ADVANCING GUIDELINES-BASED ASTHMA CARE:
Collaboration with State Medicaid Programs
INTRODUCTION
Asthma is a chronic condition that can be serious—even life threatening—if not managed properly. Over 25 million Americans currently have asthma, including over six million children under the age of 18.\(^1\) Approximately 46.4 percent of these children are enrolled in Medicaid/CHIP.\(^2\) Asthma cannot be cured, but it can be managed effectively by properly using asthma medications and avoiding exposure to environmental triggers.

Through the Asthma Guidelines-Based Care Coverage Project, the American Lung Association works to increase awareness about the importance of coverage for guidelines-based care.\(^3\) Guidelines-based care refers to the best-practices in asthma management identified by the National Heart, Lung and Blood Institute and the National Asthma Education and Prevention Program (NAEPP).\(^1\) The NAEPP guidelines are focused in four areas:

- Assessment and monitoring of patients with asthma;
- Education about asthma self-management;
- Control of environmental exposures that affect asthma; and
- Medications to treat asthma.

Adherence to guidelines-based care helps patients manage their asthma, leading to better health outcomes and better quality of life.\(^5,6,7\) Coverage of guidelines-based care has also been found to reduce healthcare costs for payers.\(^8,9,10\) With fewer hospitalizations and emergency department (ED) visits, multiple programs that use guidelines-based asthma care have demonstrated positive returns on investment. In one state, an investment by the state asthma control program in guidelines-based care of $2,000 per patient on average led to an 85 percent reduction in reported ED visits and a 50 percent reduction in hospitalizations, which translates to cost savings.\(^11\) Coverage of guidelines-based asthma care in Medicaid presents a tremendous opportunity to improve patient care while reducing long-term program costs.

This paper is intended to provide best practices that may help stakeholders develop a collaborative relationship with state Medicaid programs to address gaps in coverage for guidelines-based asthma care.

PROJECT DESCRIPTION
With funding from the Centers for Disease Control and Prevention (CDC), the American Lung Association and the George Washington University School of Public Health (GWU) sought to identify best practices and lessons learned from grantees of the CDC’s National Asthma Control Program (NACP) who have successfully collaborated with their state Medicaid programs to advance guidelines-based care for asthma.

CDC identified NACP grantees in four states—Missouri, Montana, Rhode Island and Wisconsin—that are at the forefront of this work. Four group interviews brought together members of these states’ asthma control programs to share their experience, insights and expertise regarding the process of advancing guidelines-based asthma care through Medicaid.

Many of these grantees have focused on improving coverage of home visits for patients with asthma. A home-based asthma visit often involves specialists (e.g. certified asthma educators, respiratory therapists, environmental health specialists) and/or public health workers (e.g. public health nurses and community health workers) visiting a patient and their family at home to address certain factors of the patient’s condition that may be related to their home.\(^12,13\) For example, the certified asthma educator or community health worker might assess the patient’s current level of asthma control and indoor environment; address potential indoor asthma triggers, such as mold and/or mice; and/or teach the patient and/or his or her family to control these triggers.
Informed by the experiences of these four NACP grantees, this report provides background information about the Medicaid program, highlights best practices of the states selected for this project and identifies challenges that stakeholders could anticipate if interested in working with state Medicaid offices to advance guidelines-based asthma care. Additional resources are included in the appendix.

UNDERSTANDING MEDICAID AND CHIP

Medicaid provides health care coverage for eligible low-income adults, pregnant women and children. It is jointly financed by federal and state governments. Medicaid follows broad national guidelines, but eligibility and specific coverage varies from state to state.

Federal guidelines establish mandatory and optional benefits for state Medicaid programs. Mandatory benefits include inpatient and outpatient hospital services, physician services, laboratory and x-ray services and home health services, among others. Prescription drug services, case management and occupational therapy fall into the category of optional benefits. This means that Medicaid coverage of asthma care can vary widely from state to state.

There are some changes to coverage that state Medicaid programs can make independently. For other changes, states may need to work with the Centers for Medicare and Medicaid Services (CMS) through mechanisms such as a state plan amendment, an agreement between a state and the federal government describing how that state administers its Medicaid program. In general, it is important to understand state laws and procedures around adding coverage of new benefits and/or providers under Medicaid.

States operate in either one or a hybrid of two types of Medicaid delivery systems—fee-for-service (FFS) or managed care. In the FFS model, Medicaid reimburses providers directly for the services provided. In managed care, the state contracts with managed care organizations (MCOs) to contract with providers who deliver services. States often reimburse the MCOs using a per-member per-month fee and determine healthcare service coverage through contracts negotiated between the state Medicaid office and the MCO. More information about the most common Medicaid delivery systems is included in the glossary.

The Children’s Health Insurance Program (CHIP) provides health coverage to children of families with incomes too high to qualify for Medicaid—up to approximately 200 percent of the federal poverty level (FPL), although this cap varies substantially by state. Similar to Medicaid, all states must provide certain mandatory benefits to CHIP beneficiaries but may also offer additional benefits. CHIP may work closely with Medicaid in some states, and its program design may strongly resemble that of Medicaid. Depending on the states’ CHIP administrative design, it may be necessary to explicitly include CHIP staff in conversations about coverage of guidelines-based asthma care in order to ensure coverage for CHIP beneficiaries.

BEST PRACTICES

The following sections outline the best practices identified during interviews with the NACP grantees for advancing coverage of guidelines-based asthma care in Medicaid.

Early Planning

Understanding the Landscape

Expanding Medicaid coverage of guidelines-based asthma care requires familiarity with the state’s Medicaid program. The unique features of a state Medicaid program will dictate the pathways for coverage as well as the potential barriers to expanding these policies. For example,

- What has been the state’s willingness to expand optional Medicaid services to address the needs of
beneficiaries with specific types of chronic health conditions?

- How are most Medicaid beneficiaries in the state served—through MCOs or FFS?
- Within those programs, what are the service delivery and financing systems that might be used to address guidelines-based asthma care?
- Does the state operate under a current Medicaid waiver or some other health reform initiative (e.g., Delivery System Reform Incentive Payment Program [DSRIP]) that might impact the desired outcome? Additional information about waivers is available in the glossary.

Information about how the state Medicaid program operates, has operated in the past and how it seeks to change in the future provides important context for any effort to expand coverage. While the answers to some of the questions posed above may be readily available, individuals within the state Medicaid program and/or experts in the state may have valuable knowledge beyond what is publicly known. Establishing relationships with these experts may provide access to a deeper level of knowledge about the state Medicaid program that will help craft a successful plan.

**Understanding the Mechanism for Implementing Coverage**

A state’s Medicaid landscape will impact how coverage of guidelines-based asthma care can be advanced. For example, states with only FFS may submit a single state plan amendment (SPA) to improve coverage, while those with MCOs may work directly with these organizations to expand guidelines-based care for each covered population. Different strategies may be appropriate for a state depending on its landscape and priorities.

A SPA is a single mechanism that can permanently implement statewide coverage for guidelines-based asthma care and its various providers. The process of submitting a SPA can be tedious. SPAs are required to be statewide and budget-neutral. SPAs must be publicly available for a 30-day comment period before they can be submitted. In some states, the authority to develop and submit a SPA must be granted through legislation; the final text may need to be approved by the state legislature and/or governor. Once passed, the state will have to implement a billing procedure to enable providers to bill Medicaid for the services provided. These steps should be anticipated and planned for if a state pursues statewide coverage through a SPA.

MCO contracts can extend coverage to the Medicaid/CHIP enrollees they serve. Each MCO contract is negotiated individually with the state’s Medicaid office. Depending on the needs of the MCO’s patient population and potential for a positive return on investment (ROI), an MCO may be willing to institute coverage for guidelines-based asthma care through their own funding streams, such as administrative dollars. The Lung Association’s resource on *Medicaid Managed Care and Asthma* provides additional details about how the structure of managed care can impact asthma coverage (see appendix).

**Identifying Key Stakeholders**

Whether or not to include partners in planning and negotiations with a state Medicaid program depends upon the network of stakeholders in the state and how well they work together, the political landscape and the preferences of the individuals in the state Medicaid program. Is it more effective to show broad support among stakeholders or to approach a state Medicaid program with a smaller group and a narrow request to build a strong relationship?

One participating NACP grantee that initially worked with a variety of patient organizations noted that while their coalition presented a powerful case, negotiating consensus among all parties slowed down the process. Identifying a few key people who can speak with some authority on the policy being discussed and/or lend influence throughout
the process may ultimately be more effective than a broad coalition.

Another NACP grantee noted that engaging with their state’s Medicaid program was only a small fraction of the work. Meeting with state Medicaid programs about coverage of guidelines-based asthma care needs to be part of a larger plan, developed early in the process, which considers not only what to ask for but who and how to ask. Strong relationships with Medicaid staff and expert organizations, such as the Lung Association, were considered a core element of such strategies.

A broader coalition of invested stakeholders may be most useful to facilitate the implementation of guidelines-based asthma care. NACP grantees identified the following partners as particularly beneficial:

- Healthcare providers, pharmacists and environmental professionals who participate in asthma control strategies and/or guidelines-based asthma care programs;
- Hospitals and hospital systems, especially those serving children and other populations highly affected by asthma;
- School nurses who promote and disseminate evidence-based training, tools and strategies to promote guidelines-based asthma care among students;
- Health department officials, who may have a better understanding of the state healthcare landscape at large (as well as an understanding about which partners would be most beneficial to involve); and/or
- Representatives from MCOs that are currently providing or piloting guidelines-based asthma care for enrollees in the state.

Working with State Medicaid Offices

Developing the Request

Creating an overall strategy that considers planning, implementation and evaluation prior to approaching a state’s Medicaid program can help identify major issues to raise during an initial meeting. This strategy is likely to change with input from Medicaid staff, but establishing a flexible plan can help identify potential problems early on and make the request more actionable moving forward.

All of the NACP grantees had some level of guidelines-based asthma care being delivered in their state at the time they initiated discussions with Medicaid regarding coverage. Grantees noted the importance of “speaking from experience” and being able to describe first-hand the impact of their programs on the individuals they serve.

Identifying Relevant Existing Data

Explaining the need for Medicaid coverage of guidelines-based asthma care may require data from and/or examples of existing asthma programs in the state to demonstrate that Medicaid coverage and reimbursement is necessary and would be beneficial. While national data can be helpful, state Medicaid programs may seek evidence specific to the state to demonstrate that coverage could be effective among their state residents.

Demonstrating efficacy through smaller-scale interventions in a state can help document the need and potential impact of Medicaid reimbursement of guidelines-based asthma care. Among the participating NACP grantees, —

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† Throughout the process of recruiting patients, collecting relevant data, and reporting this data through evaluation results, it is critically important that participating patients are aware of how their data will be used and that their data is protected in accordance with the Health Insurance Portability and Accountability Act (HIPAA). See: Centers for Disease Control and Prevention. Asthma—National Data (2017). Accessed June 5, 2019. Available at: https://www.cdc.gov/asthma/most_recent_national_asthma_data.htm
sources of data used to illustrate the efficacy of a proposed policy change included data from local initiatives, Medicaid MCOs, the CDC’s 6|18 Initiative and quality measures.  

**Local Initiatives**

Often, local health agencies may already be providing asthma care and are able to collect and provide useful data about the costs and outcomes associated with these initiatives. Although these operations tend to be small and inconsistently-funded, the data they collect may include specific cost-benefit and outcomes information that may be used in discussions with state Medicaid programs.

In some cases, it may be wise to pilot coverage of guidelines-based asthma care under one local health department in anticipation of pursuing statewide coverage. This approach allows demonstration of the “proof of concept” in intervention design and implementation.

For example, one participating NACP grantee presented evidence to the state Medicaid program that had been gathered through its Home Asthma Response Program (HARP). The HARP tested a model for service delivery among 158 children with active asthma with the goal of using cost-benefit analysis to build a business case for Medicaid coverage of asthma home interventions, education and supplies. This program measured the cost of providing these services against claims data to show improvements in health and wellbeing as well as significant cost-savings to the program.

**MCO**

MCOs that operate their own independent guidelines-based asthma care program may provide valuable data about the efficacy of guidelines-based asthma care. MCO data is often not public, but one NACP grantee successfully negotiated data access with MCOs in their state by offering assistance in developing and/or managing the MCO’s asthma care program. Establishing strong relationships with state MCOs can create the opportunity to share data and gather evidence about the efficacy of guidelines-based asthma care.

One NACP grantee assisted one of the MCOs in their state to begin offering asthma home visiting initiatives in exchange for access to data from that program. Establishing the expectation of data-sharing was integral to the NACP grantee’s contract with this MCO. In addition to the financial contract, the NACP grantee developed an agreement between itself, the MCO and the state Medicaid program and worked with the state’s legal counsel to ensure their continued participation in and access to data resulting from the pilot. This data access is unique to this MCO; the NACP grantee has yet to secure a data-use agreement with other MCOs in their state. For most NACP grantees, obtaining proprietary data from MCOs remains a significant hurdle.

**6|18 Initiative**

Multiple states found value in participating in the CDC’s 6|18 Initiative, which targets six health conditions (including asthma) and 18 evidence-based interventions to address them. 6|18 connects teams of state Medicaid and public health department staff with CDC researchers, economists and policy analysts to promote best practices in improving health and controlling costs in these six areas, and these CDC experts facilitate peer-to-peer support, phone calls, webinars and other technical assistance opportunities for participating states. NACP grantees that participated in 6|18 noted the value of having these expert contacts at CDC to advise them as they crafted and implemented their plan to further guidelines-based asthma care in their state. In one state, 6|18 advisers helped a local MCO establish its asthma program, creating a database that could help that state make a case for asthma care coverage to the state Medicaid program.
Asthma Quality Measures

Over the last several years, CMS has collaborated with states to improve the collection and use of data in the Medicaid program. Many state Medicaid programs and MCOs must collect and report information on quality measures, including quality measures related to asthma that are discussed later in this paper. Evidence that coverage of guidelines-based care had driven improvements in key quality measures therefore will likely be of interest to state Medicaid programs and MCOs. For example, one NACP grantee included information about improvements in the Asthma Medication Ratio (AMR) as part of a one-pager on its home asthma intervention (included in the appendix).

Collecting the Data

The NACP grantees reported that while there are many metrics that illustrate the impact of guidelines-based asthma care on asthma outcomes, there are specific types of data that have proven to be most compelling to state Medicaid programs. Among the most compelling of these data include cost and ROI information, especially if specific to the state Medicaid program. Data that demonstrates the need and potential health impacts of the proposed Medicaid coverage decision on future health outcomes can also be helpful. Additionally, some NACP grantees collected demographics data such as race and sex.

For the purposes of explaining the value of home-based asthma services to Medicaid staff, the NACP grantees identified the following data points regarding individuals who would qualify for home-based services as particularly useful:

- Hospitalizations and associated costs
- Emergency department visits and associated costs
- Outpatient claims and associated costs
- Asthma Medication Ratio (AMR)
- Self-reported health outcomes (e.g. percent improvement in ED visits, Asthma Control Test scores, etc.)

The NACP grantees stressed that a few key data points are more compelling than a litany of information.

Meeting with Medicaid Policymakers

Achieving the goal of Medicaid coverage of guidelines-based asthma care ultimately rests upon establishing good working relationships with Medicaid officials and presenting a compelling case. NACP grantees had a number of suggestions for making these meetings successful.

- Keeping the requests narrow and actionable: Keeping the “ask” specific and succinct makes it easier for state Medicaid programs to engage. For example, if state-specific data is required to make the case for reimbursement, a specific ask might be: Can the state Medicaid program provide access to current Medicaid claims data so that the NACP grantee can demonstrate the potential ROI of guidelines-based asthma care? Can the state Medicaid program provide an analyst to help staff navigate and interpret the claims data?

- Speaking the language: To best communicate the value of guidelines-based care to Medicaid staff, it will be important to understand and use the unique terms and acronyms related to the Medicaid program. A glossary of useful terms and concepts is available in the appendix.

- Framing a flexible plan: Ultimately, it is up to state Medicaid programs to implement guidelines-based asthma care coverage in Medicaid. How can the request be framed so that Medicaid can implement the program as envisioned? For example, one NACP grantee framed their request as a partnership with its state Medicaid program, emphasizing collaboration over transactional reimbursement. Be prepared to adjust the plan...
Mobilizing internal allies: Change may come more readily with the help of a knowledgeable insider who knows how to navigate the state Medicaid program. Who within the state Medicaid program can help navigate the process and gain access to key decision makers? Who can help establish that contact? Since state health departments may already be providing services directly related to guidelines-based care, one NACP grantee explained that working with the state Medicaid program required reframing the health department’s role from that of a service provider to a facilitator who could assist the state Medicaid program’s implementation of new coverage for guidelines-based asthma care. A NACP grantee noted that utilizing the professional connections between the state health department and state Medicaid program leadership to support statewide coverage of guidelines-based asthma care under Medicaid was a particularly useful strategy.

Preparing a short and succinct pitch: The most important aspects of requesting coverage of a new service to Medicaid are clarity and brevity. It is neither necessary nor helpful to present everything that could be said about asthma, guidelines-based care and/or its numerous potential benefits. What do Medicaid policymakers really want and need to know? Consider focusing on cost data, using infographics in place of published literature and homing in on a clear and targeted message.

Maintaining the connection: Turnover among key staff within state Medicaid programs can create setbacks as conversations are repeated with incoming staff. NACP grantees noted that relationships with people at multiple levels in the state Medicaid program can not only provide valuable insights but also expand the connection between the NACP grantee and the state Medicaid program so that the loss of one contact does not sever the relationship. Such contacts can also provide valuable insight regarding what materials may be helpful to present to Medicaid officials, how to prepare for meetings and the policies and priorities that drive the office’s decision making.

Data Requests
Data about program performance and patient outcomes will be essential to making the case for and, later, tracking and evaluating the impact of Medicaid coverage of guidelines-based asthma care. According to some NACP grantees, a first interaction with the state Medicaid program might be for the singular purpose of better accessing Medicaid data. Starting with a narrow request and establishing a productive working relationship often provides a useful foundation on which to build.

Developing a data use agreement with Medicaid
Perhaps the most direct measure of the need for and potential benefit of Medicaid coverage of guidelines-based asthma care comes from the Medicaid claims database itself. Understanding the patient populations’ current use of emergency services and controller medications, for example, can illustrate the opportunity to prevent asthma exacerbations by investing in low-cost interventions. Claims data can also be used to identify the most high-risk patients so that the state Medicaid program and NACP grantee can target their interventions to those most in need.

Access to Medicaid claims data is granted through a data use agreement, which should be negotiated early-on. In general, the NACP grantees all found that their state Medicaid programs were receptive to these requests but noted that going into the meeting with the state Medicaid program knowing exactly which data they wanted to access strengthened the request.

The benefit of a Medicaid claims analyst or other external partnership
Medicaid claims data can be difficult to navigate without expertise. Consider asking for a Medicaid claims data
analyst to identify, obtain and interpret relevant data. In working with an analyst, it is important to frame the cohort of Medicaid beneficiaries and services to be addressed in the analysis. Additionally, if the staff capacity is available, consider requesting login access and training for these individuals to pull claims data. Whether it is a Medicaid staff person or an outside data expert, all NACP grantees noted the importance of working closely with data experts to analyze and interpret the relevant data.

Implementation Following Medicaid Coverage and Challenges to Anticipate Journey and Implementation Modeling

Though not all NACP grantees modeled or mapped the implementation process, others found it helpful to utilize a tool that visualized the process. Tools such as a public health logic model may help identify and order priorities as well as explain the rationale underlying them.

Examples of two planning documents are included in the appendix. One example is the 6|18 planning worksheet, which asks states to identify key contextual information surrounding the implementation of home-based asthma services in a state. The other is a journey map, which visualizes the end-to-end process of achieving Medicaid coverage of guidelines-based asthma care. This map establishes a timeline of achievements that are positioned according to their impact and the effort they require. For example, the first step in making the business case to likely partners might be positioned lower than the later step of submitting a SPA to implement reimbursement for guidelines-based asthma care, indicating that while both are important to the success of the project, the prior may be a smaller achievement than the latter.

A plan, even if it changes, can facilitate conversations about what will be needed to deliver services following reimbursement as well as challenges that may arise. While planning documents may help identify priorities, they serve better as flexible templates of a plan than as decisive roadmaps for implementation.

Consulting partner stakeholders throughout the process of establishing an implementation plan may be one of the best and most feasible ways to prepare for smooth implementation following reimbursement. Stakeholders such as providers and hospitals can inform the plan with real-world expertise, which can lead to the development of a more feasible roadmap.

The Role of Quality Measures

Performance measures are driven by consensus, evidence-based national standards. Financial incentives are often tied to performance measures that encourage the delivery of high-quality care. Medicaid and CHIP currently measure the quality of a child’s care by the asthma medication ratio (AMR-CH), which is designed to measure a child’s level of control over their condition based on their medication use and, by extension, the quality of the asthma care they are receiving. Additional asthma measures may be reported voluntarily. However, the national measures may not be perfectly suited to the goals and program designs of some states’ asthma control programs and delivery systems.

The CHIP Reauthorization Act of 2009 (CHIPRA) included provisions to strengthen the quality of care provided to children enrolled in Medicaid or CHIP. Among these, CHIPRA introduced and invited states to voluntarily report on a set of performance measures called the Child Core Set. Beginning in 2024, all states will be required to report on the Child Core Set of measures to CMS. Moving to mandatory reporting will make the federal quality data set more robust and should drive providers to deliver evidence-based care. AMR-CH is currently the only asthma measure included in the Child Core Set. However, all NACP grantees agreed that AMR-CH is not the best measure of the impact of guidelines-based asthma care. States may find value in developing alternative measures to inform
the design and operation of their unique programs and better incentivize the delivery of guidelines-based care.

Other measures beyond AMR-CH are nationally-recognized. For example, the Pediatric Quality Measures Program, also implemented under CHIPRA, identifies asthma-related measures, including four endorsed by the National Quality Forum.

NACP grantees continue to work with their state Medicaid offices and providers to implement measures that aid in the evaluation of their asthma programs. As the national conversation evolves, states’ experiences with AMR-CH and other nationally-recognized measures can help inform the development of a national quality measurement system that is more useful in incentivizing and assessing guidelines-based asthma care.

**Improving Data Quality**

Accessing and analyzing Medicaid claims data and other sources of data is vital to evaluating progress in asthma care. Without high-quality data, ineffective programs may be difficult to identify and even harder to improve.

When a provider bills Medicaid for the services they provide, the billing codes used are stored in the Medicaid Claims Database. As such, the information available in the Medicaid Claims Database is limited to what can be determined from asthma-related acute care, ambulatory care and medication dispensation. Although there are advantages to using these types of administrative data, limitations and challenges exist with respect to accessing or acquiring large administrative data files, data management, data integration and, most importantly, data quality issues.

One NACP grantee found that switching provider billing codes to ICD-10, a system used by physicians and other healthcare providers to classify and code all diagnoses, symptoms and procedures, improved the quality of the data available in the Medicaid Claims Database. However, Medicaid claims data are unlikely to ever contain the full scope of information that may be necessary to assess the quality of a guidelines-based asthma care program. Alternative sources of asthma-related data (such as surveys) rely on patient self-reporting, which can be unreliable. The need for high-quality data remains a significant struggle.

**Certifying Asthma Educators under Medicaid**

Delivering guidelines-based asthma care requires a robust trained workforce that includes community health nurses, certified asthma educators, environmental health specialists and community health workers, as well as participating primary care providers and hospitals. In some cases, the workforce and policy frameworks necessary to implement guidelines-based asthma care may need to be refined or established.

For example, in states without a certification process for community health workers, legislative action may be necessary to lay the groundwork for these providers to be recognized and eligible for reimbursement by Medicaid. Additionally, one NACP grantee struggled to get providers approved by the state Medicaid program. Certified asthma educators, community health workers and some other providers are not automatically qualified to bill for services under Medicaid. In this state, while community health workers were recognized as providers under Medicaid, each individual had to be approved by Medicaid as a certified asthma educator before he or she could provide and bill for care. Some MCOs also required approval of certified asthma educators before they could provide services. The NACP grantee reported that the magnitude of the paperwork necessary to accredit these providers was substantial and recommended that other states work to establish these providers prior to implementing coverage.
Implementing coverage before a sufficient number of providers are approved can create opportunities for patients to fall through the cracks. In one state that faced this challenge, reimbursement was piloted in one city. Elsewhere in the state, hospitals, health plans, partner groups and the state health department began providing guidelines-based asthma care without reimbursement. Many of those providers later determined that the administrative red tape was not worth the reimbursement they would receive and decided to forgo the opportunity to bill Medicaid.

**Seeking Sufficient Payment**

Even after Medicaid implements coverage, payment rates can influence whether providers offer and bill for guidelines-based asthma care. If rates are too low, they may discourage providers from utilizing Medicaid coverage. In one state, the reimbursement rate was as low as $250 per year for two home visits. Because the cost of scheduling and providing the services, as well as the time and effort necessary to submit the bill, exceeds the actual reimbursement, local public health agencies in this state opted to forego billing and instead provide the service as part of their mission or secure grant funding.

Understanding the per-patient costs of guidelines-based services compared to care related to uncontrolled asthma, including ED visits and asthma controller medications, can provide important evidence for the long-term cost-savings even at higher rates of reimbursement. Participating NACP grantees agreed that the evidence available in their state demonstrated that the costs of providing guidelines-based asthma care were significantly less than the costs related to uncontrolled asthma.

Bundled payments may provide an opportunity for better reimbursement. Bundled payments could cover the identification, enrollment and support infrastructure, as well as the home visits with a certified asthma educator and environmental supplies that may be necessary to manage a patient with asthma. The bundled payment should be able to cover the average per capita cost across patients.

**CONCLUSION**

Coverage of guidelines-based asthma care presents an opportunity not just to expand access to care and improve outcomes among children and adults with asthma, but also to strengthen and provide stability to the asthma care infrastructure in states. Successfully navigating the process of negotiating with Medicaid officials and anticipating the challenges that may hinder the adoption of guidelines-based care are critical steps towards that goal.

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APPENDIX

Glossary — This document contains useful terms and acronyms referenced in this report that may be helpful when working with Medicaid offices.

How to Discuss the Return on Investment of Guidelines-Based Asthma Care Coverage | American Lung Association — This two-page brief provides talking points and statistics that can be useful when discussing the health and economic benefits of coverage for guidelines-based asthma care.

Medicaid Managed Care and Asthma: A Primer | American Lung Association — This primer describes how Medicaid managed care works through the lens of guidelines-based asthma care. Asthma-related examples illustrate the features of the system as well as how managed care may be used to improve coverage and the quality of guidelines-based asthma care.

The Home Asthma Response Program (HARP) | Rhode Island Department of Health — A single-page graphic summary of HARP, an evidence-based asthma intervention that utilizes certified asthma educator and community health worker teams to provide asthma assessment, education and care.

MO SPA #16-0002 | State of Missouri and the Centers for Medicare and Medicaid Services — In June 2016, CMS approved this SPA for Missouri, allowing the state to add asthma and other chronic conditions as qualifying conditions for Primary Care Health Homes, effective April 1, 2016.

MO SPA #16-0004 | State of Missouri and the Centers for Medicare and Medicaid Services — In October 2016, CMS approved this SPA for Missouri, allowing the state to provide reimbursement for asthma education and assessments, effective July 1, 2016.

Medicaid Journey Map | Wisconsin Department of Health — This document was used by the Wisconsin asthma program when planning implementation of asthma care coverage and may be a helpful model for other stakeholders.

Planning Worksheet for CDC’s 6|18 Initiatives: Control Asthma | 6|18 Initiative — States participating in the CDC’s 6|18 Initiative may use this worksheet in order to help identify and order priorities for the 6|18-related asthma work, as well as the rationale underlying them.

State Action Plan for CDC’s 6|18 Initiative | 6|18 Initiative — Medicaid and public health officials implementing CDC’s 6|18 Initiative activities may use this action plan template to outline their anticipated 6|18-related work and track progress and milestones.
1. Most Recent National Asthma Data. Centers for Disease Control and Prevention. May 2019. Available at: https://www.cdc.gov/asthma/most_recent_national_asthma_data.htm


11. Montana's 2019 Decision Request

12. Strategies for Addressing Asthma in Homes. Centers for Disease Control and Prevention. Available at: https://www.cdc.gov/asthma/pdfs/Asthma_In_Homes_508.pdf

13. CDC-HUD-EPA Checklist for Home Visitors. Available at: https://www.cdc.gov/asthma/pdfs/home_assess_checklist_Pdf


15. CDC’s 6|18 Initiative: Accelerating Evidence into Action. Centers for Disease Control and Prevention. Available at: https://www.cdc.gov/sixeighteen/


17. Supra n. 15 (CDC)


