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RESEARCH BRIEF
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Food Assistance May Help Families Prevent Emergency Department Visits for Child Asthma

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KEY FINDINGS

- Higher SNAP benefits are associated with fewer asthma-related emergency department visits.
- Trade-offs between the ability to eat and breathe may be tied to monthly pay cycles.
- SNAP dollars may free up money in poor households to cover health care costs, such as asthma medications.

Childhood asthma is the most common chronic childhood health condition in the United States, affecting nearly one in 10 children under the age of 18.[1] Asthma-related healthcare costs in the U.S. exceeded $56 billion in 2017, which makes effective disease management a significant concern.[2] Poverty is a risk factor for asthma, and there is increasing evidence that food insecurity—a lack of consistent access to sufficient food—also increases asthma risk.[1] Anecdotal and descriptive evidence has led to the claim that some low-income households may face a "eat or breathe" tradeoff.

Our study[3] examined food assistance and child asthma-related emergency department (ED) visits in Missouri. We investigated patterns in emergency care for childhood asthma among households that are covered by Medicaid and participated in the Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps. We found that children in households with higher SNAP benefits had fewer asthma-related emergency room visits. Our finding imply that having more SNAP dollars in the family budget may actually free up other money to spend on necessities like asthma medications.

Childhood Asthma and SNAP

Childhood asthma is a leading cause of ED visits for children under the age of 15 (amounting to more than 3 in 100 visits in 2015).[4] Prior studies have found that children who are covered by Medicaid (health insurance for certain low-income people) are more likely to visit the emergency room and more likely to be hospitalized for asthma compared to children not covered by Medicaid.[5] In 2010, Medicaid costs for emergency room visits for child asthma exceeded $272 million.[2]

The Supplemental Nutrition Assistance Program (SNAP) is a federal program that provides monthly food assistance in the form of a voucher for food. A major goal of SNAP is reducing household food insecurity, reaching approximately 9.2 million households with children, nearly one quarter of all U.S. households with children under age 18.[6]

The basic rules for SNAP eligibility and dollar benefits amounts are set at the federal level by the United States Department of Agriculture (USDA), but states implement the program at the state or county level (e.g., application process, re-certification period, payment schedule). According to federal eligibility criteria, households must have an income below 130 percent of the federal poverty line (FPL) before taxes or deductions, or be eligible

through participation in a program for low-income families, such as Temporary Assistance for Needy Families (TANF), in order to qualify for SNAP. In 2015, the USDA estimated that 83 percent of all eligible individuals participated in SNAP.[8]

Over two-thirds of children in households receiving SNAP are school aged (age 5 to 17) and the vast majority (82.5 percent) have gross household incomes below 100 percent of the poverty line.[9] Nearly half of all U.S. children reside in a household that receives SNAP at some point during their childhood.[9]

Higher SNAP Benefits are Related to Fewer Asthma-Related ED Visits

In our study, we linked Missouri's Medicaid claims data to monthly SNAP participation data from 2010 to 2013. We found clear evidence that higher SNAP benefits were associated with fewer asthma-related ED visits. For example, a $100 increase in SNAP benefits from $175 to $275 decreases the likelihood of asthma-related ED visits by about 784 per 100,000 children. This suggests that higher levels of dedicated funds for food provide positive spillover effects on health by freeing up household resources for other needs, such as asthma medication. However, the *timing* of SNAP benefits receipt was not strongly associated with the timing of asthma-related ED visits. Instead, it appears that this population may be more affected by calendar month cycles with asthma flare ups peaking at the beginning of each month when bills like rent are due.

What does this mean for policy?

This study provides additional support for the positive relationship between food assistance and child health. As policymakers consider reducing SNAP benefits, it is important to understand how SNAP contributes to family well-being by not only increasing resources for food, but also by freeing up resources to manage chronic health conditions such as asthma.

Data

We used SNAP data from the Missouri Department of Social Services (Family Support Division) for January 2010 to December 2013, which are linked to Medicaid claims data for emergency department visits during that same time-period. We used International Classification of Disease, Ninth Revisions (ICD-9) diagnosis codes to indicate ED care for an asthma related condition (ICD-9 codes). For more details on methodology, the full study can be found at Heflin et al. (2019).[3]

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