DEVELOPMENTAL SCREENING IN VERMONT, BY COUNTY AND SOCIAL DETERMINANTS OF HEALTH, 2023

VCHIP
VERMONT CHILD HEALTH IMPROVEMENT PROGRAM

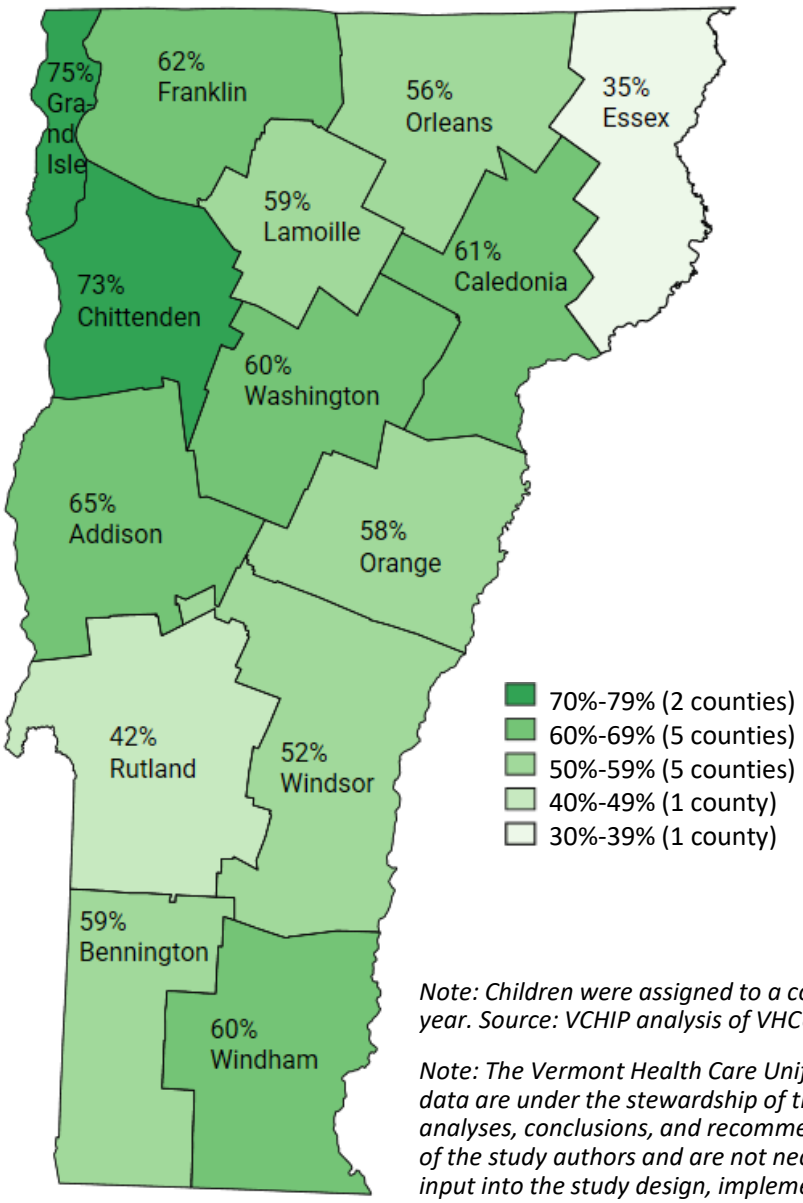
June 2025

Data Brief

Introduction & Data Notes

Developmental screening provides a snapshot across five domains of children's growth and early development during the first three years of life and is used to determine the need for further assessment or connection to developmental supports and resources. We measured the percentage of Vermont children one-to-three years old with at least one developmental screening across two location-based patient characteristics (county and Child Opportunity Index level) in 2023 using the "Developmental Screening in the First Three Years of Life[1]" (DEV-CH) measure (N= 11,116). Our data source was the Vermont Health Care Uniform Reporting and Evaluation System (VHCURES; Vermont's all-payer insurance claims database), and it is estimated to include approximately 75% of the Vermont population.

Figure 1: Percentage of Children with a Developmental Screen Claim by County, 2023



Key Findings

- In 2023, over 60% of all children one-to-three years old had a medical claim for at least one developmental screening.
- Children with a claim for at least one developmental screening were identified in all 14 Vermont counties and ranged from 108 children in Essex county to 2,629 children in Chittenden county.
- Grand Isle (75%) and Chittenden (73%) counties had the highest percentage of children with at least one developmental screening claim in 2023.
- Essex county (35%) had the lowest percentage of children with at least one developmental screening claim in 2023.

Note: Children were assigned to a county based on their first Vermont ZIP code in the year. Source: VCHIP analysis of VHCURES extract #3011

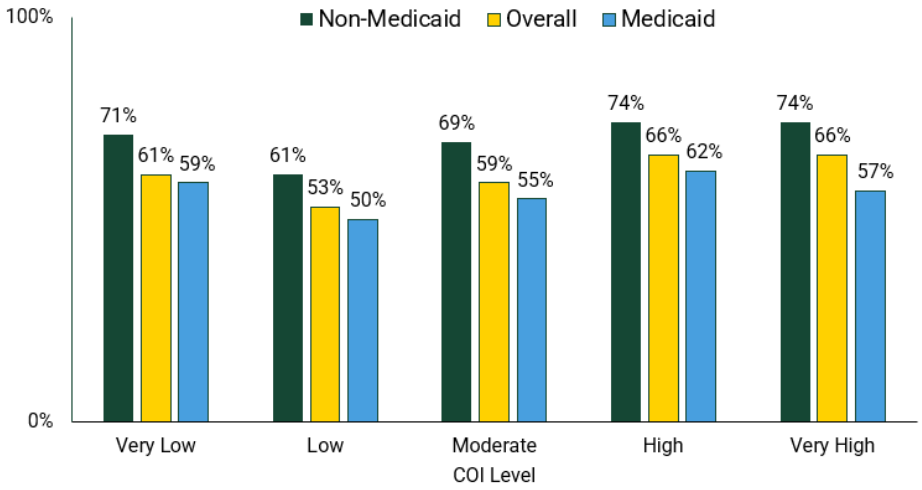
Note: The Vermont Health Care Uniform Reporting and Evaluation System (VHCURES) data are under the stewardship of the Green Mountain Care Board (GMCB). The analyses, conclusions, and recommendations from the VHCURES data are solely those of the study authors and are not necessarily those of the GMCB. The GMCB had no input into the study design, implementation, or interpretation of the findings.

Developmental Screening by Child Opportunity Index Levels

In addition to geographic variability in developmental screening percentages, there may also be variability due to social determinants of health (SDoH). SDoH are the community-level factors which affect the ways individuals experience health and health care. Exploring SDoH allows us to identify inequities and informs us of opportunities for targeted intervention. We used the Child Opportunity Index (COI) 3.0[2], a child-focused, composite, deprivation index based on census tracts to visualize the relationship between SDoH and developmental screening. A lower level of child opportunity indicates the child is more influenced by SDoH that may negatively impact their health and healthcare experiences.

Figure 2:

Percentage of Children with a Claim for At Least One Developmental Screen, by Child Opportunity Index (COI) Level Overall and Insurance Type, 2023



NOTE: Children were assigned a Child Opportunity Index level based on their first Vermont ZIP code in the year.
SOURCE: VCHIP analysis of VHCURES extract #3011

Key Findings

- Each COI level category included over 1,600 one-to-three years old children.
- Overall, children with 'high' and 'very high' opportunity had the greatest percentage (66%) of developmental screening claims, and children with 'low' opportunity had the lowest percentage (53%).
- Medicaid-insured children had lower developmental screening across all COI levels.

Summary

The percentage of one-to-three-year-old children with developmental screening claims in 2023 varied across Vermont counties and COI levels. Investigating the associations between location-based social determinants of health and developmental screening provides important insights and opportunities for future quality improvement efforts.

References

1. Centers for Medicare & Medicaid Services (2025). *Core Set of Children's Health Care Quality Measures for Medicaid and CHIP (Child Core Set)*. Center for Medicaid and CHIP Services. https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-and-chip-child-core-set-manual.pdf
2. Noelke, C., McArdle, N., DeVoe, B., Leonardos, M., Lu, Y., Ressler, R. W., & Acevedo-Garcia, D. (2024). *Child Opportunity Index 3.0 Technical Documentation.* https://www.diversitydatakids.org/research-library/research-report/coi-30-technical-documentation