A large body of evidence suggests that home visiting programs addressing indoor environmental triggers (e.g., cockroaches, mice, tobacco smoke, mold) can improve asthma control, reduce asthma-related hospitalizations and emergency department visits, and provide a positive return on investment. These types of services are recommended as a component of comprehensive asthma care for people with poorly controlled asthma but are not widely available and often limited in scale. However, recent changes resulting from healthcare reform have increased opportunities for states to consider more sustainable and widespread implementation. Some states have already invested heavily in developing programs, policies, and funding to increase access to these critical public health services. Yet many states may be unsure about how to translate these evidence-based practices into policy. This case study summarizes the current healthcare financing landscape in South Carolina for home-based asthma services with an emphasis on public financing. The case study is based on survey findings and interviews with the state Medicaid agency, the state health department, and other stakeholders. It describes the current healthcare landscape, other important funding mechanisms, key barriers, next steps, and lesson learned. This information may be useful to stakeholders in other states that are seeking healthcare financing for home-based asthma or other preventing services, or for stakeholders within South Carolina interested in a summary of current and future opportunities within the state.
Medicaid in South Carolina (page 1)
Approximately 20% of South Carolina residents (981,145 individuals) are enrolled in South Carolina’s Medicaid program, and about 75% are enrolled in Medicaid managed care organizations. The Medicaid program, which is overseen by the South Carolina Department of Health and Human Services (SCDHHs), relies on a combination of managed care plans and fee-for-service (FFS) providers to deliver services to Medicaid beneficiaries. Approximately 75% (726,810) of the state’s Medicaid population is enrolled in a Medicaid managed care organization (MCO) and 25% remains in FFS.

Medicaid and MCO Coverage for Home-Based Asthma Services (page 3)
There is currently no specific benefit under fee-for-service (FFS) Medicaid for home-based asthma interventions. Without any FFS requirement for home-based asthma coverage, MCOs in the state are not obligated to provide these services. SCDHHs does not otherwise require through the managed care contracting process that MCOs provide coverage for home-based asthma services. MCOs can elect to offer services beyond what is required under FFS, but, according to interviewees, none of the MCOs currently offering services for asthma management beyond clinical asthma services. In a 2014 survey, respondents from South Carolina reported that home-based asthma services were a reimbursable service under the state’s Medicaid program. However, interviews and additional research have not uncovered any existing or prior Medicaid-supported coverage of home-based asthma services in the state.

Barriers and Next Steps for South Carolina (pages 4-5)
Interviewees described a range of barriers to reimbursement for home-based asthma services including Medicaid’s focus on other chronic diseases, confusion over MCO capitation structure, lack of funding for training a healthy homes workforce, and lack of funding from the National Asthma Control Program. Moving forward, South Carolina is working on expanding the role of community health workers (CHWs) under Medicaid.

Other Funding Mechanisms in South Carolina (page 3)
As Medicaid support for home-based asthma services is currently nonexistent, programs that deliver these services for Medicaid-eligible patients rely on other public and private funding streams. Programs and initiatives currently in place include funding from private foundations and hospital community benefit initiatives. Programs and initiatives include the South Carolina Asthma Alliance (SCAA), Family Connection, and Greenville Health System’s Asthma Action Team.

Key Insights from South Carolina (page 5)
Although South Carolina has never been a recipient of NACP funding, interviewees reported that the collaborative process of drafting and submitting applications to NACP over the years has helped to build statewide consensus of the burden of asthma. Future opportunities to apply for CDC funding through the NACP would serve to reinvigorate partnerships and collaborations, especially with Medicaid partners. While MCOs have focused quality improvement initiatives on asthma in the past, this was not enough incentive to get managed care organizations to expand asthma services to home settings. The state may need to be more prescriptive in future MCO contract language to nudge plans to focus on asthma services outside of clinical settings.

Medicaid in South Carolina
Approximately 981,145 individuals (20%) are enrolled in the South Carolina Medicaid and CHIP program, which is overseen by the South Carolina Department of Health and Human Services (SCDHHs). South Carolina is one of 19 states that has not expanded Medicaid under the Affordable Care Act to adults with incomes up to 133% (138%) federal poverty level (FPL). Therefore, low-income childless adults who do not meet demographic or health status criteria do not qualify for Medicaid. Pregnant women below 195% FPL, parents and caretakers below 62% FPL, and children below 208% FPL qualify based on income level.

Like many other states, South Carolina relies on a combination of managed care plans and fee-for-service (FFS) providers to deliver services to Medicaid beneficiaries. Approximately 75% (726,810) of the state’s Medicaid population is enrolled in a Medicaid managed care organization (MCO) and 25% remains in FFS, including certain beneficiaries with disabilities and dual-eligible populations.

Medicaid and MCO Coverage for Home-Based Asthma Services (page 3)
In a 2014 survey conducted by the National Center for Healthy Housing and Milken Institute School of Public Health, survey respondents from South Carolina reported that there was some level of Medicaid reimbursement available in the state for asthma care plans and fee-for-service (FFS) providers to deliver services to Medicaid beneficiaries. Approximately 75% (726,810) of the state’s Medicaid population is enrolled in a Medicaid managed care organization (MCO) and 25% remains in FFS, including certain beneficiaries with disabilities and dual-eligible populations.

* Information based on responses to both the interview questions and responses to the original 2014 survey (www.nchh.org/Resources/HealthcareFinancing/Snapshot.aspx).

* For the purpose of the original survey and the follow-up interviews and case studies, home-based asthma services were defined according to the Community Guide to Preventive Services definition of home-based, multitrigger, multicomponent asthma interventions. These interventions typically involve trained personnel making one or more home visits and include a focus on reducing exposures to a range of asthma triggers (allergens and irritants) through environmental assessment, education, and/or remediation.
services in the home. However, interviews and additional research have not uncovered any existing or prior Medicaid-supported coverage of home-based asthma services in South Carolina.

Currently, there is no specific benefit under FFS Medicaid for home-based asthma interventions. Without any FFS requirement for home-based asthma coverage, MCOs in the state are not obligated to provide these services. SCDHHS does not otherwise require through the managed care contracting process that MCOs provide coverage for home-based asthma services. MCOs can, of course, elect to offer services beyond what is required under FFS, but, according to interviewees, none of the MCOs currently operating in the state offer services for asthma management beyond clinical asthma services (e.g., self-management education and development of an asthma action plan).

SCDHHS does require in contracts with MCOs that MCOs conduct certain Performance Improvement Projects (PIPs), as a means of improving quality in Medicaid. In the 2012-2013 reporting cycle, the state mandated that all MCOs implement PIPs focused on asthma, among other priority health areas. According to interviewees, the SCDHHS set a goal for each MCO to reduce asthma-related emergency department visits among children with high-risk asthma by 20% but gave MCO plans flexibility to determine the type of asthma-related interventions appropriate for meeting this goal. Reportedly, no MCOs elected to cover asthma services in home settings as part of a PIP. While asthma is no longer a priority health issue in the current PIP reporting cycle, a few MCO plans in South Carolina have continued to support projects focused on asthma for their patient populations, having been successful in reducing asthma-related emergency department visits.

However, interviewees were not aware of any current MCO-led quality improvement efforts that address asthma in home settings.

**Other Mechanisms for Funding Home-Based Asthma Services, Outside of Medicaid**

As Medicaid support for home-based asthma services is currently nonexistent, programs that deliver these services for Medicaid-eligible patients rely on other public and private funding streams. Programs and initiatives currently in place include:

- Family Connection. Family Connection is a nonprofit that links families of children with special healthcare needs with resources, support, and education. Family Connection runs Project Breathe Easy (PBE), a program that provides education and emotional support to parents of children with asthma in several counties in the state. PBE matches parent participants with trained community parents who conduct home visits to discuss parental concerns and environmental triggers in the home environment. Families are given a free allergy-proof mattress and pillow encasements, as well as an asthma

management notebook that discusses ways to gain control of asthma through daily management. Participants also attend support groups led by asthma education specialists (i.e., asthma educators, nurses, or respiratory care practitioners); support group topics center on asthma management education. A 2007 program evaluation showed that children in participating families experienced an 87% decrease in emergency department visits and a 56% reduction in missed school days.14 The program also increased the number of children connected to a medical home and the number of families with a written asthma management plan.

Greenville Health System’s Asthma Action Team. The Asthma Action Team (AAT) is a multidisciplinary, multilingual case management program for children with asthma that strives to ensure patients and families receive consistent asthma education and support services in the clinic and at home, school, and daycare.15 AAT is run by the Center for Pediatric Medicine (CPM) of the Greenville Health System and is staffed by a large team of providers, including pediatricians, certified asthma educators, respiratory therapists, case managers, nurses, social workers, and community home visitors. The AAT coordinates with payers, local schools, community-based organizations and others to identify patients in need and to provide case management for children and adolescents with hard to control asthma. Under the program, certified asthma educators act as case managers and conduct asthma education, home visits, office visit coordination, and school visits. AAT patients also receive asthma action plans written in their primary language that are shared with providers in the Greenville Health System network. The AAT also maintains a registry and alert system to track outcomes in real time for 4,338 pediatric patients with asthma.

AAT’s impact is shown by trends in decreased healthcare utilization for asthma. While the prevalence of children with asthma in the CPM system increased annually by 63%, emergency department visits for asthma has decreased.16 Among those also enrolled in Project Breathe Easy,17 there was a 71% decrease in urgent healthcare utilization, a 21% decrease in unscheduled clinical care visits, a 51% in missed school days, and a 41% decrease in missed work days for parents.18 In 2013, the program won a National Environmental Leadership Award in Asthma Management from the Environmental Protection Agency (EPA) for delivering excellent environmental asthma management as part of their comprehensive asthma care services.19 In 2014, the program was one of five hospitals awarded the American Hospital Association NOVA Award for hospital-led collaborative efforts that improve community health.20

Barriers to Implementing Home-Based Asthma Services within Medicaid

Medicaid’s Focus on Other Chronic Diseases. Interviewees reported that the state Medicaid office has recently focused on expanding autism services in response to a 2014 clarification released by the Centers for Medicare and Medicaid Services (CMS), which reminds states of their authority and responsibility under Medicaid to address autism spectrum disorders comprehensively.21 South Carolina has issued guidance on autism services and has worked to raise the overall level of services available to beneficiaries in the state who meet this diagnosis.22 In addition, interviewees reported that the state is currently prioritizing expanding cardiovascular disease and diabetes services, as these chronic conditions represent the greatest burden in the state. While addressing these health conditions is important, the strong focus on cardiovascular disease, diabetes, and autism reduces capacity for South Carolina to expand asthma services.

Confusion Over MCO Capitation Structure. Interviewees reported that, due to the complexity of the MCO capitation structure, there is confusion among providers in the state regarding reimbursement for home-based asthma services. The MCO capitation rate is a per-member/per-month charge paid by the state Medicaid program to each MCO for medical services provided to MCO enrollees. Capitation rates are a projection of future costs based on a set of assumptions, and payment is made regardless of whether enrollees receive services during the period covered by the payment. In South Carolina, MCO capitation rates include an administrative cost component, designed to provide for the MCO being able to cover its administrative overhead costs (nonmedical costs associated with the expense of operating a MCO).23 Home-based asthma services, like other care coordination and quality improvement activities, are often considered an administrative expense. Reportedly, there is confusion in the state as to whether the current capitation rate would already adequately cover home-based asthma services.

Lack of Funding for Training a Healthy Homes Workforce. Interviewees described the limited workforce currently available to provide effective asthma services in home settings. The cost of becoming trained and certified as an asthma
educator or home assessor is often prohibitive and there are few programs in the state that facilitate such training. The SCAA grant program underway (described above) is a good first step, but without more dedicated public or private dollars put toward workforce training, South Carolina will continue to have difficulty maintaining a qualified workforce to conduct home-based asthma interventions. Interviewees expressed concern that MCOs or health systems that may want to incorporate home-based asthma services into their programs may be dissuaded from doing so given the lack of available workforce.

Lack of Funding from the National Asthma Control Program. CDC’s National Asthma Control Program (NACP) funds states, cities, school programs, and nongovernment organizations to help them improve surveillance of asthma, train health professionals, educate individuals with asthma and their families, and explain asthma to the public. Despite submitting applications over the years, South Carolina has never been awarded NACP funding. Without the influx in funding from CDC, the state public health department is not able to fund an in-home asthma program and other important initiatives, such as workforce training, surveillance and asthma education efforts.

Interviewees suspected that one major reason the state was not selected as an NACP grantee is that the statewide prevalence of asthma is not as high as in other states. However, interviewees reported that there is an extremely high prevalence of asthma in certain regions of the state, but low population density in rural areas may distort the state’s overall picture of asthma. The South Carolina Department of Health and Environmental Control has since attempted to demonstrate the prevalence of asthma by ZIP code in order to demonstrate a more accurate picture of asthma in South Carolina.

Lessons Learned

South Carolina is a state that has worked arduously to bring asthma stakeholders together despite very limited state and federal resources. Although the state has never been a recipient of NACP funding, interviewees reported that the collaborative process of drafting and submitting applications to NACP over the years has helped to build statewide consensus of the burden of asthma. For example, the South Carolina Asthma Alliance was created as a statewide resource for the advancement of asthma care after stakeholders identified the need for such an organization during the NACP application process. Interviewees stated that future opportunities to apply for CDC funding through the NACP would serve to reinvigorate partnerships and collaborations, especially with Medicaid partners.

Another lesson learned in South Carolina is that naming asthma among the priority health areas for quality improvement initiatives is not incentive enough to get managed care organizations to expand asthma services to home settings. As described above, no MCO plan in the state elected to cover home-based asthma services as part of their Performance Improvement Plan (PIP), despite flexibility from the state Medicaid office to design a project focused on reducing asthma-related emergency department visits. While it is an important function of managed care to afford flexibility to MCO plans to design benefit packages for their patient populations, in cases like asthma, the state may need to be more prescriptive in future MCO contract language to nudge plans to focus on asthma services outside of clinical settings.

Future of Medicaid Reimbursement for Home-Based Asthma Services: How Is the State Working to Expand Coverage and Reimbursement?

Expanding the Role of Community Health Workers in the Provision of Asthma Services in South Carolina. South Carolina, like many states, is engaging in discussions about how to adopt and implement a new federal Medicaid rule change that allows state Medicaid programs to cover and pay for preventive services provided by professionals that may fall outside of a state’s clinical licensure system, so long as the services have been initially recommended by a physician or other licensed practitioner. This federal rule change means that, for the first time, community health workers (CHWs) – including asthma educators and home assessors who do not have a clinical license – may seek fee-for-service Medicaid reimbursement.

Interviewees reported that stakeholders remain skeptical that the state will pursue a Medicaid State Plan Amendment to allow CHWs to seek reimbursement given the state’s general lack of commitment to system changes spurred by the Affordable Care Act. However, reportedly, there are ongoing efforts in the state to create a CHW association to build on state programs to train/certify CHWs and to better incorporate CHWs into the healthcare system. Interviewees hope that these types of efforts will facilitate relationships between CHW-led initiatives (such as Project Breathe Easy) and healthcare systems and payers.
**ACRONYMS**

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**DEFINITION OF SERVICES**

*Home-based asthma services*

The original survey that formed the basis for these follow-up case studies used the *Community Guide to Preventive Services* definition of home-based, multitrigger, multicomponent asthma interventions. These interventions typically involve trained personnel making one or more home visits and include a focus on reducing exposures to a range of asthma triggers (allergens and irritants) through environmental assessment, education, and/or remediation. See Appendix A of *Healthcare Financing of Healthy Homes: Findings from a 2014 Nationwide Survey of State Reimbursement Policies* for the full definition.

**About the Project**

*This multiyear project is working to document and demystify the landscape and opportunities surrounding healthcare financing for healthy homes services. In year one of the project, the National Center for Healthy Housing (NCHH) conducted a nationwide survey to identify states where healthcare financing for lead poisoning follow-up or home-based asthma services was already in place or pending. In year two of the project, NCHH and a project team led by the Milken Institute School of Public Health conducted a series of interviews in key states identified by the survey. An interview guide was developed to ask key informants in each state questions about the extent and nature of Medicaid-supported services within the state, details of services covered, barriers to implementation, next steps for expanding services and increasing access, and lessons learned. In each state, the project team conducted interviews with at least one representative from the state Medicaid agency, a program contact in the state health department, and one to two additional stakeholders (e.g., advocates, local programs, payers, or providers). The interviews were used to develop detailed case studies to distill lessons learned in states with Medicaid reimbursement for healthy homes services, and ultimately to better equip other states in seeking reimbursement for these services.*

Endnotes and Sources


17 Project Breathe Easy (PBE) is an educational program that matches parent participants with trained community parents who conduct home visits to discuss parental concerns and environmental triggers in the home environment. Families receive a free allergy-proof mattress and pillow encasements, as well as an asthma management notebook. Participants attend support groups led by asthma education specialists.


Endnotes and Sources (continued)


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For additional resources, including many of the sources cited in this document, visit www.nchh.org/resources/healthcarefinancing.aspx

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