Study of C.H.I.L.D. G.A.P.S.*

*Children's Health Insurance Lapses and Discontinuities to Gain better Access through Policy Solutions



Jennifer DeVoe Alan Graham Lisa Krois Jeanene Smith



Over 2/3 of Oregon's uninsured children may be eligible for public coverage. (Oregon Population Study, 2004)



Nearly 40% of children enrolled in Oregon's Medicaid/SCHIP programs "churn" on and off the program within one year.

(Fairbrother, et al. "How Stable is Medicaid Coverage?" Health Affairs 2007)

- <u>Study Objective</u>: We surveyed lowincome parents in Oregon to examine the association between children's health insurance coverage gaps of different lengths and parental reports of children's access to healthcare services.
- <u>Study Hypothesis</u>: Longer insurance coverage gaps will be associated with higher unmet need.



Study Design and Data Collection

- Mail-return survey of Oregon's food stamp population.
- Survey instrument adapted validated items from national surveys.
- Cross-sectional, multivariable analysis of primary survey data.

We selected a stratified, random sample of all families with children (age 1-18) enrolled in the food stamp program as of January 31, 2005.







Total Eligible in Random Sample: 8,636

Total Completed Surveys: 2,681 31.0% of Eligible

Study subgroup was demographically similar to the eligible sample and all survey respondents.

Demographics	Eligible Sample (n=8,636)	Survey Respondents (n=2,681)
At Least One Child Enrolled in Public Insurance	50.3%	54.9%
No Children Enrolled in Public Insurance	49.7%	45.1%
Household Monthly Income		
<\$500	30.0%	28.7%
\$501-1,000	25.7%	26.5%
\$1,001-1,500	19.3%	18.2%
\$1,501-2,000	14.5%	15.4%
>\$2,000	10.5%	11.2%
Age		
1 to 4 years of age	26.2%	25.6%
5 to 9 years of age	28.9%	30.2%
10 to 14 years of age	25.4%	26.4%
15 and over	19.6%	17.8%
Race/Ethnicity		
White, non-Hispanic	73.7%	75.6%
Hispanic, any Race	18.5%	17.7%
Non-Hispanic, non-White	7.8%	6.7%

Principal Measures



• KEY INDEPENDENT VARIABLE:

Length of health insurance coverage gap

• OUTCOME VARIABLES:

Unmet medical, prescription and dental needs No usual source of care No doctor visits in past year Delayed urgent care

One in four children in Oregon's food stamp population had a coverage gap within the year.



Children more likely to have coverage gaps of any length:

- Were over age 14
- Were non-white
- Were Hispanic



- Had an uninsured parent
- Were living in households earning zero income or >100% federal poverty level



Access to Healthcare Services in the Past Year	**ADJUSTED ODDS RATIO OR (95% CI)
UNMET MEDICAL CARE NEED	
Health Insurance Coverage Gap: No Gap Gap <6 Months Gap 6-12 Months Gap >12 Months Never Insured DELAYED URGENT CARE	1.00 5.09 (3.38, 7.68) 15.94 (8.18, 31.07) 6.58 (3.63, 11.92) 7.64 (3.89, 15.01)
Health Insurance Coverage Gap: No Gap Gap <6 Months Gap 6-12 Months Gap >12 Months Never Insured	1.00 2.52 (1.58, 4.03) 4.58 (1.95, 10.78) 6.81 (3.43, 13.52) 8.85 (3.52, 22.25)

**multivariable odds ratio adjusted for age, race/ethnicity, household income, parental employment, place of residence, and whether child had a special healthcare need.

Access to Healthcare Services in the Past Year	**ADJUSTED ODDS RATIO OR (95% CI)
UNMET DENTAL CARE NEED	
Health Insurance Coverage Gap: No Gap Gap <6 Months Gap 6-12 Months Gap >12 Months Never Insured UNMET PRESCRIPTION NEED	1.00 2.28 (1.61, 3.21) 5.91 (3.12, 11.19) 6.74 (3.65, 12.44) 12.55 (6.56, 24.00)
Health Insurance Coverage Gap: No Gap Gap <6 Months Gap 6-12 Months Gap >12 Months Never Insured	1.00 2.24 (1.58, 3.20) 3.85 (1.96, 7.58) 4.78 (2.74, 8.33) 3.43 (1.78, 6.63)

**multivariable odds ratio adjusted for age, race/ethnicity, household income, parental employment, place of residence, and whether child had a special healthcare need.

Access to Healthcare Services in the Past Year	**ADJUSTED ODDS RATIO OR (95% CI)
NO DOCTOR VISITS	
Health Insurance Coverage Gap: No Gap Gap <6 Months Gap 6-12 Months Gap >12 Months Never Insured NO USUAL SOURCE OF CARE	1.00 1.35 (0.85, 2.16) 3.64 (1.67, 7.96) 9.18 (4.67, 18.01) 5.00 (2.63, 9.52)
Health Insurance Coverage Gap: No Gap Gap <6 Months Gap 6-12 Months Gap >12 Months Never Insured	1.00 2.51 (1.50, 4.20) 4.68 (2.18, 10.02) 8.48 (4.50, 15.99) 12.91 (6.13, 27.20)

**multivariable odds ratio adjusted for age, race/ethnicity, household income, parental employment, place of residence, and whether child had a special healthcare need.

"I feel it's not right that a family that is trying to make it in life gets knocked back and down...my 10year-old son lost his health insurance because I got a 39 cent raise in pay."

"I've heard that it's hard to find doctors who are accepting new OHP patients. We are generally healthy, so we are risking it."

"I was actually relieved when my husband lost his job because it made my son eligible for coverage again. There is no feeling in the world worse than trying to figure out if you should really take an injured child to the doctor or not because of lack of money."



Study Limitations

- Self-reported data from mail-return survey received from 31% of the eligible sample population.
- Food stamp population may have higher or lower rates of unmet healthcare needs compared with the general low-income population.
- This is a preliminary cross-sectional analysis and associations cannot be proven causal.

Conclusions



High rates of churning, even if coverage gaps are short, may negatively impact access to healthcare for children.

Every effort should be made to minimize barriers to continuous health insurance coverage for children.



ACKNOWLEDGEMENTS

This study was funded by a HRSA grant through the Office for Oregon Health Policy and Research. Jen DeVoe's time was funded by a postdoctoral fellowship and a K08 career development award from the Agency for Healthcare Research and Quality (AHRQ).

Thanks to the Office for Oregon Health Policy and Research, the Oregon Department of Children, Adults and Families, the Oregon Department of Medical Assistance Programs, and the OHSU Department of Family Medicine WORC group (Working On Research Collaboratively).

A special thanks to Bruce Goldberg, Tina Edlund, Jeanene Smith, Janne Boone, Jessica Miller, James Oliver, Rebecca Ramsey and Pooya Naderi, Ron Taylor and Jeff Tharpe.

Demographic Variables	Unmet Medical Need Adjusted OR(95% CI)*	Unmet Prescription Need Adjusted OR(95% CI)*	Unmet Dental Need Adjusted OR(95% CI)*
TO TAL (weighted %)	15.1%	21.2%	24.0%
Gap In Coverage No Gap < 6 Month Gap 6-12 Month Gap >12 Month Gap Never Insured	1.00 5.09 (3.38, 7.68) 15.94 (8.18, 31.07) 6.58 (3.63, 11.92) 7.64 (3.89, 15.01)	1.00 2.24 (1.58, 3.20) 3.85 (1.96, 7.58) 4.78 (2.74, 8.33) 3.43 (1.78, 6.63)	1.00 2.28 (1.61, 3.21) 5.91 (3.12, 11.19) 6.74 (3.65, 12.44) 12.55 (6.56, 24.00)
Child's Age in 2005 1-4 5-9 10-14 15-18	$\begin{array}{c} 1.00\\ 1.03 \; (0.62, 1.69)\\ 1.54 \; (0.94, 2.53)\\ 0.99 \; (0.59, 1.66)\end{array}$	$\begin{array}{c} 1.00\\ 0.90\ (0.61, 1.34)\\ 0.98\ (0.64, 1.50)\\ 1.27\ (0.81, 1.97)\end{array}$	1.00 1.90 (1.27, 2.85) 2.67 (1.76, 4.05) 1.74 (1.08, 2.80)
Race/Ethnicity Categories White Not Hispanic Hispanic, Any Race Non-White, Non-Hispanic	1.00 1.10 (0.64, 1.87) 2.00 (1.09, 3.69)	1.00 0.80 (0.52, 1.22) 0.56 (0.30, 1.08)	$\begin{array}{c} 1.00\\ 0.66 \ (0.43, 1.00)\\ 0.40 \ (0.22, 0.73)\end{array}$
Parental Employment Not Employed Employed	1.00 1.13 (0.79, 1.63)	1.00 1.01 (0.75, 1.37)	1.00 1.08 (0.81, 1.44)
Ge ographic Residen ce Urban Rural	1.00 1.28 (0.90, 1.82)	1.00 1.11 (0.83, 1.49)	1.00 1.41 (1.06, 1.87)
Household Income as a percent of Federal Poverty Level (FPL) Zero Income 1-50% FPL 51-100% FPL 101-133% FPL >133% FPL	$\begin{array}{c} 1.00\\ 0.89\ (0.46,1.73)\\ 0.67\ (0.34,1.31)\\ 1.35\ (0.68,2.68)\\ 1.06\ (0.49,2.33)\end{array}$	1.00 1.70 (0.98, 2.97) 1.60 (0.91, 2.82) 2.41 (1.32, 4.39) 2.41 (1.28, 4.56)	1.00 1.15 (0.97, 1.97) 1.23 (0.71, 2.12) 1.89 (1.05, 3.42) 1.42 (0.72, 2.79)
Special Health care Need No Yes	1.00 3.36 (2.05, 5.50)	1.00 2.28 (1.54, 3.39)	1.00 2.36 (1.58, 3.54)