



# **RESEARCH BRIEF #59**

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### **Consistent SNAP Participation Increases Preventative Health Care Visits for Infants**

## Colleen Heflin, Irma Arteaga, Julia Stafford

Food insecurity in families with children has increased dramatically during the coronavirus (COVID-19) pandemic. Two in five households with children reported being food insecure in 2020, and one in five households reported that their children were experiencing food insecurity.<sup>1,2</sup> At the same time, preventative health care visits have decreased during the pandemic as well as over a longer period of time. Children are attending fewer well-child visits and not getting their recommended vaccinations.<sup>3</sup>

Well-child visits are important for child health—especially in the first year of life—but they are underused in the United States among children on Medicaid.<sup>4.5</sup> Skipping preventative care is associated with negative health outcomes, particularly if children are not given their routine immunizations at wellchild visits.<sup>6</sup>

#### **KEY FINDINGS**

- Each additional month of SNAP participation in an infant's first year of life increases the likelihood that they will receive the recommended number of well-child visits.
- Infants in households that receive unstable SNAP benefits have a lower likelihood of attending all their well-child visits and receiving routine immunizations.
- SNAP is more highly correlated with infant preventative care for infants living in urban areas, and those with Black or Hispanic mothers.
- Policymakers should consider interventions to simplify the SNAP recertification process and increase the stability of SNAP participation to help mothers and their infants access preventative health care and immunizations.

Food insecurity is linked to poorer child

health directly, such as if they do not have enough to eat or their families choose less nutritious but cheaper foods. Food insecurity can also affect children's health indirectly—for example, if their caregivers prioritize immediate food needs over preventative care visits.<sup>7,8</sup>

Participation in the Supplemental Nutrition Assistance Program (SNAP)—the largest federal food assistance program with the specific goal of reducing household food insecurity—supports child

health. $^{9,10}$  However, some families on SNAP do not see the full health benefits because of inconsistent and interrupted participation in the program. $^{11}$ 

This brief summarizes findings from our recently published paper, <u>Giving Kids a Boost: The Positive</u> <u>Relationship between Frequency of SNAP Participation and Infant's Preventative Health Care</u> <u>Utilization</u>, which examines the connection between SNAP participation and preventative care in an infant's first year of life. Our study covered 51,551 first-born children of low-income mothers, ages 18 and older, who participated in SNAP and Medicaid in the state of Missouri between 2006 and 2014. We tracked the children's participation in SNAP, the number of well-child visits they attended, and immunizations received in the twelve months after birth. We also examined SNAP participation dynamics, distinguishing between households that were consistently receiving SNAP benefits, those who received no benefits, and those who moved on and off SNAP over the course of the year.

# More Time on SNAP Increases Likelihood of Receiving Well-Child Visits and Immunizations

The American Academy of Pediatrics recommends that infants receive five or more well-child visits in their first year of life, <sup>14</sup> but only 50% of the infants in our sample met this recommendation. Our study found that SNAP participation was associated with an increase in well-child visits.

Although the effect is small on a monthly basis, it increases over multiple months. An increase of 10 months of SNAP participation is associated with a 4% increase in infants attending five or more well-child visits during their first 12 months. We also found that compared to families who consistently receive SNAP benefits, those who do not participate in SNAP at all are 3% less likely to attend the recommended number of well-child visits. While these effect sizes may seem small, increasing well-child visits among the Medicaid population has been challenging, and SNAP is working indirectly (instead of paying money women to complete five well-child visits, for example).

Through this connection to preventative care, SNAP participation also influences whether infants will receive their childhood vaccinations, which most children receive at well-child visits.

#### Infants in Families with Unstable SNAP Participation Are Less Likely to Receive All of the Recommended Preventative Care

Our findings suggest that SNAP participation consistency may be a better indicator of infants' access to preventative care than the total number of months that a family receives SNAP benefits. When families with infants receive inconsistent or interrupted SNAP benefits, they are more likely to miss well-child visits. Families who receive SNAP benefits inconsistently or leave the program during an infant's first year are 10% less likely to attend the recommended number of well-child visits.

Instability in SNAP participation may be due to difficulty completing the SNAP recertification process. Other families may leave SNAP because of an income increase that makes them ineligible for assistance but creates new work responsibilities that make it difficult to attend well-child visits.

As shown in Figure 1, we also found that children of Black and Hispanic mothers with unstable SNAP participation had an even lower likelihood of receiving all five well-child visits. For example, Hispanic infants who moved off SNAP or onto SNAP in their first year of life had a 12.4 and 10.8 lower predicted probability of receiving five or more well-child visits compared to those who consistently

remained on SNAP. The same is true of infants in urban areas in Missouri, as compared to rural areas. These results suggest a need for targeted policies focusing on these vulnerable populations.

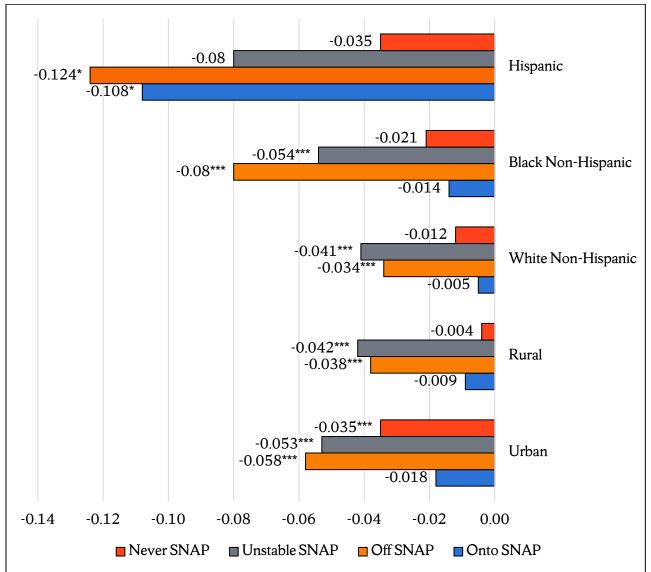


Figure 1. Change in the Predicted Probability of Receiving Five or More Well-Child Visits in the Year after Birth by SNAP Participation Pattern, Geography, and Mother's Race and Ethnicity (Regression Adjusted)

Data Source: Authors' analysis of Missouri administrative data for SNAP and Medicaid, 2006-2014. We used probit models and report average marginal effects.

\*\*\*p<0.001, \*\*p<0.01, \*p<0.05 indicates statistically different from reference category (always SNAP).

#### Policymakers Should Target Interventions to Help Families Increase SNAP Stability and Support Infant Health

Given the long-term health benefits associated with well-child visits and immunizations, our study emphasizes the population health benefits of stable and consistent SNAP participation. Policymakers should consider interventions to simplify the SNAP recertification process and increase the stability of

SNAP participation to help mothers and their infants access preventative health care and immunizations.

Recent policy actions are already increasing the value of SNAP benefits. During the COVID-19 public health emergency, the U.S. Department of Agriculture temporarily gave states the ability to modify SNAP recertification processes. These policies and investments are particularly timely, as food insecurity has spiked, and preventative health care has declined. Policymakers should consider making these changes permanent, since continued and increased infrastructure investment in this area will further support child health and well-being.

#### **Data and Methods**

This study analyzed administrative data containing SNAP participation linked to Medicaid claims data from Missouri's Department of Social Services (Family Support Division) for the period of January 2006 to July 2014. The sample was limited to first-born children of low-income mothers aged 18 and older who participated in SNAP and Medicaid (51,551 infants). We constructed a binary indicator of whether a child receives at least five well-child visits in the year after birth, using the International Classification of Disease, Ninth Revision (ICD-9) diagnosis code V202. To track immunizations, we focused on hepatitis B; diphtheria, tetanus, & acellular pertussis; and haemophilus influenza type B. We used multivariate regression to analyze the relationship between SNAP dynamics and well-child visits and immunizations. For additional information on the methodology, see the published study, <u>Giving Kids a Boost: The Positive Relationship between Frequency of SNAP Participation and Infant's Preventative Health Care Utilization</u>.

#### References

- 1. Bauer, L. (2020). About 14 million of children in the US are not getting enough to eat. Up Front, Brookings. https://www.brookings.edu/blog/up-front/2020/07/09/about-14-million-children-in-the-us-are-not-getting-enough-to-eat/
- 2. Schanzenbach, D., & Pitts, A. (2020). Food insecurity in the census household pulse survey data tables. Institute for Policy Research, 1-15.
- Murphy, B. P., Zell, E., Kirtland, K., Jones-Jack, N., Harris, L., Sprague, C., Schultz, J., Le, Q., Bramer, C. A., Kuramoto, S., Cheng, I., Woinarowicz, M., Robison, S., McHugh, A., Schauer, S., & Gibbs-Scharf, L. (2021). Impact of the COVI-19 Pandemic on Administration of Selected Routine Childhood and Adolescent Vaccinations - 10 U.S. Jurisdictions, March-September 2020. Morbidity and Mortality Weekly Report. Centers for Disease Conrol and Prevention.

https://www.cdc.gov/mmwr/volumes/70/wr/pdfs/mm7023a2-H.pdf

- 4. Ortega, A. N., McKenna, R. M., Chen, J., Alcalá, H. E., Langellier, B. A., & Roby, D. H. (2018). Insurance coverage and well-child visits improved for youth under the Affordable Care Act, but Latino youth still lag behind. Academic Pediatrics, 18(1), 35-42.
- 5. Medicaid. (2020). Well-visits in the first 15 months of life. <u>https://www.medicaid.gov/state-overviews/scorecard/well-child-visits-first-15-months-of-life/index.html</u>
- 6. Tom, J. O., Tseng, C.-W., Davis, J., Solomon, C., Zhou, C., & Mangione-Smith, R. (2010). Missed well-child care visits, low continuity of care, and risk of ambulatory care-sensitive hospitalizations in young children. Archives of Pediatrics & Adolescent Medicine, 164(11), 1052-1058.
- 7. Gundersen, C., & Ziliak, J. P. (2015). Food insecurity and health outcomes. Health Affairs, 34(11), 1830-1839.
- 8. Thomas, M. M., Miller, D. P., & Morrissey, T. W. (2019). Food insecurity and child health. *Pediatrics*, 144(4), e20190397.

- 9. Cook, J. T., Frank, D. A., Berkowitz, C., Black, M. M., Casey, P. H., Cutts, D. B., Meyers, A. F., Zaldivar, N., Skalicky, A., & Levenson, S. (2004). Food insecurity is associated with adverse health outcomes among human infants and toddlers. *The Journal of Nutrition*, 134(6), 1432-1438.
- 10. Kreider, B., Pepper, J. V., Gundersen, C., & Jolliffe, D. (2012). Identifying the effects of SNAP (Food Stamps) on child health outcomes when participation is endogenous and misreported. *Journal of the American Statistical Association*, 107(499), 958-975.
- 11. Mills, G., Vericker, T., Koball, H., Lippold, K., Wheaton, L., & Elkin, S. (2014). Understanding the Rates, Causes, and Costs of Churning in the Supplemental Nutrition Assistance Program (SNAP). United States Department of Agriculture, Food and Nutrition Service, Office of Policy Support. <u>https://fnsprod.azureedge.net/sites/default/files/ops/SNAPChurning.pdf</u>
- 12. Heflin, C., Hodges, L., & Ojinnaka, C. (2020). Administrative Churn in SNAP and Health Care Utilization Patterns. *Medical Care*, 58(1), 33-37.
- Ribar, D. C., & Edelhoch, M. (2008). Earnings volatility and the reasons for leaving the food stamp program. Income Volatility and Food Assistance in the United States. Kalamazoo, MI: WE Upjohn Institute for Employment Research, 63-102.
- 14. American Academy of Pediatrics. (2018, October 26). AAP Schedule of Well-Child Care Visits. https://www.healthychildren.org/English/family-life/health-management/Pages/Well-Child-Care-A-Check-Up-for-Success.aspx
- 15. Chen, E., Martin, A. D., & Matthews, K. A. (2006). Understanding health disparities: The role of race and socioeconomic status in children's health. *American Journal of Public Health*, 96(4), 702-708.
- 16. Williams, D.R., & Sternthal, M. (2010). Understanding racial-ethnic disparities in health: sociological contributions. Journal of Health and Social Behavior, 51(1\_suppli), S15-S27.
- 17. Flanagan, B. E., Hallisey, E.J., Adams, E., & Lavery, A. (2018). Measuring community vulnerability to natural and anthropogenic hazards: the Centers for Disease Control and Prevention's Social Vulnerability Index. Journal of Environmental Health, 80(10), 34.
- 18. Health Resources and Services Administration. (2015, April). The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation, 2011-2012. <u>https://mchb.hrsa.gov/sites/default/files/mchb/Data/NSCH/nsch11-12-health-well-child-rural-apr2015.pdf</u>

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#### About the Author

**Colleen Heflin** (<u>cmheflin@syr.edu</u>) is a Professor of Public Administration and International Affairs, Faculty Affiliate in the Center for Policy Research, Aging Studies Institute, and Lerner Center for Public Health Promotion, and Senior Research Associate in the Center for Policy Research in the Maxwell School of Citizenship and Public Affairs at Syracuse University (SU). **Irma Arteaga** (<u>arteagai@missouri.edu</u>) is an Associate Professor at the Truman School of Public Affairs, University of Missouri. **Julia Stafford** (<u>jdstaffo@syr.edu</u>) is an MPA candidate and Graduate Research Assistant at the Maxwell School at SU.

Lerner Center for Public Health and Promotion 426 Eggers Hall Syracuse, New York 13244 syracuse.edu | lernercenter.syr.edu To access all brief, visit: https://surface.syr.edu/lerner/

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