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JOURNAL articles

McGovern C.M., Arcoeo K., and B Melnyx, *COPE for asthma: Outcomes of a cognitive behavioral intervention for children with asthma and anxiety*, School Psychology, 2019 Nov;34(6):665-676. [doi: 10.1037/spq0000310](https://doi.org/10.1037/spq0000310).

Asthma is the most common childhood chronic condition and a major contributor to school absences and lost instructional time. Children with asthma have a higher risk of internalizing disorders, such as anxiety and depression, which can further complicate asthma management. The purpose of this pilot study was to assess the feasibility, acceptability, and preliminary effects of a manualized, cognitive-behavioral skills-building intervention for children with asthma and anxiety. The design for this study was a one-group, pre/posttest preexperimental with a 6-week follow-up. This article presents the immediate posttest follow-up results. Children between 8 and 12 years of age and their caregivers were recruited from three elementary schools in a large public school district in Ohio. Thirty-two children with asthma and symptoms of anxiety completed the Creating Opportunities for Personal Empowerment (COPE) for Asthma program. Caregivers completed surveys, but they did not participate in the intervention. Results indicated that the program was feasible to implement in small groups during the school day. Self-reported findings indicated a significant reduction in separation anxiety and increased personal beliefs,

child-management self-efficacy, and asthma illness representations. Parents and caregivers reported symptom reduction in their children on the Pediatric Symptom Checklist. The subgroup of children scoring high on anxiety at baseline showed reductions with the intervention, having large positive effect sizes for separation and social anxiety as well as medium and large positive effect sizes on the personal beliefs and asthma illness representations, respectively.

Merrick M.T., et al., *Vital Signs: Estimated Proportion of Adult Health Problems Attributable to Adverse Childhood Experiences and Implications for Prevention - 25 States, 2015-2017*, MMWR Morbidity and Mortality Weekly Report, 2019 Nov 8;68(44):999-1005. [doi: 10.15585/mmwr.mm6844e1](https://doi.org/10.15585/mmwr.mm6844e1).

INTRODUCTION: Adverse childhood experiences, such as violence victimization, substance misuse in the household, or witnessing intimate partner violence, have been linked to leading causes of adult morbidity and mortality. Therefore, reducing adverse childhood experiences is critical to avoiding multiple negative health and socioeconomic outcomes in adulthood.

METHODS: Behavioral Risk Factor Surveillance System data were collected from 25 states that included state-added adverse childhood experience items during 2015-2017. Outcomes were self-reported status for coronary heart disease, stroke, asthma, chronic obstructive pulmonary disease, cancer (excluding skin cancer), kidney disease, diabetes, depression, overweight or obesity, current smoking, heavy drinking, less than high school completion, unemployment, and lack of health insurance. Logistic regression modeling adjusting for age group, race/ethnicity, and sex was used to calculate population attributable fractions representing the potential reduction in outcomes associated with preventing adverse childhood experiences. **RESULTS:**

Nearly one in six adults in the study population (15.6%) reported four or more types of adverse childhood experiences. Adverse childhood experiences were significantly associated with poorer health outcomes, health risk behaviors, and socioeconomic challenges. Potential percentage reductions in the number of observed cases as indicated by population attributable fractions ranged from 1.7% for overweight or obesity to 23.9% for heavy drinking, 27.0% for chronic obstructive pulmonary disease, and 44.1% for depression. **CONCLUSIONS AND**

IMPLICATIONS FOR PUBLIC HEALTH PRACTICE: Efforts that prevent adverse childhood experiences could also potentially prevent adult chronic conditions, depression, health risk behaviors, and negative socioeconomic outcomes. States can use comprehensive public health approaches derived from the best available evidence to prevent childhood adversity before it begins. By creating the conditions for healthy communities and focusing on primary prevention, it is possible to reduce risk for adverse childhood experiences while also mitigating consequences for those already affected by these experiences.

Wen, H, et al., *Medicaid Expansion Associated With Reductions In Preventable Hospitalizations*, Health Affairs, 2019 Nov, 38(11). [doi: 10.1377/hlthaff.2019.00483](https://doi.org/10.1377/hlthaff.2019.00483)

Hospitalizations for ambulatory care–sensitive conditions indicate barriers to care outside of inpatient settings. We found that Medicaid expansions under the Affordable Care Act were

associated with meaningful reductions in these hospitalizations, which suggests the potential of Medicaid expansions to reduce the need for preventable hospitalizations in vulnerable populations and produce cost savings for the US health care system.

Feldman J.M., et al., *The Adaptive Effect of Illness-Specific Panic-Fear on Asthma Outcomes in Mexican and Puerto Rican Children*, Journal of Pediatrics, 2019 Nov;214:178-186. doi: [10.1016/j.jpeds.2019.06.003](https://doi.org/10.1016/j.jpeds.2019.06.003).

OBJECTIVE: To examine baseline measures of illness-specific panic-fear (ie, the level of anxiety experienced specifically during asthma exacerbations) as a protective factor in pediatric asthma outcomes over a 1-year period. **STUDY DESIGN:** The sample comprised 267 children (Mexican, n = 188; Puerto Rican, n = 79; age 5-12 years) from a longitudinal observational study conducted in Phoenix, AZ and Bronx, NY. Assessments were done at baseline and 3, 6, 9, and 12 months. The Childhood Asthma Symptom Checklist was administered at baseline to children and caregivers to assess children's illness-specific panic-fear. Asthma outcome variables quantified longitudinally included pulmonary function, the Asthma Control Test, acute healthcare utilization, and medication adherence, measured by devices attached to inhaled corticosteroids. **RESULTS:** Child report of illness-specific panic-fear at baseline predicted higher forced expiratory volume in 1 second (FEV1) % across 1-year follow-up in Mexican children ($\beta = 0.17$, $P = .02$), better asthma control in Puerto Rican children ($\beta = 0.45$, $P = .007$), and less acute healthcare utilization for asthma in both groups (Mexicans: $\beta = -0.39$, $P = .03$; Puerto Ricans: $\beta = -0.47$, $P = .02$). Caregiver report of child panic-fear predicted higher FEV1% in Mexican ($\beta = 0.30$; $P = .02$) and Puerto Rican ($\beta = 0.19$; $P = .05$) children. Panic-fear was not related to medication adherence. **CONCLUSIONS:** Illness-specific panic-fear had beneficial effects on asthma outcomes in both groups of Latino children. The heightened vigilance associated with illness-specific panic-fear may lead children to be more aware of their asthma symptoms and lead to better strategies for asthma management.

Figgat M., et al., *Chronic Disease Surveillance Using Electronic Health Records From Health Centers in a Large Urban Setting*, Journal of Public Health Management and Practice, 2019 Oct 31. doi: [10.1097/PHH.0000000000001097](https://doi.org/10.1097/PHH.0000000000001097).

OBJECTIVES: To assess the validity of electronic health records (EHRs) from a network of health centers for chronic disease surveillance among an underserved population in an urban setting. **DESIGN:** EHRs from a network of health centers were used to calculate the prevalence of chronic disease among adult and child patient populations during 2016. Two population-based surveys with local estimates of chronic disease prevalence were compared with the EHR prevalences. **SETTING:** A network of health centers that provides health care services to an underserved population in a large urban setting. **PARTICIPANTS:** A total of 187 292 patients who had at least 1 health care visit recorded in the Philadelphia health center network. **MAIN OUTCOME MEASURE:** Chronic disease indicator (CDI) prevalence of adult obesity, adult smoking, adult diabetes, adult hypertension, child obesity, and child asthma. Health center CDI

proportions were compared with survey estimates. RESULTS: Overall consistency between the health center estimates and surveys varied by CDI. With the exception of childhood obesity, all health center CDI proportions fell within the 95% CI for at least 1 comparison survey estimate. Statistically significant differences were observed and varied by CDI. CONCLUSIONS: This analysis presents a novel use of existing EHR data to estimate chronic disease prevalence among underserved populations. With the increased use of EHRs in health centers, data from health center networks may supplement chronic disease surveillance efforts, if used appropriately.

Hanson C., et al., *Associations of Prenatal Dietary Inflammatory Potential with Childhood Respiratory Outcomes in Project Viva*, *Journal of Allergy and Clinical Immunology Practice*, 2019 Oct 30. pii: S2213-2198(19)30899-2. doi: [10.1016/j.jaip.2019.10.010](https://doi.org/10.1016/j.jaip.2019.10.010).

BACKGROUND: Inflammation during pregnancy may be a factor in the developmental programming of asthma and wheeze in childhood. OBJECTIVE: To examine associations of inflammatory potential of prenatal diet with respiratory outcomes in early and mid-childhood. METHODS: Among 1,424 mother-child pairs in Project Viva, a pre-birth cohort, we examined associations of Dietary Inflammatory Index (DIIreg) (1st trimester, 2nd trimester, and average of 1st and 2nd trimester) scores in relation to: ever asthma and wheezing in the past year (early childhood and mid-childhood); current asthma and lung function (mid-childhood), and wheeze trajectory during 1-9 years. We used multivariable linear and logistic regression modeling, adjusting for relevant confounders. RESULTS: In a fully adjusted analysis, a more pro-inflammatory diet was associated with an early vs. never wheeze trajectory (1st and 2nd trimester average 4th vs. 1st quartile: OR=1.89, 95% CI: 1.14, 3.13). A more pro-inflammatory diet during pregnancy also was associated with lower forced expiratory flow (FEF25-75) in mid-childhood (1st and 2nd trimester average 4th vs. 1st quartile: β -132 ml, 95% CI: -249, -14). Results were evident for 1st, but not 2nd, trimester DII and wheeze trajectory and mid-childhood FEF25-75. Other child respiratory outcomes, including ever asthma, were not related to any DII measure during pregnancy. CONCLUSION: Pro-inflammatory diet during pregnancy is associated with wheeze trajectory during early childhood and decrements in small airways caliber in mid-childhood, but not other respiratory outcomes in the offspring.

Dragan K.L., Gould Ellen I., and S.A. Glied, *Gentrification and the Health of Low-Income Children in New York City*, *Health Affairs*, 2019 Sept, 38(9). doi: [10.1377/hlthaff.2018.05422](https://doi.org/10.1377/hlthaff.2018.05422).

Although the pace of gentrification has accelerated in cities across the US, little is known about the health consequences of growing up in gentrifying neighborhoods. We used New York State Medicaid claims data to track a cohort of low-income children born in the period 2006–08 for the nine years between January 2009 and December 2017. We compared the 2017 health outcomes of children who started out in low-income neighborhoods that gentrified in the period 2009–15 with those of children who started out in other low-income neighborhoods, controlling for individual child demographic characteristics, baseline neighborhood characteristics, and

preexisting trends in neighborhood socioeconomic status. Our findings suggest that the experience of gentrification has no effects on children's health system use or diagnoses of asthma or obesity, when children are assessed at ages 9–11, but that it is associated with moderate increases in diagnoses of anxiety or depression—which are concentrated among children living in market-rate housing.

In the NEWS

Padilla M. and N. Vigdor, [Laurel Griggs, Broadway Actress, Dies at 13 After Asthma Attack, Family Says](#), The New York Times, 2019 Nov 10.

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Chatterjee R., [CDC: Childhood Trauma Is A Public Health Issue And We Can Do More To Prevent It](#), NPR, 2019 Nov 5.

Jones R., [UNM participated in national study on asthma in African American children](#), The University of New Mexico Health Sciences Newsroom, 2019 Oct 31.

Roberts M., [Asthma carbon footprint 'as big as eating meat'](#), BBC News, 2019 Oct 30.