Proposed Changes to Existing Measure for HEDIS®[1] MY 2026: Lead Screening in Children (LSC)

NCQA seeks comments on proposed updates to the *Lead Screening in Children (LSC)* measure, which assesses the percentage of persons 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday. The measure is specified for the Medicaid product line and uses the Administrative and Hybrid reporting methods.

NCQA proposes to remove the Administrative and Hybrid methods and transition to the Electronic Clinical Data Systems (ECDS) reporting method in measurement year (MY) 2026.

Background

The digital transformation of health care, supported by emerging data standards, enables enhanced use of electronic clinical data to create more detailed quality assessments, address clinical outcomes and support care improvement. NCQA aims to transition HEDIS to a fully digital system based on standards-based, interoperable electronic data and digital quality measures by 2030. Several ongoing NCQA efforts support the digital transition of HEDIS. The ECDS reporting method[2] facilitates the use of electronic clinical data from diverse data sources, including administrative claims, EHRs, registries and care management systems. As the quality of clinical data improves and becomes more accessible for quality measurement and care improvement, NCQA is expanding the ECDS reporting standard across HEDIS, phasing out the Hybrid reporting method to reduce the burden of medical record review and facilitate the transition to a fully digital quality measurement system.

NCQA established a multi-year timeline for the phase-out by MY 2029, beginning with the transition of LSC for MY 2026. This plan is informed by stakeholder feedback, feasibility considerations and measure-specific reporting insights.

HEDIS Reporting Analysis

Currently, plans can report LSC using either administrative data or administrative data supplemented with medical record review for a sample of members.

Since 2020, administrative data has accounted for a large percentage of numerator submissions (88.6%–91.2%) among plans using the Hybrid Method. The percentage point difference in average performance rates, with and without inclusion of manual medical record review, has been small (2.48%–3.55%). This suggests there will be minimal impact on performance with removal of the Hybrid method. Transitioning to ECDS reporting will encourage efficient use and exchange of electronic clinical data sources and will better enable the transition to digital quality measures.

Stakeholders support the transition, indicating that lead screening information is highly structured and often identified using administrative data.

NCQA seeks general comments on the proposal to remove the Administrative and Hybrid reporting methods from LSC and transition to ECDS-only reporting.

Supporting documents include the measure specifications, evidence workup and performance data.

NCQA acknowledges the contributions of external stakeholders.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2]https://www.ncqa.org/hedis/the-future-of-hedis/hedis-electronic-clinical-data-system-ecds-reporting/

Measure title	Lead Screening in Children	**Measure ID**	LSC-E
Description	The percentage of persons 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement and rationale	The Centers for Disease Control and Prevention recommends testing blood for lead exposure. Health care providers may use a capillary or venous sample for initial blood lead level screening.		
Citations	Centers for Medicare & Medicaid Services (CMS). (n/d) "Lead Screening." https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/lead-screening/index.html Centers for Disease Control and Prevention (CDC). (n/d) "Recommended Actions Based on Blood Lead Level." https://www.cdc.gov/nceh/lead/advisory/acclpp/actions-blls.htm		
Characteristics			
Scoring	Proportion.		
Type	Process.		
Product line	Medicaid.		
Stratification	None.		
Risk adjustment	None.		
Improvement notation	Increased score indicates improvement.		
Guidance	**Data collection methodology:** ECDS. Refer to *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Which services count?** When using claims, include all paid, suspended, pending and denied claims.		
Initial population	*Measure item count:* Person. *Attribution basis:* Enrollment. • *Benefits:* Medical.		

<table>
<tr><td></td><td>

- *Continuous enrollment:* 365 days prior to the second birthday and the second birthday.
- *Allowable gaps:* No more than one gap of ≤45 days during the continuous period. No gaps on the second birthday.

Ages: 2 years old during the measurement period.

Event: None.
</td></tr>
<tr><td>Denominator exclusions</td><td>

- **Persons with a date of death.**

  Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit.
- **Persons in hospice or using hospice services.**

  Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file.
</td></tr>
<tr><td>Denominator</td><td>The initial population minus denominator exclusions.</td></tr>
<tr><td>Numerator</td><td>Persons with at least one lead capillary or venous blood test.
Lead capillary blood test (Lead Tests Value Set) on or before the person’s second birthday.</td></tr>
<tr><td>Summary of changes</td><td>This is the first year the measure is reported using ECDS.</td></tr>
<tr><td>Data element tables</td><td>Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table LSC-E-1: Data Elements for Lead Screening in Children

Metric	Data Element	Reporting Instructions
LeadScreeningChildren	InitialPopulation	Report once
	Exclusions	Report once
	Denominator	Report once
	Numerator	Report once
	Rate	(Percent)
</td></tr>
</table>

Lead Screening in Children (LSC-E)

Measure Workup

Topic Overview

Importance and Prevalence

In 2020, an estimated 590,000 American children 1–5 years of age had elevated blood lead levels (Jacobs & Brown, 2023). Lead exposure has detrimental health effects on almost all of the body's systems (CDC, 2012; Wani et al., 2015). For developing children, elevated blood lead levels can cause irreversible damage, especially to the nervous system (CDC, 2012). Even low levels of lead exposure can lead to cognitive and behavioral impairment, including poor executive functioning and attention-related behavioral challenges, often contributing to lower academic attainment (Wani et al., 2015).

Young children are particularly vulnerable due to increased lead absorption and the potential for chronic exposure during critical windows of development (CDC, 2012). Severe lead exposure can result in acute neurological symptoms, including seizures and death (WHO, 2024). For children exposed to lead, blood lead level screening enables intervention to prevent long-lasting neurocognitive damage.

Financial importance and cost-effectiveness	Lead screening is a first step in alleviating economic burden by enabling identification of children who are exposed to lead and interventions to protect their health and functioning. Inadequate screening and follow-up has a significant economic impact. One study estimates $192B–$270B in costs from lead exposure per birth cohort (The Pew Center on the States, 2010), likely related to health care, decreased cognitive function, increased special education needs, lower lifetime economic productivity, behavioral challenges and crime (The Pew Center on the States, 2010).

Evidence Supporting Lead Screening in Children Before 24 Months of Age

National guidelines recommend screening children who live in environments that confer a higher risk of lead exposure for blood lead levels before 24 months of age. Guidelines vary slightly in recommended timing and frequency of screening. Table 1 lists current clinical guidelines for lead screening in children.

Screening age	Children 12–24 months.
Screening frequency	The American Academy of Pediatrics (AAP) and the Centers for Disease Control and Prevention (CDC) recommend universal blood lead level testing for children who are enrolled in Medicaid or who live in neighborhoods with higher risk for lead exposure. The CDC recommends testing at 12 months and 24 months of age. The AAP recommends targeted testing between 12 and 24 months of age.
Screening methods	A capillary test (finger prick or heel prick) can determine if a child has lead in their blood. If the results are above 3.5 µg/dL, the CDC recommends following up with a venous blood draw to confirm. If a venous sample was taken during the first screening test, no second confirmation test is needed.

Digital Concept Feasibility

NCQA intends to transition to a fully digital quality measurement portfolio. In preparation, we conducted a digital concept feasibility assessment that is an initial assessment of the measure's intent and clinical

concepts as a digital measure construct. The primary objectives are to determine if the clinical concepts can be defined using a standardized data model and nationally recognized terminologies, and to assess plans' ability to capture and extract the clinical data in a discrete and structured format to meet the measure's intent.

LSC-E has been specified for the ECDS reporting method, and will replace the current LSC measure, which is specified for the Administrative and Hybrid reporting methods. LSC-E aligns with the current measure and includes all the same data elements.

Data and Terminology Standards

NCQA uses the Fast Healthcare Interoperability Resources (FHIR®) as the basis of our digital quality measures. FHIR comprises a set of data elements that facilitate interoperable exchange of electronic health care data. The US Core FHIR Profiles are requirements for implementing FHIR in the United States.

Separately, the Office of the National Coordinator for Health Information Technology (ONC)[1] adopted the United States Core Data for Interoperability (USCDI) as part of the Cures Act Final Rule, which requires certified health IT systems to support USCDI for interoperable health information exchange. ONC's USCDI and FHIR US Core are complementary initiatives, with USCDI defining high-level data requirements and FHIR US Core providing detailed FHIR-based profiles for meeting those requirements. Mapping between them is necessary for achieving interoperability and consistency in health care data exchange in the United States. When creating value sets for each clinical concept, NCQA uses nationally recognized terminologies (e.g., International Classification of Diseases [ICD]-10, Current Procedural Terminology [CPT]) to ensure clinical data are interpreted and represented in the measures in a standardized way.

Digital Concept Feasibility Assessment

The digital feasibility scorecard in Figure A is an assessment for each concept across three primary domains, scored high to low.

- High = Feasible with no concerns.
- Medium = Feasible with some concerns.
- Low = Low feasibility with concerns.

Figure A assesses the digital feasibility of all the clinical concepts used in the measure. As shown, all clinical concepts in the measure, including those used in the hybrid specification, can be modeled in the FHIR data standard.

Figure A. Digital Feasibility Scorecard

Clinical Concept	Data Standards	Data Structured & Available	Terminology Standards
Encounter: Hospice	High	High	High
Intervention: Hospice	High	High	High
Observation: Hospice flag	High	High	High
Disposition: Death	High	High	High
Observation: Lead Test	High	High	High

[1]ONC has been renamed to Office of the Assistant Secretary for Technology Policy and Office of the National Coordinator for Health Information Technology (ASTP/ONC).

Data Sources

Data used for digital measures may come directly from clinical systems, such as EHRs, or from billing and claims data, and are discrete and structured. However, we expect most plans will continue to use administrative claims data to meet LSC-E measure criteria.

Table 1: Guidelines for Lead Screening Using Capillary or Venous Blood Test in Children Before 24 Months of Age

Year	Population	Recommendation	Testing Procedure and Thresholds
US Preventive Services Task Force (USPSTF): Elevated Blood Lead Levels in Children and Pregnant Women: Screening			
2024	NA	USPSTF recognizes the importance of screening and testing for blood lead levels in children and pregnant persons (USPSTF, 2024). However, the USPSTF does not wish to duplicate the investment of resources made by others to review the evidence on this topic and make recommendations. The USPSTF therefore will not update its 2019 recommendation.	USPSTF refers to CDC Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) guidelines (below)
2019 (currently inactive)	Screening not recommended for at any age or risk level (if asymptomatic)	USPSTF concluded that evidence is insufficient to recommend for or against routine screening for elevated blood lead levels in asymptomatic children aged 1 to 5 who are at increased risk (Cantor et al., 2019). (I recommendation). USPSTF recommends against routine screening for elevated blood lead levels in asymptomatic children aged 1 to 5 years who are at average risk (Cantor et al., 2019). (D Recommendation).	NA
Centers For Disease Control and Prevention (CDC) Advisory Committee on Childhood Lead Poisoning Prevention			
2024	Children enrolled in Medicaid at ages 12 and 24 months.(CDC, 2024a)	CDC recommends testing blood for lead exposure (CDC, 2024b). All children enrolled in Medicaid should be screened with a blood lead test twice before age 2—at ages 12 and 24 months, or at ages 36--72 months if they have not previously been screened.	A capillary test can determine a child's blood lead level. If the results are above 3.5 µg/dL, CDC recommends following up with a venous blood draw to confirm. Follow-up actions and care should be provided for children whose results show any quantifiable amount of lead.
American Academy of Pediatrics (AAP)			
2025	• Asymptomatic children: Screening according to federal, local, and state requirements. • Children at high risk of lead poisoning: Targeted screening.	Pediatricians and other primary care providers should test asymptomatic children for elevated blood lead concentrations according to federal, local, and state requirements (AAP, 2025). The following groups should receive targeted testing: • Immigrant, refugee, and internationally adopted children also should be tested for blood lead concentrations when they arrive in the United States • Children 12 to 24 months of age and live in communities or census block groups with ≥25% of housing built before 1960 or a prevalence of children's blood lead concentrations ≥5 µg/dL (≥50 ppb) of ≥5% • Children who live in or visit a home or child care facility with an identified lead hazard or a home built before 1960 that is in poor repair or was renovated in the past 6 months	Testing procedures align with above CDC recommendations. A comprehensive environmental inspection is conducted in the housing units of children who have blood lead concentrations ≥5 µg/dL (≥50 ppb) and that they receive appropriate case management (AAP, 2025).

References

AAP. (2025). *Lead Exposure Policy*. https://www.aap.org/en/patient-care/lead-exposure/lead-exposure-policy/

Cantor, A. G., Hendrickson, R., Blazina, I., Griffin, J., Grusing, S., & McDonagh, M. S. (2019). Screening for Elevated Blood Lead Levels in Childhood and Pregnancy: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA*, *321*(15), 1510–1526. https://doi.org/10.1001/jama.2019.1004

CDC. (2012). *Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention*. https://stacks.cdc.gov/view/cdc/11859

CDC. (2024a, May 29). *Recommended Actions Based on Blood Lead Level*. Childhood Lead Poisoning Prevention. https://www.cdc.gov/lead-prevention/hcp/clinical-guidance/index.html

CDC. (2024b, October 30). *Testing for Lead Poisoning in Children*. Childhood Lead Poisoning Prevention. https://www.cdc.gov/lead-prevention/testing/index.html

Jacobs, D. E., & Brown, M. J. (2023). Childhood Lead Poisoning 1970-2022: Charting Progress and Needed Reforms. *Journal of Public Health Management and Practice*, *29*(2), 230–240. https://doi.org/10.1097/PHH.0000000000001664

The Pew Center on the States. (2010). *Cutting Lead Poisoning and Public Costs*. https://www.pewtrusts.org/~/media/assets/2010/02/22/063_10_paes-costs-of-lead-poisoning-brief_web.pdf

USPSTF. (2024). *Inactive: Elevated Blood Lead Levels in Children and Pregnant Women: Screening*. https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/elevated-blood-lead-levels-in-childhood-and-pregnancy-screening

Wani, A. L., Ara, A., & Usmani, J. A. (2015). Lead toxicity: A review. *Interdisciplinary Toxicology*, *8*(2), 55–64. https://doi.org/10.1515/intox-2015-0009

WHO. (2024). *Lead poisoning*. https://www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health

Lead Screening in Children (LSC)

Reporting and Performance Results Report

February 2025

Background

NCQA is seeking public comment on the recommendation to remove the hybrid and administrative reporting methods of the *Lead Screening in Children (LSC)* measure and transition to reporting via the ECDS reporting method (LSC-E) in measurement year (MY) 2026. To understand the potential impact on reporting, data source use, and performance, NCQA evaluated LSC HEDIS reporting results.

Results

The table and figures below represent reporting and performance results for the LSC measure from MY 2019–MY 2023. Currently, most health plans submit the hybrid version of the measure (Table 1), but among both administrative (Figure 1) and hybrid (Figure 2) submissions, the majority of contributions to the numerator are attributed to administrative data. Additionally, the hybrid lift for the LSC measure has been stable and consistently low for 5 years (Figure 3). The quantitative results below, in combination with the qualitative analysis of the measure, suggest there will be minimal impact on performance with the transition to ECDS reporting.

Table 1. Number of LSC Submissions Using Administrative vs. Hybrid Reporting Method, MY 2021–MY 2023

MY 2021		MY 2022		MY 2023	
Hybrid	Admin	Hybrid	Admin	Hybrid	Admin
132 (70.2)	56 (29.8)	139 (66.5)	70 (33.5)	143 (64.4)	79 (35.6)

Figure 1. Proportion of LSC Numerator From Each Data Source Among Administrative Reporters, MY 2019–MY 2023

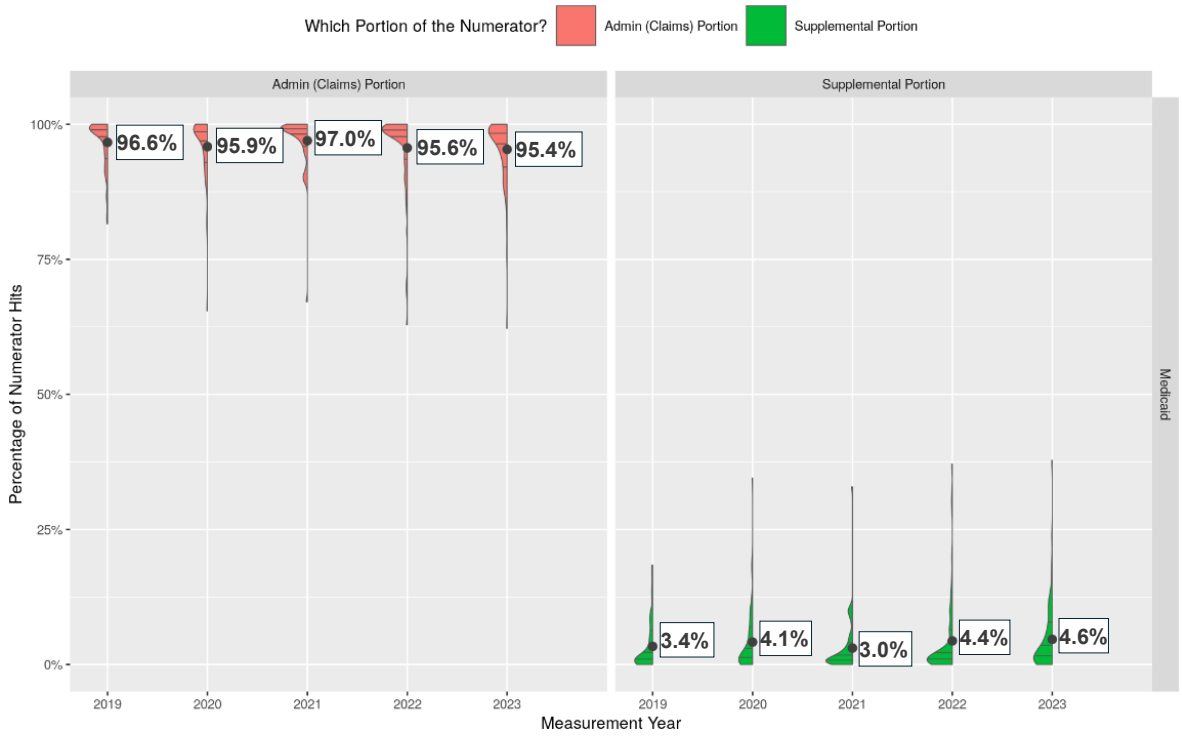

Figure 2. Proportion of LSC Numerator From Each Data Source Among Hybrid Reporters, MY 2019–MY 2023

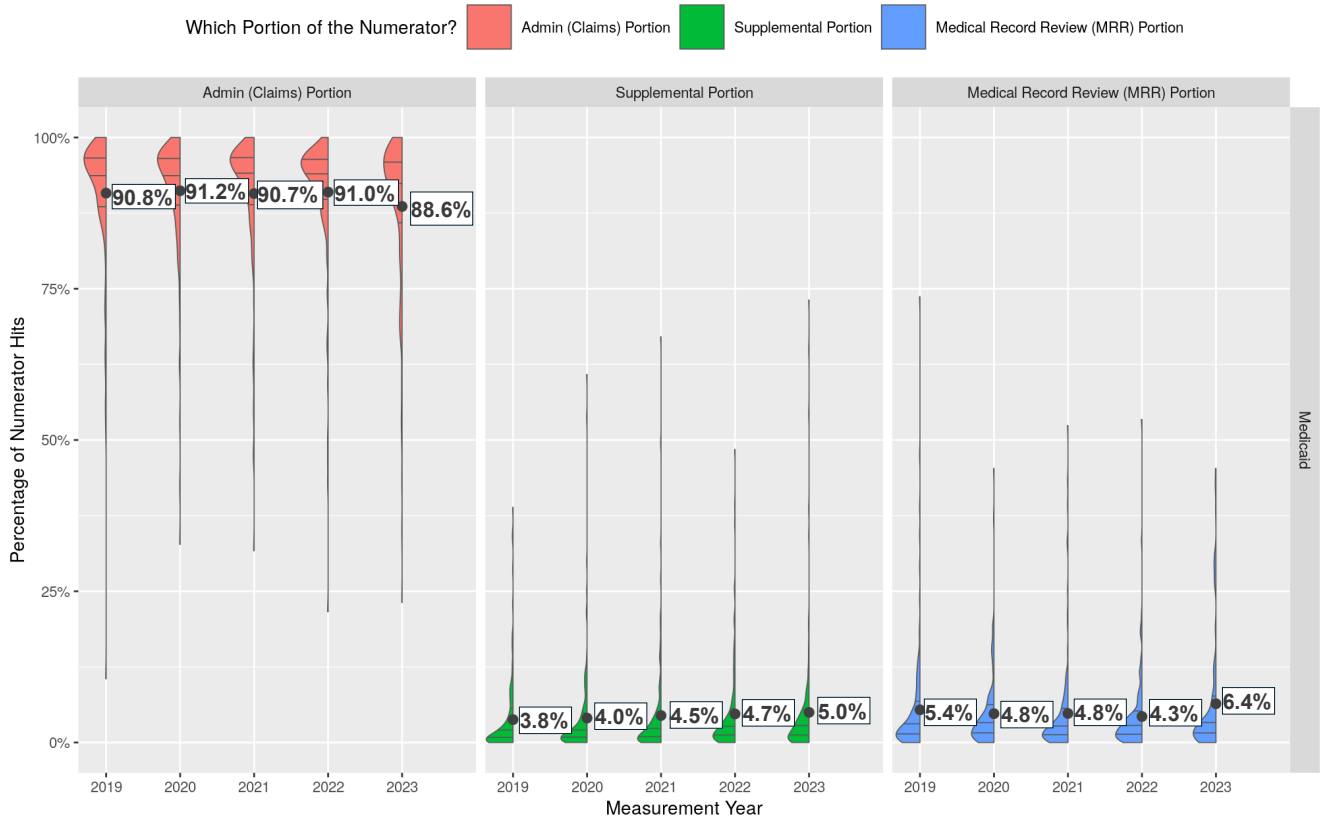

Figure 3. Comparing Performance Rates When Including vs. Excluding Manual Medical Record Review, LSC, MY 2019–MY 2023