National Center for Healthy Housing

Milken Institute School of Public Health
THE GEORGE WASHINGTON UNIVERSITY

Case Studies in Healthcare Financing of Healthy Homes Services:

Medicaid Reimbursement for Lead Follow-Up Services in Rhode Island

Childhood exposure to lead can have lifelong consequences including decreased cognitive function, developmental delays, and behavior problems; and, at very high levels, it can cause seizures, coma, and even death.[1] The Centers for Disease Control and Prevention (CDC) recommend follow-up services for children with blood lead levels at or above the current reference value of 5 µg/dL. These include continued monitoring of the blood lead level, nutritional intervention, environmental investigation of the home, and lead hazard control based on the results of the environmental investigation. The regulatory and workforce infrastructure to provide these services exists in many states, but many children in at-risk communities still lack consistent access to lead follow-up services.[2] 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 provide lead follow-up services, but many may be unsure about how to translate these evidence-based practices into sustainable systems and policy. This case study summarizes the current healthcare financing landscape in Rhode Island for lead follow-up services. The case study is based on survey findings[2] and interviews with the state Medicaid agency, the state health department, and other stakeholders. It describes the current state of healthcare, other important funding mechanisms, key barriers, next steps, and lessons learned. This information may be useful to stakeholders in other states that are seeking healthcare financing for lead follow-up or other preventive services or for stakeholders within the state of Rhode Island interested in a summary of current and future opportunities within the state.

AT A GLANCE
Medicaid Reimbursement for Lead Follow-Up Services in RI

Medicaid in Rhode Island
Almost 40% of children in Rhode Island are enrolled in the state Medicaid program - the *Rhode Island Medical Assistance Program*.[3] Approximately half of the children under age six identified in Rhode Island with elevated blood lead levels are enrolled in Medicaid.

Rhode Island operates its entire Medicaid program, with few exceptions, under a single section 1115 demonstration waiver, known as the *Rhode Island Comprehensive Demonstration*.[a] This waiver, originally submitted in 2008 and approved in 2009, has several components, including *RIte Care*, Rhode Island's Medicaid managed care program. *RIte Care* provides eligible uninsured children, families, and pregnant women with comprehensive healthcare through one of two participating health plans: Neighborhood Health Plan of Rhode Island and UnitedHealthcare of New England.[5] Approximately 88% of Medicaid-covered children in the state are enrolled in a managed care plan.[6]

Medicaid Reimbursement for Lead Follow-Up Services[b,c]
Reimbursement type (page 3): Lead follow-up services are provided through four "lead centers" that are certified through the state health department. Through these lead centers, lead follow-up services are offered to all children identified in Rhode Island with elevated blood lead levels, regardless of where they live or what type of health insurance they have. The lead centers bill Medicaid for each service provided to Medicaid recipients and are reimbursed at different amounts for varying services.

Geographic coverage (page 3): Statewide.

Eligibility for services (page 4): Medicaid reimburses the lead centers for nonmedical case management services provided to Medicaid-enrolled children up to age six identified with blood lead levels (BLLs) over 15 µg/dL. The Department of Health is similarly reimbursed for home assessments for children with BLLs over 20 µg/dL (or two tests over 15 µg/dL); housing characteristics and location may also influence eligilbilty.[d]

Types of services covered (page 3): Covered services include case management, home assessment of the primary residence (or a secondary residence or a childcare facility), nutritional counseling, lead education, interim controls to limit exposure to the lead hazards, information on safe cleaning techniques, and in-home education.

Staffing (page 4): Certified lead center staff, including community health workers, nurses, and/or certified lead assessors, technicians, or inspectors.

Barriers and Next Steps for Rhode Island (pages 4-5)
Interviewees describe the current program as stable and receiving consistent support within the state. However, opportunities to expand covered services to include actions such as structural remediation and lower the blood lead level that must be identified to be eligible for Medicaid reimbursable home inspections are being explored.

Other Funding Mechanisms in Rhode Island (page 4)
No other funding mechanisms have been identified.

Key Insights from Rhode Island (page 5)
Interviewees noted that the programmatic logistics of reimbursement for structural remediation activities must be carefully considered for the service to be utilized effectively. Additionally, interviewees stressed the importance of working with policy makers to ensure that the legislative changes needed to support reimbursement systems are made.

Medicaid in Rhode Island
Almost 40% of children in Rhode Island are enrolled in the state Medicaid program – the Rhode Island Medical Assistance Program.[3] Approximately half of the children under age six identified in Rhode Island with elevated blood lead levels (EBLLs) are enrolled in Medicaid.

Rhode Island operates its entire Medicaid program, with small exceptions, under a single section 1115 demonstration waiver, known as the *Rhode Island Comprehensive Demonstration*.[a] This waiver, originally submitted in 2008 and approved in 2009, established a new federal-state compact that allowed Rhode Island the flexibility to "redesign the state's Medicaid program to provide cost-effective services that will ensure beneficiaries receive the appropriate services in the least restrictive and most appropriate setting."[4]

The waiver has several components, including *RIte Care,* Rhode Island's Medicaid managed care program. *RIte Care* provides eligible uninsured children, families, and pregnant women

[a] The Rhode Island Medicaid Reform Act of 2008 (R.I.G.L. §42-12.4) directed the state to apply for a global demonstration project under the authority of section 1115(a) to restructure the state's Medicaid program and give the state more flexibility from CMS to design a cost-effective and person-centered program for Rhode Island residents. The Rhode Island Comprehensive Demonstration waiver was initially approved by CMS on January 16, 2009. In 2013, CMS renewed the Comprehensive Demonstration through December 31, 2018.

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

[c] For the purpose of the original survey and the follow-up interviews and case studies, lead poisoning follow-up services were defined as services that go beyond blood lead screening to include one or more of the following components: service coordination, education, environmental assessments to identify sources of lead exposure in the home environment or remediation of the home environment to eliminate lead hazards.

[d] Interviewees did not identify any housing age or location restrictions; this information was indicated by initial survey respondents.

with comprehensive healthcare through one of two participating health plans: Neighborhood Health Plan of Rhode Island and UnitedHealthcare of New England.[5] Approximately 88% of Medicaid-covered children in the state are enrolled in a managed care plan.[6]

Medicaid-Supported Reimbursement for Lead Follow-Up Services[c]

Lead services in Rhode Island are provided through four "lead centers" certified through the state health department. Three of these lead centers are operated by community action agencies; the fourth is located in a hospital. Through these four centers, lead services are available throughout the entire state and to all children identified with elevated blood lead levels (BLL). The lead centers bill by the "Current Procedure Terminology" billing code (CPT code) for each service provided to Medicaid recipients and are reimbursed by Medicaid different amounts for an initial visit, a follow-up visit, or to close the case. The Rhode Island Department of Health (RIDOH) reimburses the lead centers for services provided to non-Medicaid-enrolled children. Interviewees were not aware of private insurers who are paying for lead services.

What lead follow-up services are provided?

For children under age six who have been screened and found to have a BLL over 15 µg/dL, the services supported through the Medicaid reimbursement mechanisms described above consist of case management, visual assessment of the primary residence, nutritional counseling, lead education, interim controls to limit exposure to the lead hazards, information on safe cleaning techniques, and in-home education. These services are provided by lead center staff.

In addition to these services, an RIDOH lead inspector performs a Comprehensive Environmental Lead Inspection (CELI) in the home of all children identified with a BLL greater than or equal to 15 µg/dL and lead center staff review the CELI with the family to help them understand sources of lead in their home. This 15 µg/dL action level changed from an identified BLL greater than or equal to 20 µg/dL (or two tests over 15 µg/dL) in January 2015 and is expected to be lowered again in January 2016 to an identified BLL greater than or equal to 10 µg/dL. However, at the current time, Medicaid reimbursement is only available for CELIs for eligible children with an identified BLL greater than or equal to 20 µg/dL (or two venous blood lead tests over 15 µg/dL). RIDOH has requested that Medicaid review the current allowable charges and change the definition of lead poisoning to be consistent with the current CDC reference level (5 µg/dL), but this request is one small part of an overall Medicaid review, and there are no changes to Medicaid reimbursement at this time.

Looking for additional detail on the Rhode Island Lead Centers and the services they provide?

Visit:

www.eohhs.ri.gov/Portals/0/Uploads/Documents/Lead_Center_cert_stds.pdf

to view:

Comprehensive Lead Centers: Certification Standards
Section 5.0 Service Description
Required Scope of Services

When children are identified with a BLL between 5 and 14 µg/dL, the family is referred to one of the four lead centers for an educational home visit to discuss lead poisoning, nutrition, and cleaning practices that can protect them from further lead exposure. Trained community health workers from the lead centers may also conduct Visual Environmental Lead Assessment (VELA) using a one-page checklist to guide education and next steps.[7] Additionally, since April 2015, lead centers have offered soil and dust wipes in the homes of children with a BLL between 10-14 µg/dL. These education and dust wipe services for children with BLLs less than 15 µg/dL are currently supported with funding from an RIDOH contract and are not reimbursed by Medicaid.[7]

Rhode Island also has a provision for the replacement of windows and the spot repair of hazards that are found to pose lead hazards to children with elevated BLLs. However, interviewees indicated that this structural remediation benefit has been seldom used, primarily for the following two reasons: First, the current reimbursement rate for window replacements – $214 per window – is typically lower than the actual replacement costs; second, the mechanisms by which lead centers receive reimbursement for this service are too cumbersome. Interviewees further noted that the process by which the lead centers must pay for the window replacement first, and then subsequently seek reimbursement, may have posed a financial barrier to some lead centers. Additionally, interviewees also observed that families often move out of rental units with lead hazards rather than await window replacement; under the current system, once the family has moved, the lead center is ineligible for window replacement reimbursement.

Other than the window replacement program, interviewees were not aware of Medicaid dollars being used for structural remediation or lead hazard

control efforts. However, when a violation is found and a notice of violation is issued, owners and families are automatically referred to local HUD-funded lead hazard control grant programs that may pay for structural remediation. RIDOH is currently assessing how frequently these grant programs are accessed by cited owners and whether barriers exist to enrollment. Currently, requirements to access these grant programs include income qualification, age of property (pre-1978), and the presence of a child under the age of six living in or frequently visiting the dwelling (in a single-family home scenario) or the presence of a child under the age of six living in or frequently visiting at least one unit of a multifamily property. In the multifamily property scenario, the other units can be vacant or occupied with the understanding that the every effort be made to rent these units to a family with a child under six when it is rented (for vacant units) or upon re-renting a currently occupied unit.

What patient populations are eligible to receive lead follow-up services through Medicaid?

Although lead follow-up services are offered to all children identified in Rhode Island with elevated blood lead levels, regardless of where they live or what type of health insurance they have, Medicaid reimbursement is currently available to the lead centers for services provided to Medicaid-enrolled children up to age six who are identified with a BLL over 15 µg/dL and to RIDOH for CELIs for those identified with a BLL over 20 µg/dL (or two venous blood lead tests over 15 µg/dL). Original survey responses included eligibility requirements related to housing characteristics or location. Interviewees were unaware of such requirements.

What types of providers are eligible to provide lead follow-up services?

The four lead centers certified to offer lead follow-up services in Rhode Island utilize a range of providers

ACRONYMNS

ACO	***Accountable care organization***
BLL	***Blood lead level***
CELI	***Comprehensive environmental lead investigation***
CPT	***Current procedure terminology***
EBLL	***Elevated blood lead level***
RIDHS	***Rhode Island Department of Human Services***
RIDOH	***Rhode Island Department of Health***
VELA	***Visual environmental lead assessment***

DEFINITION OF SERVICES

Lead poisoning follow-up services

Services that go beyond blood lead screening to include one or more of the following components are follow-up services: service coordination, education, environmental assessments to identify sources of lead exposure in the home environment, or remediation of the home environment to eliminate lead hazards.

Examples of these types of services could include but are not limited to the following:

- *A nurse or community health worker or other health professional provides phone-based education or visits the home of a child with an EBLL to provide the family with information about reducing exposure to lead hazards and proper nutrition.*
- *An environmental health professional, lead risk assessor, nurse, or community health worker visits the home of a child with an EBLL to assess the home for potential lead hazards and provide education about reducing exposure to lead hazards.*
- *Potential lead hazards are remediated in the home of a child with an EBLL. Remediation activities could include but are not limited to stabilizing or repairing deteriorated paint, abatement of lead-based paint from components (e.g., doors, windows), replacement of components (e.g., doors, windows), making floor and window surfaces smooth and cleanable, performing specialized cleaning of horizontal surfaces, and other lead hazard control activities.*

to deliver in-home lead services. Because the services are offered through the lead centers under specifications of the contract with the state Medicaid organization, the lead centers have the flexibility to hire a range of personnel, such as community health workers, nurses, and certified lead inspectors, to deliver these services.

How well is information shared between these providers and the larger healthcare team?

According to the Rhode Island Department of Human Services (RIDHS), written Medicaid standards require the lead centers to contact associated healthcare providers when providing lead follow-up services. The lead center identifies a specific case manager for each child or family who is responsible for all communication and coordination with the child's primary care provider or treating physician, all treatment providers and community support agencies and the child's health plan, when appropriate. Additionally, the lead center case manager works with RIDHS and RIDOH as necessary. This individual serves as the single point of contact for the child, family, and all providers and agencies.

Are these services improving outcomes for individuals with elevated lead levels? What evidence is there for a return on investment?

Interviewees are not aware of any systematic efforts to measure the effectiveness of lead follow-up services in the state. However, the RIDHS does maintain data on the total number of children served and the costs of these services over time. In recent years, Medicaid has paid for an average of 20 to 25 investigations statewide each year.

Interviewees indicated that there has been consistent support for continuation of this program due to the relatively low total cost of the lead program within the state's overall Medicaid budget and the well-established dangers of lead poisoning. The table on the bottom right from the Rhode Island Executive Office of Health and Human Services displays the total number of Medicaid-enrolled children who received lead follow-up services from the Rhode Island lead centers and the corresponding amount of total Medicaid reimbursement for selected years between 2006 and 2014.

Other Mechanisms for Funding Lead Follow-Up Services, Outside of Medicaid

As noted above, interviewees were not aware of private insurers that reimburse the lead centers for lead follow-up services. RIDOH covers the cost of the services described above for non-Medicaid enrolled children as well as Medicaid-enrolled children when these services are not covered by Medicaid (e.g., CELIs for chidlren identified with BLLs between 15 and 20 µg/dL). Interviewees also were not aware of accountable care organizations (ACOs) or patient-centered medical homes supporting these services.

Barriers to Implementing Lead Follow-Up Services within Medicaid

Interviewees did not note any major barriers, with the exception of considerations that have limited utilization of the window replacement provision (described on page 3).

Future of Medicaid Reimbursement for Lead Follow-Up Services: How Is the State Working to Expand Coverage and Reimbursement?

Interviewees were satisfied with the continued support for Medicaid reimbursement of lead poisoning follow-up services in Rhode Island. The current 1115 demonstration waiver is in place through 2018. They noted the lack of utilization and implementation methods of the window replacement provision described above. RIDOH is currently exploring improvements to the window replacement program, such as a revolving loan fund, in an attempt to increase use. In partnership with the lead centers, RIDOH is also piloting a limited environmental investigation (soil testing only) for children with lower blood lead elevations (BLLs over 10 µg/dL).

Lessons Learned

Interviewees noted that because the contracts and programs are so closely connected with the health department's lead program, most potential changes require action by the state legislature prior to establishing reimbursement by Medicaid. Therefore, they emphasized, it is important to work closely not only with involved agencies, but also legislators to assure support for the policy changes needed to make the reimbursement system possible.

Year	*Payment for Medicaid-enrolled children*	*Case load**
2006	*$88,022*	*105*
2008	*$79,189*	*59*
2010	*$55,287*	*51*
2012	*$33,873*	*36*
2014	*$18,464*	*24*

**Total case load based on RIDOH dashboard*

Endnotes and Sources

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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.

For more information: www.nchh.org/Program/DemystifyingHealthcareFinancing.aspx

Lead Case Study #2
Healthcare Financing for Healthy Homes

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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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