

Health Services Initiatives: Using a CHIP State Plan Option to Address Asthma Among Children in Low-Income Households

Asthma remains one of the most pressing, costly, and persistent public health problems. It affects more than 26 million people in the United States, including over 6 million children.¹ Annually, asthma is the cause of 1.6 million emergency department visits, nearly 10 million physician office visits, and over 3,500 deaths.² The direct cost of pediatric asthma care for public and private payers was recently estimated at \$4.7 billion annually.³

In-home interventions and other community-based activities can be highly effective in addressing asthma and its triggers. Yet a lack of coverage under the Children's Health Insurance Program (CHIP) and Medicaid creates barriers to providing these nontraditional services. With 47.6% of children with asthma enrolled in CHIP or Medicaid, it is important that these programs provide access to the best practices in asthma care for their enrollees.⁴ A long-standing but underutilized provision in CHIP — the health services initiative (HSI) — gives states a flexible opportunity to leverage federally matched funds to design, implement, and finance asthma interventions for children in low-income households.

Health Services Initiatives Target Programs for Children in Low-Income Households

CHIP HSIs are targeted initiatives aimed at directly improving the health of eligible children in low-income households.⁵ Using a portion of its administrative allotment, a state may fund a wide

range of programs to improve child health. Eligible uses of HSIs include virtually any services that target the needs of children under age 19 who are either enrolled in or potentially eligible for CHIP or Medicaid. As of January 2019, 22 states were using HSIs to implement a wide range of clinical and non-clinical preventive services, interventions, and direct services (see Table 1).⁶

The Centers for Medicare and Medicaid Services' (CMS) *Frequently Asked Questions on HSIs* demonstrates the agency's receptiveness to innovative HSIs that aim to provide nontraditional health services.⁷ For example, a state may propose an HSI that targets the environmental and educational factors of childhood asthma, such as poor housing conditions. Teaching families about in-home triggers, and helping them to avoid or remediate sources of exposure, are activities that may be funded using an HSI to help manage pediatric asthma. Through such an HSI, a state could significantly expand access to effective, evidence-based care for a substantial number of children with asthma.

Federal Financing for a Health Services Initiative

Federal and state governments jointly finance HSIs as part of each state's CHIP administrative funding allocation. Under Title XXI of the Social Security Act, the federal authority for CHIP, states can draw down federal matching funds at the enhanced CHIP rate for expenditures not related to the direct provision of covered benefits.⁸ These funds, which may equal up to 10% of the state's total spending on covered benefits, can be used to fund administrative work and HSIs. States must first fund the operating costs for the core CHIP program; any remaining funds can then be used to finance an HSI. For example, if a state's coverage expenditure is \$100 million out of a \$150 million annual CHIP allotment, \$10 million can be used for non-coverage activities.⁹ If CHIP administrative costs account for \$4 million, then the state can spend up to \$6 million on an HSI.

The amount a state can spend for non-coverage expenditures depends on its total CHIP budget, which is based on the previous year's CHIP spending for that state (adjusted for child population growth and medical inflation) and the federal CHIP matching rate.

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Proposing a Health Services Initiative

To implement an HSI, states must submit a state plan amendment (SPA) detailing the proposed initiative to CMS for approval (see Appendix A).¹⁰ A CHIP HSI-SPA must be designed to directly improve the health of children in low-income households and aim to serve children who are eligible for but unenrolled in Medicaid or CHIP. Though focused on improving the health of children in low-income households, the initiatives may serve children regardless of income and are not bound by the same state-wideness requirements that govern regular CHIP benefits.¹¹

States must meet a number of requirements to develop and implement a CHIP HSI-SPA. States must:

- » Demonstrate the need for the initiative.
- » Develop a proposal for a targeted initiative that will improve the health of children in low-income households.
- » Identify sources of state share funding.
- » Estimate the number of children in low-income households who will benefit from the initiative.
- » Include a detailed timeframe for implementing the initiative.
- » Meet specific program design criteria.¹²

Table 1. Overview of States' Uses of the Health Services Initiative as of January 2019

States	Health Services Initiative Purpose
Maryland	Expand county level programs to provide environmental case management and in-home education programs to reduce the impact of lead poisoning and asthma on children in low-income households. ¹³
Maryland, Michigan, Missouri, Ohio, and Wisconsin	Support in-home lead abatement programs.
California, Indiana, Iowa, Maryland, Michigan, Nebraska, New Jersey, New York, Oregon, Washington, and Wisconsin	Support the state's poison control center.
Delaware	Provide vision exams and glasses to uninsured children in schools with a large share of children who receive free or reduced-cost school meals.
Florida, Idaho, Massachusetts, Missouri, Nevada, New Jersey, New York, and West Virginia	Fund various school-based health services programs.
Illinois and Iowa	Automatically cover children who apply for Medicaid/CHIP through presumptive eligibility until the final determination is made.
Illinois and Minnesota	Cover postpartum services for women covered under the CHIP unborn child option.
Massachusetts	Massachusetts has 18 HSI programs with the overall goal of improving the health of children, with at least part of program support coming from CHIP. Due to the number of programs and the 10% cap on administrative services, the state does not currently claim federal funds under all programs.

SOURCE: Brooks, Tricia, Lauren Roygardner, and Samantha Artiga. Medicaid and CHIP Eligibility, Enrollment, and Cost Sharing Policies as of January 2019: Findings from a 50-State Survey. (San Francisco, CA: Kaiser Family Foundation, March 2019). <https://www.kff.org/medicaid/report/medicaid-and-chip-eligibility-enrollment-and-cost-sharing-policies-as-of-january-2019-findings-from-a-50-state-survey/>.

Home-Based Interventions to Improve Asthma Outcomes for Children in Low-Income Households

Asthma disproportionately affects children in low-income households and children of color.¹⁴ With higher rates of illness, children in low-income households are subsequently more likely to miss school and struggle to succeed academically.¹⁵ Therefore, robust asthma services can help the most vulnerable children achieve greater health and success throughout their lives.

For many, asthma control begins at home. Indoor allergens including dust, mold, and tobacco smoke can trigger and worsen asthma symptoms; a lack of asthma management education and support may also contribute to worse disease outcomes.¹⁶ Home-based asthma interventions have been shown to return substantial value by addressing causes of asthma at their source and improving health on a number of measures.^{17, 18, 19} For example:

- » The Environmental Health Services program of the Little Sisters of the Assumption Family Health Service provides services to children with asthma living in the Harlem neighborhood of New York City, and illustrates the importance of home-based asthma interventions.²⁰ Community health workers provide interactive training and education on how to improve unhealthy living conditions, and they provide comprehensive assessments of the home to remediate triggers. The program has demonstrated statistically significant improvements in a number of baseline factors, including emergency department visits and use of rescue medications.²¹
- » An urban health system in Pennsylvania partnered with a community-based environmental justice organization to implement a four- to six-week peer educator–led environment remediation and education intervention for families with asthmatic children. The program consisted of five home

visits. The environment remediation component utilized the Asthma Control Test and the Environmental Protection Agency’s Asthma Home Environment Checklist for home assessments. The education component utilized lesson plans from the Asthma and Allergy Foundation’s *You Can Control Asthma* curriculum. The intervention showed statistically significant improvements in its goal to reduce asthma attack frequency and improve disease control, and to reduce the number of emergency department visits. It also reduced overnight hospital stays.²²

- » The Reducing Environmental Triggers of Asthma program, part of the Minnesota Department of Health Asthma Program, used affordable and easy to implement interventions to address environmental factors. High-efficiency particulate air vacuum and air cleaners and pillow and mattress dust encasements were the most common interventions. Statistically significant declines in unscheduled office visits and oral steroid use were reported.²³

Use of a Health Services Initiative to Fund Targeted Home-Based Interventions

HSIs give states an opportunity to create a sustainable financing model for effective, evidence-based asthma interventions by providing reimbursement for home-based asthma services and providers. Given the flexibility of CMS in initiative design and purpose, as well as the absence of state-wideness requirements, states’ HSIs can be as targeted as necessary to address child populations with the greatest need, such as children of color and children in low-income households.²⁴

Maryland remains the first and only state to pursue an HSI to implement home-based asthma services for children in low-income households under CHIP!

iHome repairs are not currently covered by Maryland’s HSI, but could be, as HSIs used for lead abatement programs do so. This makes HSIs an easier pathway to implement comprehensive asthma services given home repairs are typically difficult to get reimbursed through other delivery models (e.g. reimbursement for CHWs).

Maryland's Efforts to Address Asthma Through a Health Services Initiative State Plan Amendment

Maryland's HSI-SPA introduced a two-pronged approach to improving health outcomes for children. The first prong, developed prior to the asthma initiative, is solely devoted to preventing lead poisoning. The second prong, administered by the Maryland Department of Health's Environmental Health Bureau, simultaneously addresses lead exposure and asthma control.

To help reduce indoor asthma triggers and improve families' capacity to manage their children's disease, the program funds teams of trained registered community health nurses and community health workers who provide home visit asthma services to children in low-income households in nine participating counties. Local health departments oversee these teams. The model was designed with reference to successful existing asthma programs in Maryland and incorporates features from other effective evidence-based programs implemented nationwide.¹

Under the SPA, Maryland's HSI program is allotted \$3 million in total funding, 12% of which is provided by Maryland in accordance with the state's CHIP enhanced federal medical assistance percentage.²⁵ The number of children who can be served within that budget depends on the per-patient cost of delivering these services, considering the staffing and resources required to provide each child with quality services — including sufficient visits, supplies, and other support. Each local health department receives reimbursement for the services it provides by submitting invoices to the Environmental Health Bureau, which administers the distribution of HSI funding.

The HSI-SPA created an opportunity for Maryland to provide home-based asthma services to a finite number of children with especially high need. It did not change the scope of benefits covered under Medicaid in Maryland, create associated billing or procedure codes, or recognize community health workers as Medicaid providers or health professionals.

¹ Maryland's HSIs use the Safe At Home program from the Green & Healthy Homes Initiative. The Green & Healthy Homes Initiative is a nonprofit organization committed to ensuring that all families live in homes that are healthy, safe, energy efficient, and sustainable. As one of a variety of services that the initiative provides in furtherance of this mission, the organization provides expert subject matter trainings and works within cities to implement evidence-based integrated home interventions. More information is available at <https://www.greenandhealthyhomes.org>.

More States Can Use the Health Services Initiatives to Address Childhood Asthma

States with especially high asthma prevalence should consider a CHIP HSI-SPA to provide home-based asthma services to children in low-income households with asthma. In 2017, of the 31 states and the District of Columbia that had not implemented HSIs, 20 had more than 40% of their administrative cap remaining, which could theoretically be used to support HSIs (see Table 2).²⁶

A recent publication found that Kentucky, North Carolina, Mississippi, Missouri, Ohio, Pennsylvania, and Virginia were home to 13 of the top 20 “asthma capitals” — cities that are challenging places for people with asthma to live.²⁷ Each of these states also had remaining CHIP administrative funds.

States interested in addressing childhood asthma through a CHIP HSI can use Maryland's approved SPA as a guide and modify according to need. Maryland's approved CHIP HSI-SPA, and all other HSIs, can be found on Medicaid's website²⁸

Table 2. Twenty States with More than 40% Remaining Funds for Spending on HSIs within the 10% Administrative Cap, Federal Fiscal Year 2017ⁱⁱ

State	Total Administration Costs	10% Administrative Cap	Available for Spending on HSIs within the 10% Administrative Cap	
			Dollar Amount	Percentage
Alabama	\$7,148,710	\$ 21,700,575	\$14,551,865	67.0%
Arizona	\$1,251,966	\$4,320,432	\$3,068,466	71.0%
Colorado	\$11,163,108	\$33,488,774	\$22,325,666	67.0%
District of Columbia	\$1,913,271	\$3,838,797	\$1,925,526	50.0%
Hawaii	\$2,531,257	\$7,186,821	\$4,655,564	65.0%
Kentucky	\$4,024,541	\$25,885,333	\$21,860,792	84.0%
Louisiana	\$14,287,012	\$38,372,431	\$24,085,419	63.0%
Mississippi	\$3,045,738	\$16,778,281	\$13,732,543	82.0%
Missouri	\$14,073,380	\$24,499,789	\$10,426,409	43.0%

State	Total Administration Costs	10% Administrative Cap	Available for Spending on HSIs within the 10% Administrative Cap	
			Dollar Amount	Percentage
Montana	\$5,301,757	\$10,650,542	\$5,348,785	50.0%
New Hampshire	\$13,916	\$3,858,936	\$3,845,020	99.6%
New Mexico	\$1,808,000	\$3,629,798	\$1,821,798	50.0%
North Carolina	\$12,555,456	\$49,766,362	\$37,210,906	75.0%
Ohio	\$34,175,234	\$59,479,667	\$25,304,433	43.0%
Pennsylvania	\$11,964,327	\$44,752,373	\$32,788,046	73.0%
South Carolina	\$8,175,820	\$18,515,294	\$10,339,474	56.0%
South Dakota	\$478,520	\$3,295,946	\$2,817,426	85.0%
Texas	\$60,035,896	\$106,433,212	\$46,397,316	44.0%
Virginia	\$21,050,895	\$34,767,425	\$13,716,530	39.0%
Wyoming	\$1,015,507	\$1,834,187	\$818,680	45.0%

SOURCE: Centers for Medicare and Medicaid Services, "CHIP Annual Reports FFY 2017."

<https://www.medicaid.gov/chip/annual-reports/index.html>.

ⁱⁱ NOTE: Federal Fiscal Year 2017 started October 1, 2016 and ended September 30, 2017.

Conclusion

Asthma is the single most common chronic illness among children in the United States. Home-based asthma interventions have been shown to return substantial economic value and improve outcomes among children with asthma. Childhood asthma advocates and policymakers, especially in states with remaining CHIP administrative funding and demonstrated need, should consider HSIs as a mechanism to fund home-based asthma services, including home environmental remediation to improve asthma outcomes among children in low-income households.

Endnotes

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Appendix A

CHIP SPA Processing Tools for States Template for Child Health Plan Under Title XXI of the Social Security Act

Children’s Health Insurance Program (CHIP) State Plan

Section 2.2

Guidance: Section 2.2 allows states to request to use the funds available under the 10% limit on administrative expenditures in order to fund services not otherwise allowable. The health services initiatives must meet the requirements of 42 CFR 457.10.

2.2. Health Services Initiatives: Describe whether the State will use the health services initiative option as allowed at 42 CFR 457.10. If so, describe what services or programs the State is proposing to cover with administrative funds, including the cost of each program, and how it is currently funded (if applicable); also update the budget accordingly. (Section 2105(a)(1)(D)(ii)); (42 CFR 457.10).

CHIP SPA Toolkit: <https://www.medicaid.gov/state-resource-center/spa-and-1915-waiver-processing/chip-spa-toolkit/index.html>

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