, treating, preventing, or minimizing the adverse effects of illness, injury and other physical or mental health impairments. Given that asthma self-management education services involve direct patient care and minimize the adverse effects of asthma, these services fall under Medicaid’s definition of preventive services. For adults, preventive services are considered an "optional" Medicaid benefit, meaning that state Medicaid programs have discretion to determine whether and to what extent preventive services, such as asthma education, are offered to adults. Medicaid MCOs must provide services as required by the state—including EPSDT and any required preventive services—but can offer additional services that meet the needs of their members. Most often, MCOs cover these additional services out of their administrative budgets.

**Findings**

Of the Medicaid plans offered in the ten states, health plans appear to offer asthma education through a variety of programs ranging from broad chronic disease management programs to specific asthma education programs. However, few Medicaid plans specify the types or amount of asthma education services available to plan enrollees.

The majority of plans mention in plan documents that they offer general chronic disease management programs for asthma and other chronic conditions with varying levels of self-management education. These programs are described using multiple terms including: “disease management,” “care management,” “population health program,” “wellness program,” and “health education program.” While plans appear to describe specific services related to asthma education, the majority of plans reviewed do not specify which services are billable. Out of 47 plans analyzed, only two plans describe CPT codes and the related services that are covered, which are as follows:

- Individual Preventive Counseling Services (asthma education sessions): 99401, 99402, 99403, 99404
- Group Preventive Counseling Services (asthma education services): 99411, 99412
- Preventive Care: Health Risk Assessment (asthma control questionnaire): 99420
- Inhaler Technique: 94640, 94664
- Group Education Service: 99078

Some plans offer asthma-specific programs, such as respiratory disease management programs or asthma education programs. In the ten states reviewed, plans describe services offered such as:

- clinic-based asthma self-management education;
- home-based asthma self-management education;
- home environmental assessments;
- telehealth services including education provided online and over the phone;
- asthma support groups; and
- educational information provided through postal mail.
Table 1: Examples of Asthma Self-Management Education Services Mentioned in Plan Documents

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Overall Use by Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic-based asthma Self-Management Education</td>
<td>8 of 47 plans reviewed indicate they provide clinic-based asthma education.</td>
</tr>
<tr>
<td>Home-based asthma Self-Management Education</td>
<td>6 of 47 plans reviewed indicate they provide home-based asthma education.</td>
</tr>
<tr>
<td>Home environmental assessments</td>
<td>5 of 47 plans reviewed indicate they provide home environmental assessments.</td>
</tr>
<tr>
<td>Telehealth services</td>
<td>11 of 47 plans reviewed indicate they provide telehealth services.</td>
</tr>
<tr>
<td>Educational material by mail</td>
<td>9 of 47 plans reviewed indicate they provide educational material by mail.</td>
</tr>
<tr>
<td>Asthma education classes</td>
<td>8 of 47 plans reviewed indicate they provide asthma education classes.</td>
</tr>
</tbody>
</table>

Providers Eligible to Perform Asthma Self-Management Education Services

NAEPP Guidelines

The Guidelines state that asthma self-management education should begin at the time of diagnosis by a physician and be reinforced by all health professionals across the care continuum.24

- **Physicians.** The Guidelines recommend that physicians provide asthma information and training in asthma management skills and self-monitoring, assistance developing a written asthma action plan and regular assessment. The Guidelines cite a large randomized controlled trial (RCT) of evidence showing that providing physician education results in reduced hospitalizations and emergency department (ED) visits, missed work days and improved quality of life.25

- **Nurses.** In a clinic or hospital setting, the Guidelines cite several RCTs that demonstrate the effectiveness of nurse-educators with specialized asthma training delivering asthma education.26,27

- **Respiratory Therapists.** The Guidelines recommend that respiratory therapists provide asthma education in hospital, ED and clinic settings, citing evidence in improving inhaler technique.28

- **Pharmacists.** The Guidelines recommend that pharmacists provide asthma self-management education with a focus on medication adherence in a pharmacy setting. Several RCTs cited in the Guidelines describe how asthma self-management education is especially effective when provided by a pharmacist who has received specialized asthma training and is delivered in a community-based pharmacy.29,30

- **Community Health Workers.** The Guidelines cite a RCT that demonstrates how using community health workers (CHWs) to deliver asthma self-management education and allergen-control education can lead to reductions in ED visits, and improvements in quality of life for caregivers.31 Other studies cited by the Guidelines demonstrate how CHWs delivering in-home asthma education can lead to significantly decreased allergens and improved home environments.32,33
Other Non-traditional Providers. In the community setting, evidence is cited for use of community peer educators, nurses, and child-life specialists with specialized asthma training.

Medicaid
Guidance published by the Centers for Medicare and Medicaid Services (CMS) emphasizes that states have broad discretion to recognize and potentially reimburse a range of health professionals as well as individuals trained and certified as health educators to furnish services to Medicaid beneficiaries. In addition, a recent federal regulatory change, known as the “Medicaid preventive services rule,” allows states the option to reimburse non-licensed providers for preventive services as long as they are recommended by a physician or other licensed practitioner. This alternative provider option could let a state reimburse asthma educators, healthy homes specialists and other community health workers (CHWs) to provide asthma education.

States are determining whether and how to implement this rule change in their FFS programs. In the meantime, Medicaid MCOs have discretion to hire community health workers, asthma educators and other professionals important for asthma education as internal staff, paid for out of the plan's administrative budget.

Findings
In the ten states reviewed, asthma self-management education services are most commonly provided by nurses. However, plans describe a wide range of providers used to deliver asthma education including:

- respiratory therapists
- pharmacists
- community health workers
- asthma educators
- social workers
- care managers or coordinators
- health educators
- nutritionists
- chronic care assistants and
- health coaches

In some examples, community health workers and other non-licensed providers are part of the care team, but often are internal employees of the MCO, not an outside provider who seeks Medicaid reimbursement for services rendered. The following table provides examples of provider categories mentioned in some of the plans.

† Previously, Medicaid regulations limited the scope of allowable coverage of preventive services to those that were actually provided by a physician, nurse or other licensed practitioner, effectively preventing a broader range of qualified providers from seeking Medicaid reimbursement for asthma self-management education services delivered to Medicaid beneficiaries.
Table 2: Examples of Asthma Self-Management Education Provider Categories Mentioned in Plan Documents

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Overall Use by Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td>24 of 47 plans reviewed indicate they use nurses to provide asthma education.</td>
</tr>
<tr>
<td>Respiratory Therapists</td>
<td>2 of 47 plans reviewed indicate they use respiratory therapists to provide asthma education.</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>4 of 47 plans reviewed indicate they use pharmacists to provide asthma education.</td>
</tr>
<tr>
<td>Community Health Workers (CHWs)</td>
<td>4 of 47 plans reviewed indicate they use CHWs to provide asthma education.</td>
</tr>
<tr>
<td>Asthma Educators</td>
<td>5 of 47 plans reviewed indicate they use asthma educators to provide asthma education.</td>
</tr>
<tr>
<td>Asthma education classes</td>
<td>8 of 47 plans reviewed indicate they provide asthma education classes.</td>
</tr>
</tbody>
</table>

Settings of Care Delivery

**NAEPP Guidelines**

The Guidelines support the provision of asthma self-management education in a range of clinical settings, including outpatient clinics (e.g., physician office or community health center), hospitals, emergency departments, and pharmacies. In addition, the Guidelines support asthma education interventions in homes, schools, and other community locations. Finally, asthma education provided via telehealth technologies is emerging as a way to reach patients outside of clinical settings. As each setting may involve different providers or resources and may reach patients at a different point in their care, the Guidelines make recommendations on the general types of asthma self-management education that should happen in each care setting:

- **Clinics.** According to the Guidelines, practitioners in health clinic settings should provide education on self-management and medication adherence and work with patients to create a written asthma action plan. Evidence cited by the Guidelines shows that adding asthma education to regular clinical visits may lead to reduced ED visits and missed days of work and school and improved quality of life.

- **Hospitals.** The Guidelines recommend that hospital and ED-based asthma education include brief asthma education, a discharge plan, inhaler technique training and referral for follow up, citing evidence of the effectiveness of teaching inhaler technique and referral for follow up care in the ED setting.

- **Pharmacy.** The Guidelines recommend that education in the pharmacy setting target a patient’s understanding of medications and proper inhaler technique. Studies cited by the Guidelines show pharmacy-based interventions result in improved asthma knowledge, medication adherence and improved quality of life.

- **Homes.** The Guidelines state that home-based asthma self-management education supplements and reinforces clinical disease education and treatment by reaching individuals where they live. Specifically, the Guidelines recommend that home-based asthma education be delivered to

“In the ten states reviewed, asthma self-management education services are most commonly offered in clinical settings. Some plans indicate that services may be provided by clinical providers, but do not specify whether services are provided in a clinical or alternative setting.”
asthma patients to improve understanding of asthma and include allergen-control education. The Guidelines note that allergen-control education in the home setting can lead to reductions in ED visits and improvements in quality of life for caregivers.47

- **Schools.** Self-management education in school settings is recommended for children, along with asthma education training for school staff and families of students. Several studies cited by the Guidelines show that asthma education provided in a school setting (e.g., in a school-based clinic by healthcare providers or in the classroom by other school-based personnel) can improve symptoms, utilization of health care services, absenteeism, academic performance and quality of life.48,49,50

- **Community Settings.** The Guidelines recommend asthma self-management be delivered in community centers and various other community settings to improve quality of life and behavior change. The Guidelines cite a controlled trial which shows that asthma self-management education delivered at community centers by trained community residents led to a reduction in acute care visits.51

- **Telehealth.** The Guidelines recommend and cite emerging evidence on the impact of computer and internet-based asthma self-management education.52,53,54

**Medicaid**

Medicaid permits state programs to cover preventive services, such as asthma self-management education, in both clinical and community settings, such as homes and schools.55 A recent change to Medicaid—removing the so-called “free care rule”—makes it much easier for Medicaid agencies to reimburse for services furnished in schools and other community settings.56 CMS guidance also urges Medicaid plans to coordinate with a broad range of social service programs, further broadening the settings in which care can be delivered.57

**Findings**

In the ten states reviewed, asthma self-management education services are most commonly offered in clinical settings. Some plans indicate that services may be provided by clinical providers, but do not specify whether services are provided in a clinical or alternative setting. Where patients have higher needs, home visits are sometimes available through MCOs. Other settings described in plan documents include:

- pharmacy
- home
- community and
- telehealth, including online or over the phone

One issue that may inherently limit available settings for asthma self-management education is the fact that most plans only utilize licensed clinical providers to offer education, as described in the eligible providers section above. While most state Medicaid agencies do not prevent physicians, nurses and other licensed practitioners from working in community settings, it is less common for these providers to work outside of a clinical setting.58 It may also be too expensive for MCOs to reimburse for physicians and nurses to travel if more states adopt the Medicaid preventive services rule...and integrate non-clinical providers into care teams, asthma [self-management] education could become available in a wider range of community settings.”
to visit patients in their homes, schools, and other community settings. If more states adopt the “Medicaid preventive services rule” and integrate non-clinical providers into care teams, asthma education could become available in a wider range of community settings.

The following table provides examples of the types of settings mentioned in some of the plans.

**Table 3: Examples of Asthma Self-Management Education Settings Mentioned in Plan Documents**

<table>
<thead>
<tr>
<th>Settings Category</th>
<th>Overall Use by Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>2 of 47 plans reviewed indicate that they provide asthma education in a pharmacy setting.</td>
</tr>
<tr>
<td>Home</td>
<td>6 of 47 plans reviewed indicate that they provide asthma education through home visits.</td>
</tr>
<tr>
<td>Community</td>
<td>10 of 47 plans reviewed indicate that they provide asthma education in a community setting.</td>
</tr>
<tr>
<td>Telehealth</td>
<td>12 of 47 plans reviewed indicate that they provide asthma education telephonically.</td>
</tr>
</tbody>
</table>

**Snapshot of the Montana Asthma Control Program:** Montana’s state health department has led a coordinated effort to expand asthma education services, settings and providers. Most Medicaid beneficiaries in Montana are enrolled in a primary care case management (PCCM) program. There are no MCOs in Montana. In addition to securing Medicaid reimbursement for asthma education billing codes, the Montana Asthma Control Program (MACP), operated through the Montana Department of Health, has made it a high priority goal to secure reimbursement for AE-Cs.

Montana’s Department of Health has developed several robust initiatives using grant funding to enhance delivery of asthma services in the state, such as the Asthma Educator Initiative, the Montana Asthma Home Visiting Program, and the Asthma Friendly Schools program. MACP has fully adopted the Guidelines to create quality measurement goals for its asthma programs in general and for its asthma education goals specifically.

Through its Asthma Educator Initiative, MACP provides education, scholarships and study materials to interested persons who meet certain criteria. The Asthma Friendly Schools program which, in addition to providing a resource guide to schools for creating an asthma friendly environment, also offers online training programs for school staff and awards grants to school nurses and health educators to enable them to provide school-based asthma self-management education services.

The Asthma Home Visiting Program provides home assessments and comprehensive education on asthma triggers. Participants also receive materials to help mitigate environmental asthma triggers, such as mattress and pillow encasements and High-Efficiency Particulate Absorption filters.
Recommendations for Improving Coverage of Asthma Self-Management Education

This review of publicly available information on asthma self-management education in ten states suggests that there are gaps between the Guidelines and what Medicaid FFS and MCO plans currently provide. Both state Medicaid offices and MCOs have a role to play in bridging these gaps and could improve asthma education in the following ways.

Services

An examination of the services provided in the 47 plans illustrates the wide spectrum of coverage these plans offer. For example, while one plan states that members can get health education services by calling their care management department, another plan has in place a robust, detailed asthma management program description. State Medicaid programs and MCOs should adopt and encourage Guidelines-based care and a higher level of services that will lead to better patient outcomes.

- **MCOs Should Align Services with the Guidelines.** Plans with the leanest service offerings could provide more robust offerings such as the ones provided as examples in this issue brief.

- **FFS and MCO Plans Should Publicize the Asthma Education Services they do Cover.** Given that this review only considered publicly available plan documents, there remains the possibility that some of these plans offer more robust services than their plan documents convey. Plans should publicize their asthma education services through plan documents and other outlets to increase awareness and uptake by patients and providers.

- **State Medicaid Programs and MCOs Should Adopt Clear Reimbursement Pathways.** As mentioned above, the Guidelines serve as broad guidance for the provision of asthma education services and leave implementation details up to state Medicaid programs and MCOs. Most state Medicaid programs do not explicitly cover asthma self-management education services, and MCOs have the discretion to cover these services using their administrative budgets. State Medicaid programs and MCOs should consider the following:
  - State Medicaid programs should provide and disseminate a list of asthma self-management education-related procedure and billing codes for which providers can seek reimbursement.
  - In states where the Medicaid program has not made asthma self-management education procedure and billing codes explicitly reimbursable, MCOs should cover these services through their administrative budgets while ensuring that providers are made aware of any available reimbursement pathways for such services.

- **State Medicaid Programs and MCOs Should Collect and Report Asthma Quality Measures.** While increased provision of services is important, measuring the quality of services provided may be equally important. States should consider collecting and reporting asthma-related quality measures related to asthma self-management education.
Providers
The Guidelines recommend that a wide variety of providers deliver asthma self-management education services and a number of plans have utilized non-clinical providers like community health workers to reach wider cross sections of Medicaid populations. However, some gaps remain. To further incorporate the Guidelines, some states need to: (1) expand the kinds of providers who can seek Medicaid reimbursement, and (2) work towards building the numbers of diverse providers who can provide these services within the state.

- **State Medicaid Offices Should Allow Reimbursement of a Broader Range of Preventive Service Providers.** Many states are engaging in discussions about how to expand reimbursement eligibility rules in light of new flexibility to allow non-licensed providers to seek Medicaid reimbursement for preventive services. This change could expand opportunities for a wider range of trained providers to offer asthma education services supported by the Guidelines. To incorporate this new flexibility, states should submit State Plan Amendments (SPAs) to CMS. SPAs delineate who is covered, what services are to be provided and how providers are reimbursed.

- **MCOs Should Utilize MCO Administrative Dollars to Fund Asthma Self-Management Education.** Meanwhile, even absent changes at the state level, MCOs have flexibility to provide asthma self-management education and to select appropriate provider networks. As noted above, some MCOs already employ or reimburse for the services of community-based providers by using administrative dollars. MCOs should embrace new provider types and recognize the value these non-traditional providers bring to helping beneficiaries manage asthma symptoms.

- **State Health Departments and MCOs Should Invest in Expanding the Workforce Capacity of Non-Clinical Providers.** Funding is needed to train a robust community-based workforce to offer asthma self-management education in accordance with the Guidelines. Public health dollars could be used for training efforts, and MCOs could invest resources in training such as non-clinical providers.

- **States Should Consider Establishing Medicaid Health Homes to Bring Together Teams of Providers.** Medicaid health homes allow states to offer comprehensive care coordination to individuals with one or more chronic conditions, including asthma. Medicaid health homes provide or coordinate all patient care, including a specific set of “health home” services such as comprehensive care management or care coordination. States should submit a State Plan Amendment (SPA) to CMS to implement health homes.

Settings
The Guidelines recommend that states offer asthma self-management education services in a wide variety of settings, and some of the plans examined above have expanded beyond provision of services in the clinical setting. States and MCOs should provide services in an even broader variety of settings, such as schools, homes and communities.

- **State Medicaid Programs and MCOs Should Provide Services in a Variety of Settings.** In accordance with the Guidelines, asthma self-management education should be provided at every opportunity.

“Many states are engaging in discussions about how to expand reimbursement eligibility rules in light of new flexibility to allow non-licensed providers to seek Medicaid reimbursement for preventive services.”
programs and MCOs should expand the delivery of asthma education beyond the clinic setting. Other settings used by state Medicaid programs and MCOs and recommended by the Guidelines include: schools, homes, communities, pharmacies, hospitals, emergency departments and via telehealth. States should also consider implementing the Medicaid “free care” rule, which allows Medicaid agencies to reimburse for services provided in schools and other community settings.

**States Should Remove Barriers to Providing Asthma Services in Expanded Settings.** While MCOs have discretion to provide asthma education services in a variety of settings, states may have barriers that limit this flexibility. For example, while Indiana Medicaid reimburses for services in home settings, the state only reimburses services provided by certain types of traditional providers such as nurses and qualified home health aides. States should consider removing such barriers to allow maximum flexibility to MCOs to provide asthma education in various settings.

**Coverage in Indiana: A Case Study**

To better understand the challenges of advancing asthma self-management education coverage, GW conducted a case study of Indiana, a CDC National Asthma Control Program funded state. In 2015, more than 628,000 Indiana residents currently had asthma. With more than 1 in 10 adults currently suffering from this disease (10.2%), the asthma rate among Indiana adults has been increasing much faster in Indiana since 2011 compared to the national rate.

GW reviewed Indiana Medicaid plan documents and conducted interviews with a range of stakeholders: the Indiana Joint Asthma Coalition (InJAC); state Medicaid officials from the Indiana Family and Social Services Administration (FSSA), which operates the Office of Medicaid Policy and Planning (OMPP); and providers from the Parkview Health Asthma Call-Back Program. In addition, GW had formative discussions with the American Lung Association in Indiana.

**Current Medicaid Coverage for Asthma Self-Management Education Services:**

**Indiana Medicaid**

Over 1.5 million Indiana residents are enrolled in Medicaid, CHIP and the Medicaid Expansion. About 79 percent of Indiana Medicaid beneficiaries are enrolled in Medicaid MCOs. While the Indiana Medicaid office requires MCOs to offer chronic disease management programs, which could include asthma education services, there remain several limitations with respect to coverage for asthma self-management education in the state:

- **Chronic Disease Management Programs:** While Indiana requires that MCOs offer chronic disease management programs, which are “encourage[d] [to comply] with national care guidelines,” the Medicaid office does not specify the types, frequency, or duration of services that must be provided.

- **Reimbursement of Asthma Education Procedure and Billing Codes:** Indiana Medicaid interviewees state that Indiana does not offer reimbursement for asthma education procedure and billing codes, because these services generally take place during annual wellness visits in a clinical setting.
■ **Medicaid Preventive Services Rule**: Indiana has not yet determined whether and how to implement the Medicaid preventive services rule to expand coverage to services provided by non-traditional providers. For example, Indiana Medicaid agency staff stated that they do not recognize certified asthma educators (AE-Cs) as eligible providers, which may deter MCOs from using this workforce to deliver asthma education, even with administrative dollars.

■ **Home Settings**: While Indiana Medicaid reimburses for services in home settings, it only reimburses services provided by certain types of traditional providers such as nurses and qualified home health aides.

**Indiana MCOs**

■ **Services**: Indiana MCOs provide chronic disease management programs, as required by the Medicaid office, but the scope of asthma education services provided through these programs varies from being explicitly stated as telehealth education services to being generally labeled as “education” services. Since the Indiana Medicaid program does not reimburse for these services, they are likely paid for through MCOs’ administrative budgets.

■ **Providers**: MCO plan documents do not describe the range of providers eligible to perform asthma-related services, and interviewees were not aware of MCOs employing non-traditional providers such as CHWs to provide asthma education.

■ **Settings**: MCOs have the discretion to employ non-traditional providers such as CHWs to deliver asthma education in home settings using administrative dollars, but the lack of a clear reimbursement pathway may act as a deterrent. Current MCO plan documents do not describe home-based asthma education services. However, two plans offer health education in community settings.

**Lessons Learned**

■ **Build Strong Coalitions**: InJAC is a voluntary network of stakeholders and organizations that work to reduce the burden of asthma for people living in Indiana. The coalition includes members from federal, state, and local government agencies, professional organizations, managed care plans, hospitals, schools, environmental groups, and other community-based organizations involved in the prevention and control of asthma in Indiana. InJAC has a number of working groups including the Asthma Educator Reimbursement Work Group, the Asthma Team-based Care Workgroup, and the Environmental Work Group, among others. The coalition has proven to be an effective force for improving asthma initiatives in Indiana.
Demonstrate Cost-Effectiveness: Interviewees from InJAC suggest that demonstrating cost-effectiveness of asthma self-management education is likely the most important factor for Indiana Medicaid and MCOs when determining whether to cover this or any service. Demonstrating return-on-investment (ROI) of asthma education can be done by highlighting outcomes of successful programs in the state or by lifting up examples from other states. For example, Parkview Health, a non-profit health system in Fort Wayne, Indiana provides asthma education through its Asthma Call-Back Program.\textsuperscript{89} The program includes follow-up phone calls and home visits delivered by a team of providers including a registered nurse and respiratory therapist after an individual is discharged from the hospital emergency department with a primary discharge diagnosis for asthma.\textsuperscript{90} A third-party evaluation of the program found reduced ED visits, increased number of participants with a regular source of a primary care provider, and improvements in missed days of school and work.\textsuperscript{91} By calculating the ROI, decision-makers can determine where to make investments and how to target proposed initiatives for maximum financial impact.

Engage Multiple Stakeholders, Especially MCOs: According to interviewees, to improve access to asthma self-management education, it is important to engage with the state Medicaid office, further develop relationships with MCO leadership, and continue serving as a catalyst for MCOs to provide evidence-based asthma services. For example, InJAC engaged with MCOs by hosting a MCO forum with the objective of encouraging MCOs to utilize CPT code 98960 (Education and Training for Patient Self-Management)\textsuperscript{‡} to deliver in-home asthma education.\textsuperscript{92,93} Interviewees highlighted the importance of reaching out to the appropriate contacts within MCOs, such as community engagement staff, medical directors, individuals in charge of chronic disease management programs, or other individuals working on asthma-related projects.

Use a Multidimensional Approach to Increase Coverage for Asthma Self-Management Education: Interviewees considered using multiple strategies to ensure better coverage and reimbursement of asthma self-management education services including regulation, and voluntary initiatives by health plans to deliver asthma self-management education in home and community settings. One interviewee suggested beginning outreach efforts by engaging MCOs, then broadening the approach to engage state Medicaid agencies. According to interviewees from the state Medicaid agency, Indiana Medicaid has not received any requests through its online process to consider reimbursement for specific asthma-related billing codes. Convening the Medicaid office, MCOs and stakeholders may serve as an opportunity for Indiana and other states to determine the most effective way to move forward with changes to coverage and billing codes for asthma self-management education.

Use Champions to Further the Goal of Improving Asthma Self-Management Education: Interviewees highlighted the importance of utilizing champions to further the goal of enhancing coverage of asthma self-management education. They stated that patients are the best voice...

\textsuperscript{‡} 30 minutes of individual, face-to-face patient education provided by a qualified, non-physician health care professional.
to use when framing the importance of asthma-related services, and are working to educate communities on how asthma education services have benefited individuals in need. Interviewees recommend collaborating with community health workers when meeting with Medicaid programs to discuss reimbursement for non-traditional providers. Moving forward, coalition members in the state hope to collaborate with other stakeholder groups such as respiratory care, minority health, and pediatric organizations to advance better coverage and improve patient outcomes.

**Conclusion**

Both the ten-state analysis of Medicaid coverage of asthma self-management education and the Indiana case study demonstrate some of the gaps and challenges in Medicaid programs delivery of evidence-based care in the area of asthma self-management education. The ten-state analysis identified gaps in Medicaid reimbursement for asthma education services, the providers who deliver them, and the settings in which the services are delivered. Interviews in Indiana shed light on how these gaps can be bridged by multiple stakeholders working together to advance evidence-based asthma care.

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21 23 CFR § 440.130(c).
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