



Medicaid and Children's Health Insurance Program Levers to Promote Lead Screening and Treatment: Indiana's Experience

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Introduction

Childhood lead exposure is associated with lower cognitive function,¹ which leads to children's underperformance in school and later in the workplace. Yet, children in an estimated 4 million households are currently exposed to high levels of lead.² Due to lead's adverse long-term consequences, addressing lead hazards today can yield future economic benefits and improved health outcomes. Remediating lead paint hazards in homes of children from low-income families built before 1960 is estimated to generate \$3.5 billion in future benefits—which include earnings, health and education savings, and quality-adjusted life years—for 311,000 low-income children.³ Because Medicaid covers many low-income children who may be at high risk of lead exposure,⁴ failing to address lead hazards and exposure can generate significant long-term costs for Medicaid and a lost opportunity to promote children's healthy development.

The National Academy for State Health Policy (NASHP) recently released a [50-State Scan of State Health Care Delivery Policies Promoting Lead Screening and Treatment](#) that highlights various Medicaid and non-Medicaid strategies that states use to improve lead screening rates and reduce lead hazards. This case study explores several Medicaid and Children's Health Insurance Program (CHIP) levers and highlights Indiana's strategies, including a managed care organization performance metric, data sharing, coverage of lead abatement, and an additional provider guideline for screening.



What is the long-term value of lead remediation?

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How States Can Address Lead Through Medicaid and CHIP

Below are state Medicaid and CHIP levers used to address lead poisoning. Screening identifies individuals with elevated blood lead levels, but diagnoses must be followed by appropriate remediation to prevent future exposure and treatment to improve health outcomes.

- **Metrics:** Many states require managed care organizations (MCOs) to report lead screening as part of their performance reports. Some states use Healthcare Effectiveness Data and Information Set's (HEDIS)⁵ [lead screening in children measure](#).
- **Incentives:** States can reward MCOs and primary care providers with financial and non-financial incentives to screen for and treat lead exposure, such as using bonus payments or auto-assignment algorithms.⁶ Alternatively, states can also sanction or withhold payments if providers and/or MCOs do not perform a satisfactory level of lead screening.
- **Performance and quality improvement projects:** States can include lead screening and treatment as one of the performance improvement projects (PIPs, also known as quality improvement projects in some states) in which MCOs participate annually.⁷
- **Coverage for abatement:** Under Section 2105(a)(1)(D)(ii) of Title XXI that authorizes [CHIP](#), states with available funds can submit a state plan amendment (SPA) to develop [Health Services Initiatives](#) (HSIs), which cover direct services and public health initiatives designed to improve the health outcomes of low-income children using CHIP administrative funding.⁸ HSI expenditures count toward the 10 percent administrative expenses cap of CHIP funding match that states receive from the federal government. A few states have received approval for HSI SPAs that allow those states to use a portion of their CHIP administrative funds for lead abatement services in the homes of low-income children.⁹
- **Provider guidelines:** In addition to the federal requirement that all children enrolled in Medicaid and CHIP receive blood lead tests at ages 12 months and 24 months, states can recommend that providers perform additional risk assessments or blood lead tests for beneficiaries at high risk of lead exposure.
- **Reimbursement:** Some state Medicaid programs reimburse home environment inspections and case management for children with elevated blood lead levels.
- **Data sharing:** State health departments, Medicaid agencies, MCOs, and Special Supplemental Nutrition Programs for Women, Infants, and Children (WIC) can share data to allow clients' lead test status to be reviewed when routine health services are accessed.

To learn more, read [State Strategies to Improve Childhood Lead Screening and Treatment Services under Medicaid and CHIP](#) and view this [Lead Screen & Treatment in Medicaid & CHIP infographic](#).

Indiana's Strategies

The US Environmental Protection Agency has designated East Chicago in Lake County, Indiana, as a Superfund site since 2009 due to lead and arsenic contamination in its soil.¹⁰ Lead-based paint is the most common source of lead exposure in Indiana because more than 63 percent of the state's housing stock was built before 1978, the year lead-based paints were banned in housing.¹¹ Indiana's Medicaid agency has a high stake in promoting lead screening and treatment because Medicaid-enrolled children have a disproportionately higher rate of lead poisoning compared to other children.¹² In 2014, of the 40,811 children up to age six tested for lead, only 26 percent were reported to be enrolled in Medicaid, yet about 45 percent of children with blood lead levels of 10 µg/dL and higher were covered by Medicaid.¹³ This blood lead level is significant because it was used by the Centers for Disease Control and Prevention (CDC) to define a blood lead "level of concern" in children until 2012 and was the trigger for case management according to Indiana Administrative Code ([410 IAC 29-1-6](#)). Indiana Medicaid has utilized the following statewide strategies to identify and treat children with elevated blood lead levels.

Metric: Starting in 2018, Indiana implemented an MCO performance metric based on HEDIS that is tied to incentive payments.¹⁴

Data sharing: MCOs receive monthly information from Indiana State Department of Health's (ISDH) registry showing lead test results for their members. Managed care entities use the registry data to track outreach to families and coordinate follow-up care, such as additional lead tests and environmental home inspections.

CHIP coverage of abatement: Indiana operates a combination program and receives federal funding for both a Medicaid expansion and a separate CHIP program.¹⁵ Indiana submitted a [SPA](#) to implement a HSI to enhance and expand the state's existing lead abatement program on June 30, 2017. The SPA is effective starting July 1, 2016, and continues for five years or until all eligible homes have been abated for lead. The SPA permits Indiana to use up to \$3 million of the state's CHIP administrative funding annually to provide "coordinated and targeted" lead abatement services in the homes of low-income children and pregnant women, especially in the homes of beneficiaries with elevated blood lead levels of ≥ 5 µg/dL and/or living in affected areas such as East Chicago.

Only professionals licensed by ISDH can perform lead abatement services. After the completion of abatement work, a lead inspector or risk assessor licensed by ISDH conducts a visual inspection and takes dust wipe samples inside the property to ensure that identified lead hazards have been abated. The state will track and report the number of homes that have received lead abatement services, the actual services provided, and clearance testing results to the Centers for Medicare & Medicaid Services (CMS).

Indiana's SPA defines abatement services as the removal of lead hazards, including:

- The permanent removal, or enclosure, or encapsulation of lead-based paint and lead dust hazards from an eligible residence.
- The removal or replacement of surfaces or fixtures within the eligible residence.
- The removal or covering of soil lead hazards up to the eligible residence property line, and
- All preparation, lab-sampling analysis, clean up, disposal, and pre- and post-abatement paint, dust, soil, and clearance testing activities associated with such measures.

Indiana's HSI funds cannot be used to address soil contamination. The HSI does not cover assessment of lead hazards in drinking water or water pipe replacements. However, the state can use HSI funds to install water

filters in the homes of beneficiaries exposed to lead through water.

Case management reimbursement: Indiana Medicaid covers targeted case management for children with elevated blood lead levels at or above 5 µg/dL.

Additional provider guidelines: Indiana does not require all children in the state—regardless of health coverage—to be tested for elevated blood lead levels, but the state requires an initial blood lead test at the six-month visit for high-risk children enrolled in Medicaid in addition to the blood lead tests that all Medicaid-enrolled children should receive at the 12-month and 24-month well-child visits.¹⁶

In addition to monitoring the policies outlined above, Indiana is working to ensure that case management services will include nutritional and developmental assessments, a home visit, and risk assessment of the child's primary address.

It is important to note that other state agencies, such as public health and environmental protection, also play vital roles in addressing lead hazards. For example, ISDH's Lead and Healthy Homes Program (LHHP) tracks lead testing rates and compiles annual childhood lead surveillance reports. Beginning in 2015, LHHP began recommending that all local health departments follow CDC's [new reference level](#) in providing case management to individuals with blood lead levels of 5 µg/dL and higher.¹⁷ Formal adoption of 5 µg/dL as the elevated blood lead level in Indiana Administrative Code is currently underway. In 2017, ISDH also created a [lead risk map](#) where residents can enter their addresses to discover the risk of lead exposure in their communities. The map uses age of housing stock and child poverty as weighted risk factors in determining risk.

Outside Indiana, some states require or recommend that all providers perform blood lead tests for all children, or all children living in high-risk zip codes, and conduct risk assessment for all children regardless of their risk level and insurance type. These statutory mandates are usually administered by the state public health agency.¹⁸

Endnotes

1. Aaron Reuben, Avshalom Caspi, and Daniel W. Belsky, "Association of Childhood Blood Lead Levels With Cognitive Function and Socioeconomic Status at Age 38 Years and With IQ Change and Socioeconomic Mobility Between Childhood and Adulthood," *JAMA* 317, 12 (2017): 1244-1251, <https://doi.org/10.1001/jama.2017.1712>.
2. "Lead," Centers for Disease Control and Prevention, last updated July 18, 2018, <https://www.cdc.gov/nceh/lead/>.
3. Pew Charitable Trusts and Robert Wood Johnson Foundation, *Ten Policies to Prevent and Respond to Childhood Lead Exposure*, August 2017, http://www.pewtrusts.org/~media/assets/2017/08/hip_childhood_lead_poisoning_report.pdf.
4. William Wheeler and Mary Jean Brown, "Blood Lead Levels in Children Aged 1-5 Years – United States, 1999-2010," *Morbidity and Mortality Weekly Report* (April 5, 2013 / 62(13)): 245-248, Centers for Disease Control and Prevention, <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6213a3.htm>.
5. HEDIS is a set of health care performance measures developed and maintained by the National Committee for Quality Assurance (NCQA). HEDIS is widely used by health plans in the United States. For more information, please see <http://www.ncqa.org/hedis-quality-measurement>.
6. Auto-assignment algorithms are mathematical formula used to automatically assign health plans to individuals required to enroll who do not select health plans. Auto-assignment algorithm can serve as an indirect financial incentive because health plans that perform well on certain measures may be automatically assigned more members.
7. Every year, states specify one or more PIP(s) that MCOs are required to implement to improve quality of care. MCOs within a state may work on the same or different PIP(s) in a given year, and the projects may differ from year to year depending on where states see the need for improvement.
8. Centers for Medicare & Medicaid Services, *Frequently Asked Questions (FAQs): Health Services Initiative*, January 12, 2017, <https://www.medicaid.gov/federal-policy-guidance/downloads/faq11217.pdf>; Olivia Bacon, "Health Services Initiative Gives States Unique Tools to Improve the Health of Low-Income Children," *National Academy for State Health Policy*, June 19, 2018, <https://nashp.org/health-service-initiatives-give-states-unique-tools-to-improve-the-health-of-low-income-children/>.
9. Please see NASHP's [50-State Scan of State Health Care Delivery Policies Promoting Lead Screening and Treatment](#) for a list of states that are approved to use HSI funding to cover lead abatement services.
10. "USS Lead Superfund Site," United States Environmental Protection Agency, last updated May 29, 2018, <https://www.epa.gov/uss-lead-superfund-site?id=0501433>.
11. Lead & Healthy Homes Program, *2016 Childhood Lead Surveillance Report*, Indiana State Department of Health, accessed August 1, 2018, <https://www.in.gov/isdh/files/lead%20report%202016-new.pdf>.
12. Lead & Healthy Homes Program, *2014 Surveillance Report*, Indiana State Department of Health, revised February 26, 2016, [https://www.in.gov/isdh/files/Lead_Report_2014\(3\).pdf](https://www.in.gov/isdh/files/Lead_Report_2014(3).pdf).
13. Ibid.
14. For more information, please see Indiana's 2018 [Medicaid Managed Care Quality Strategy Plan](#).
15. "CHIP State Program Information," Medicaid.gov, accessed August 1, 2018, <https://www.medicaid.gov/chip/state-program-information/index.html>; National Academy for State Health Policy and American Academy of Pediatrics, "Indiana 2016 CHIP Fact Sheet," accessed August 1, 2018, https://nashp.org/wp-content/uploads/2015/02/Indiana_Final.pdf.
16. *Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)/HealthWatch, Indiana Health Coverage Programs, Provider Reference Module*, Indiana Family & Social Services Administration, December 2017, <http://provider.indianamedicaid.com/media/155529/epsdt.pdf>.
17. LHHP, 2016 Surveillance Report.
18. Please see NASHP's [50-State Scan of State Health Care Delivery Policies Promoting Lead Screening and Treatment](#) for more information.

Acknowledgements:

The National Academy for State Health Policy (NASHP) would like to thank Gary Parker at Indiana Family and Social Services Administration (Medicaid) and Paul Krievins at Indiana Lead and Healthy Homes Program for their time and insights, which made this case study possible. The author also wishes to thank Carrie Hanlon, Megan Lent, Trish Riley, and Jill Rosenthal for their contributions to this case study. Any errors or omissions are the author's.

This project is supported by the Health Resources and Services Administration (HRSA) of the US Department of Health and Human Services (HHS) under grant number UJ9MC31105 – Maternal and Child Environmental Health Collaborative Improvement and Innovation Network (CollIN) for \$849,999. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the US government.