

Reimbursement Strategies for Healthy Homes Services

Issue Brief: Considerations for State Medicaid Offices

Introduction

The purpose of this issue brief is to demonstrate successful State Medicaid strategies that establish sustainable funding pathways for healthy homes services.

Key Takeaways

- Healthy housing programs address the health and safety of the home environment through any combination of case management, home visits and education, home assessment, and home repairs.
- Common healthy housing issues include lead exposure, asthma triggers, home injury and falls, poor weatherization, and energy inefficiency.
- Research evidence demonstrates the importance of healthy housing to improved health outcomes, reduced medical utilization, and positive return on investment.
- GHHI has worked with State Medicaid offices, Managed Care Organizations, and other stakeholders across the country to secure sustainable Medicaid funding streams for healthy housing services.



The Far-Reaching Effects of Unhealthy Homes

Decades of racially motivated policies and actions have disproportionately affected housing conditions in low-income communities of color across the US, endangering the health, safety, and well-being of countless families. Research shows that African Americans are more likely to live in poor-quality housing, which is part of the legacy of systemic racist housing practices such as redlining, where African Americans were denied loans to purchase in certain neighborhoods or improve their homes. Poor housing quality can cause lead poisoning, exacerbate chronic conditions such as asthma, and raise the risk of home-based falls among other hazards, drastically increasing costs for the healthcare system and creating undue financial strains on families.

An estimated 30 million families live in unhealthy housing in the United States. Given that Americans spend approximately 90% of their time indoors, improving the nation's housing stock as a healthcare measure is critical. Common healthy housing issues include exposure to lead poisoning hazards, asthma triggers, fall risks, and energy inefficiencies.

With the increasing understanding that the social determinants of health (SDOH), and specifically housing quality, play a critical part of health and racial equity, MCOs are well positioned to contract for healthy housing services to benefit their most vulnerable members.

Healthy Housing Program Models

A comprehensive healthy homes intervention is comprised of evidence-based practices that improve housing conditions, health outcomes, quality of life, and life trajectory. The holistic model includes the following components:

- Single stream intake process with “no wrong door.” Referrals may come from a broad set of sources including healthcare providers, healthcare payers, local agencies, utilities, and community-based organizations.
- Comprehensive assessment of the home environment to identify hazards that cause asthma exacerbations, injuries, falls, lead exposure, energy inefficiency, and poor weatherization.
- Home repairs that address the whole home as a single system, remediating hazards identified through the comprehensive assessment. Quality control and quality inspection ensure that home repairs meet a standard level of excellence.
- Home visits and home-based education that provide the family with the knowledge and skills to maintain a healthy home and sustain positive health outcomes.
- Evaluation of health and social outcomes by a third-party evaluator.

Cost-Benefit Analysis

Research evidence has not only established the health benefits of healthy housing services, but also the positive return-on-investment that these programs have for healthcare costs and societal outcomes.

Lead: According to the CDC, primary prevention, which means removing hazards from the home before a child is exposed, “is the most effective way to ensure that children do not experience harmful long-term effects of lead exposure.”ⁱ While screening children for lead early and remediating hazards after an increased blood lead level screen is important, it is often too late. Research studies quantifying the impact of lead poisoning prevention and hazard control measures show enormous benefits to individuals and the society at large, with a leading study showing a return of \$17-\$221 to society for each dollar invested—a net savings of \$181-\$269 billion.ⁱⁱ

Asthma: While there is no cure for asthma, symptoms can be effectively controlled with a combination of appropriate medical care, health education, and reduction or elimination of exposure to asthma triggers and respiratory irritants.ⁱⁱⁱ The CDC Community Preventive Services Task Force implemented a systematic review of studies focused on comprehensive asthma interventions that assess the home environment, remediate environmental asthma triggers, and provide asthma management education, finding that they produced a return of \$5-\$14 for each dollar invested, a median decrease of 0.57 acute healthcare visits per year, and an decrease of 12.3 school absences per year on average.^{iv} Additional recent studies have assessed the impact of comprehensive asthma programs on Medicaid total cost of care and shown a 29% reduction, the equivalent of \$2,144 per child per year.^v From 2016-2019, GHHI contracted with the leading actuarial firm Milliman to analyze datasets of 3-5 years of Medicaid claims from # health plans in different jurisdictions and develop cost savings projections. Milliman’s model estimated average savings of \$8,806 per person over 10 years.

Fall hazards: Evidence has shown that multifactorial fall prevention programs that include a combination of exercise, education, and home modification lead to a statistically significant reduction in the rate of falls. One such intervention model called CAPABLE has resulted in approximately \$10,000 per year in Medicaid savings for enrollees compared to a control group,^{vi} and another study also showed over \$10,000 in annual Medicare savings for CAPABLE participants.^{vii}

State Medicaid Strategies

Healthy housing services are traditionally not reimbursable under state Medicaid programs. However, in recent years the healthcare system has begun to acknowledge the significance of housing and other non-medical determinants of health outcomes, especially for underserved and vulnerable communities. To better address the social determinants of health, policymakers have found innovative ways to use health policy tools to direct more resources to non-medical services that impact individual and community health.

In this section we outline Medicaid policy tools that have advanced the sustainable delivery of healthy housing services in various states, and we note whether the tool was used for a specific issue area within healthy housing. GHHI has worked directly with states and stakeholders in several of these examples, which we note below.

Medicaid Managed Care Provisions

Medicaid Managed Care Provisions (Asthma)

Examples:^{viii} Louisiana, Michigan, Pennsylvania

States may incorporate quality improvement provisions in their Managed Care contracts that encourage or require MCOs to address healthy housing or the social determinants of health broadly. An advantage of using this policy mechanism is that it requires relatively low administrative burden on the part of the state. These types of contract provisions may be set up in various ways, such as through a capitated payment separate from the MCO's premium (Pennsylvania) or a withhold payment that requires the MCO to demonstrate successful implementation of services or projects (Michigan). In both examples, MCOs are required to contract with community-based organizations to address SDOH and meet other specific goals set by the state.

Louisiana's most recent Managed Care Request for Proposals included a component for Value-Added Benefits, where MCOs were scored on their proposals to address eight topic areas for members, one of which directly addressed healthy housing.

Other MCO Provisions Enabled by Policy

Other examples of MCO requirements and provisions are included in other sections of this document if they are enabled by overarching policy mechanism like a waiver or state plan amendment.

Louisiana

Louisiana's RFP section for Value-Added Benefits (VAB) 2.6.3.1.6 required MCOs describe their plan for "identification and remediation of health-harming environmental factors related to an enrollee's shelter (e.g., infestations, mold...)." The VAB section of the RFP was worth 100 points of the total 1,500 possible points

Michigan

Michigan's Population Health Management contract provisions require that MCOs work with community-based organizations and community health workers to address SDOH. In 2019 GHHI worked with Healthy Homes Coalition, Priority Health, and other stakeholders to set up a program in which asthma home assessments, home visits, and repairs were paid for as a project to meet the Population Health provision.

Pennsylvania

Pennsylvania's HealthChoices contract includes a Community Based Care Management (CBCM) quality improvement program that allows MCOs to propose projects that address SDOH for their members. In 2017 GHHI worked with Health Partners Plans who used the CBCM program to fund community health worker home visits, home assessments, supplies, and integrated pest management for members with high utilization and cost for asthma.

State Plan Amendments

Children’s Health Insurance Program (CHIP) Health Services Initiative (HSI) (Lead & Asthma)

Examples:^{ix} *Indiana, Maryland, Michigan, Ohio, Wisconsin*

HSIs are often underutilized policy tools that states can use to leverage enhanced federal match to fund childhood asthma and lead-related issues tied to the home environment.

HSIs are funded under a state’s CHIP administrative budget, which is made up of a federal share and state share based on an enhanced matching rate that varies by state—the Enhanced Federal Medical Assistance Percentage (E-FMAP). This federal matching rate is considered “enhanced” as it is higher than the FMAP for a state’s Medicaid program. The administrative budget is limited to 10% of a state’s total CHIP budget.

Michigan was first to use an HSI to pay for lead remediation and lead service line replacement in 2017, and since then several states have followed suit with similar programs.

Home Visit Reimbursement Rates (General, Asthma)

Examples:^x *Minnesota, Missouri, Oregon*

States have used state plan amendments (SPAs) to establish fee-for-service reimbursement rates for home-based services such as community health worker home visits (MN), asthma education home visits (OR, MO), and home assessments (MO).

We note that the success of SPA-supported reimbursement rates is highly dependent on the level of reimbursement that is established and ability for community-based providers to bill Medicaid payers. We have seen that low reimbursement rates and lack of capacity building around Medicaid billing can result in limited uptake on service provision.

Michigan

In 2017 Michigan was the first state to implement an HSI to fund lead remediation, including lead service line replacement. The HSI provides \$23.8 million per year that is more flexible than the typical HUD lead hazard control grants, allowing the state and city agencies to expand the scale and scope of their lead poisoning prevention activities.

Maryland and Wisconsin

Both Maryland and Wisconsin serve as unique examples because they are the only two states that have utilized the HSI to address both lead and asthma. With training support from GHHI, Maryland uses HSI funds to support environmental case management (lead and asthma) in addition to lead remediation. Wisconsin recently gained approval to use HSI funds to pay for home modifications that address both lead and asthma triggers.

Oregon

Targeted Case Management (TCM) for asthma and healthy homes provides \$507 per home visit. TCM has supported Multnomah County Health Department’s Healthy Homes program since 2005 and has demonstrated [significant reductions in ED and hospital utilization](#).

Waivers

Because Medicaid waivers widely by state, below we highlight specific state waivers that address healthy housing issues in an innovative way.

1915(c) Waiver (Aging in Place): Minnesota^{xi}

Minnesota's Community Alternative Care (CAC) Waiver allows for the provision of comprehensive community- and home-based services for older adults who require a nursing home level of care. Alternative care services include environmental accessibility adaptations in the member's "primary home or primary vehicle to ensure the person's health and safety to enable them to function with greater independence." A member may receive up to \$20,000 to address home modifications like grab bars, ramps, widening of doorways, and floor coverings.^{xii}

1115 Waiver with 'In Lieu Of' Managed Care Provision (Aging in Place, Asthma): California

California Advancing and Innovating Medi-Cal (CalAIM) is the Department of Health Care Service's (DHCS) multi-year Medi-Cal transformation project and is collectively made up of the state's 1115 demonstration waiver, consolidated 1915(b) waiver, Enhanced Care Management, state-approved in lieu of services, and state plan updates. A primary goal of CalAIM is to address members' social determinants of risk as a means to improve health outcomes and reduce health disparities.^{xiii} In 2019 and 2020 RAMP, GHHL, and other stakeholders advocated for the inclusion of home modification as part of California Advancing and Innovating Medi-Cal's In Lieu of Services. As part of this 1115 demonstration, the State has created a preapproved list of 14 nonmedical in lieu of services (ILOS) that managed care organizations are strongly encouraged to offer as of January 2022.

One of the 14 services is "Home Modification Supports," which includes 1) Environmental Accessibility Adaptations (Home Modifications) and 2) Asthma Remediation. DHCS performed a literature review to determine ILOS services with a strong evidence base for efficacy and cost effectiveness. This review led to the inclusion of these home modifications in the ILOS menu of services. Up to \$7,500 of home modifications may be provided per member.^{xiv}

1115 Waiver for Health Related Social Needs (HRSNs)

In September 2022, CMS approved 1115 waivers in both Massachusetts and Oregon that enables each state to deliver services that address the social determinants of health of their members more comprehensively. The waiver establishes a set of services that address health related social needs (HRSN). Home modifications are explicitly listed as allowable HRSN services. This includes "medically necessary air conditioners, humidifiers, air filtration devices and asthma remediation, ...accessibility ramps, handrails, grab bars, repairing or improving ventilation systems, and mold/pest remediation."^{xv1}

¹ <https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/ma-masshealth-ca1.pdf>

1115 Waiver for Value Based Payment (Asthma): New York

For the past 25 years, New York has implemented a Medicaid Redesign Team 1115 Waiver that seeks to improve access, quality, and cost effectiveness of health services to the New York's most vulnerable populations. One of the demonstrations in this waiver was the Delivery System Reform Incentive Payment (DSRIP) Program, which set up the state's Value Based Payment (VBP) Roadmap. The VBP Roadmap set requirements for New York MCOs to implement VBP contracts with community-based organizations to address SDOH.

GHHI supported the rollout of the VBP Roadmap by co-leading some of the "boot camps" hosted by the New York State Department of Health to explain the mechanics of how community-based organizations contract with MCOs for non-medical services, and how to evaluate those outcomes. The State used healthy homes as an example SDOH area that could be addressed by VBP.^{xvi}

As of February 2022, New York State Department of Health is in the process of finalizing an updated version of its VBP Roadmap and has submitted a concept paper to CMS for a new 1115 waiver to expand its efforts to address SDOH.

Asthma Outcomes-Based Financing Project

In 2022, GHHI launched an asthma program in NYC with Affinity by Molina Healthcare through an innovative model that combines outcomes-based financing with VBP to fund home-based services not typically covered by Medicaid fee-for-service. Third-party impact investors are providing over \$4M to fund services provided by community-based service providers AIRnyc and Association for Energy Affordability. Leveraging VBP contracts, Affinity by Molina will repay the investors from cost savings created by the program's impact on medical utilization.

To incentivize these models, New York inserted language in its 2019 CMS-approved update to the [VBP Roadmap](#) encouraging the use of third-party financing models (also known as "Pay for Success") to address SDOH. The State also clarified that MCOs can classify SDOH expenses as medical costs.

Statewide Healthy Homes VBP Pilot

In 2021, New York State Energy Research & Development Authority (NYSERDA) and the New York State Department of Health launched a \$10 million VBP pilot to provide home assessments, education, energy efficiency services, and remediation of environmental hazards related to asthma for 500 households over two years. Medicaid MCOs participating in the program identify pediatric members with a history of hospitalizations due to asthma who then receive home-based services from nurses, community health workers, and home performance contractors. The funding initially comes from ratepayer funds NYSEDA manages, but the participating Medicaid MCOs agree to evaluate the impact on health outcomes, quality, and costs, and will fund these home-based services through VBP contracts starting in the third year if the evaluation shows a positive return on investment. The state's funding will act as an on-ramp to sustainable VBP funding that will help MCOs achieve VBP requirements and goals set forth in the VBP Roadmap.

GHHI was contracted to support the state in designing the pilot and will also support the transition to VBP for year three.

Other Policy Mechanisms

Lead Poisoning Prevention Fund (Lead)

Example: Michigan

In 2020, GHHI began working with the Michigan Department of Health and Human Services (MDHHS) to design and create a statewide Lead Poisoning Prevention Fund (MDHHS administers the state Medicaid program, but the Fund sits outside the purview of Medicaid office). The goal of the fund is to provide affordable financing products to property owners to remediate lead hazards at scale. The fund is modeled after the state's highly successful Michigan Saves program, which provides affordable finance to property owners to install energy efficiency upgrades. Through Michigan Saves, the State leveraged its own investment of \$8 million to secure additional private loan capital of over \$300 million.

In 2021 MDHHS has secured \$12 million of state dollars to seed the fund. This initial investment will establish a loan-loss reserve to attract additional private investment, similar to that of Michigan Saves.

End Notes

- i <https://www.cdc.gov/nceh/lead/prevention/default.htm>
- ii <https://pubmed.ncbi.nlm.nih.gov/19654928/>
- iii Zahran, H. S., Bailey, C. M., Damon, S. A., Garbe, P. L., & Breyse, P. N. (2018). Vital signs: asthma in children—United States, 2001–2016. *Morbidity and Mortality Weekly Report*, 67(5), 149. Retrieved from <https://www.cdc.gov/mmwr/volumes/67/wr/mm6705e1.htm>
- iv Asthma Control: Home-Base Multi-Trigger, Multicomponent Environmental Interventions. Community Preventive Services Task Force. 2011. Accessed August 2016. <http://www.thecommunityguide.org/asthma/multicomponent.html>.
- v <https://downloads.cms.gov/files/cmmti/hcia-diseasespecific-thirdannualrpt.pdf>
- vi Szanton, S. L., Alfonso, Y. N., Leff, B., Guralnik, J., Wolff, J. L., Stockwell, I., ... & Bishai, D. (2018). Medicaid cost savings of a preventive home visit program for disabled older adults. *Journal of the American Geriatrics Society*, 66(3), 614-620.
- vii <https://www.healthaffairs.org/doi/10.1377/hlthaff.2016.1305>
- viii Louisiana's Managed Care RFP: <https://wwwcfprd.doa.louisiana.gov/osp/lapac/agency/pdf/7660203-01.pdf>
Michigan's Population Health Management requirements, which include addressing SDOH of members, is included in Section X of their Managed Care Contract: https://www.michigan.gov/documents/contract_7696_7.pdf
Pennsylvania's Community Based Care Management (CBCM) program is described in Exhibit B(5) of their Managed Care Contract: <https://www.dhs.pa.gov/HealthChoices/HC-Services/Documents/HC%20Agreement%202021.pdf>
- ix Links to HSI approval documents:
Michigan: <https://www.medicaid.gov/CHIP/Downloads/MI/MI-17-0018-CHIP.pdf>
Maryland: <https://www.medicaid.gov/CHIP/Downloads/MD/MD-17-0001-LEAD.pdf>
Indiana: <https://www.medicaid.gov/CHIP/Downloads/IN/IN-17-0000-0002.pdf>
Ohio: <https://www.medicaid.gov/CHIP/Downloads/OH/OH-19-0014.pdf>
Wisconsin: <https://www.medicaid.gov/CHIP/Downloads/WI/WI-19-0004.pdf>
- x The Minnesota SPA has been amended since its initial approval to update reimbursement rates. Original approval documents: <https://www.medicaid.gov/sites/default/files/State-resource-center/Medicaid-State-Plan-Amendments/Downloads/MN/MN-13-22.pdf>
Missouri: <https://www.medicaid.gov/sites/default/files/State-resource-center/Medicaid-State-Plan-Amendments/Downloads/MO/MO-16-04.pdf>
The Oregon SPA has been amended since its initial approval to include additional geographies and updated reimbursement rates. Original approval documents: <https://www.medicaid.gov/sites/default/files/State-resource-center/Medicaid-State-Plan-Amendments/Downloads/OR/OR-10-002-179.pdf>
- xi <https://www.medicaid.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/82171>
- xii https://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=id_002196
- xiii <https://www.dhcs.ca.gov/provgovpart/Pages/CalAIM.aspx>
- xiv <https://www.dhcs.ca.gov/Documents/MCQMD/ILOS-Pricing-Guidance-Updated-8-5-2021.pdf>
- xv <https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/ma-masshealth-ca1.pdf>
- xvi GHHI presentation from VBP Boot Camp:
https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/vbp_bootcamp/docs/addressing_hr_factors.pdf
See Scenario C of VBP Bootcamp Class slides:
https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/vbp_bootcamp/docs/2018-01-09/contracting.pdf