



Children's National

The Impact of Your Philanthropy

IMPACT DC | December 2022

Children's National Hospital remains deeply committed to children and teens challenged by asthma in the Washington, D.C. region. Support from the community to IMPACT DC makes a difference for hundreds of families and allows their kids to grow up stronger. Kids frequently miss school days when they lack evidence-based education on how to manage their asthma and preventative care. They end up in the emergency room or even hospitalized. Parents often miss work caring for their sick child. Asthma affects the entire family.

IMPACT DC provides hope. It pioneers interventions and solutions that make living with this chronic condition easier. Together, we are tackling an illness that disproportionately affects children in Washington, D.C.'s neighborhoods and communities that experience a lack of resources. We present this update on IMPACT DC's work over the last year with sincere appreciation.



Daniel Felten, M.D. provides care to a patient at new Goldberg Center at Shepherd Park

Meeting the Needs of Children and Families in Washington, D.C.

New Clinical Site at Shepherd Park

The IMPACT DC Asthma Clinic continues to thrive with the addition of a new location at the Diana L. and Stephen A. Goldberg Center for Community Pediatric Health at Shepherd Park. Our new site provides quality care for children and families from Washington, D.C. and Maryland. It provides inclusive services with clinicians who speak both English and Spanish. They now offer Friday appointments, which is important for hardworking families. Since April 2022, IMPACT DC has provided care to dozens of new patients at the site.



Diana L. and Stephen A. Goldberg Center for Community Pediatric Health at Shepherd Park

Caregiver Depression Screening

A recent Children's National-led study shows a potential correlation between a caregiver's mental state, such as depressive symptoms, and their child's morbidity. IMPACT DC's postdoctoral researcher, Rachel Margolis, Ph.D., successfully implemented a depression screening tool to ensure that caregiver mental health is a regular component of clinical care. Questionnaire scores determine the appropriate resources for IMPACT DC families. These resources may be informational sheets or in-person crisis intervention meetings. Whatever the need, IMPACT DC will continue to support patient families to improve health outcomes.



Rachel Margolis, Ph.D.



Welcoming Andrea, Our First Asthma Navigator

This year, we welcomed Andrea Williams as our first asthma navigator. She works closely with the IMPACT DC clinical team to identify and address families' needs. Her role is to pinpoint social barriers for our patient population and close gaps in care.

Since February, Ms. Williams has met with dozens of families. She guided their initial clinic visits and introduced them to appropriate community resources such as utilities assistance, healthy housing and access to healthy food. Ms. Williams has also conducted site visits with IMPACT DC community partners to strengthen existing relationships. Finally, she has developed an inpatient recruitment pilot program set to launch in 2023. The program aims to provide real-time health education and connection to the IMPACT DC model for inpatients. Ms. Williams will continue to discover new ways to support our patient population and address their care needs beyond our clinic walls.

Asthma Educator Spotlight: Amari McDuffie

Amari and her family's involvement with IMPACT DC began about 15 years ago. For nearly a year, Amari attended monthly research study visits that required spending the day at Children's National. She participated in many events such as the Asthma Walk and holiday celebrations held by IMPACT DC. Amari's severe asthma diagnosis led to multiple Pediatric Intensive Care Unit admissions throughout each year, but Amari persevered. This sparked a curiosity about medicine; there was no surprise when she grew up to pursue a career in healthcare.

Amari pursued her undergraduate studies at Pennsylvania State University and obtained a Master of Public Health degree at George Washington University. This set the stage for her dream's fulfillment.

Amari joined the IMPACT DC clinical team in 2021 as an asthma educator. She is an inspiration to our patients and team as an example of how children with asthma can grow up to pursue lives and careers with no limits. Amari also serves as the IMPACT DC severe asthma clinic coordinator and hopes to become a pediatric pulmonologist.



A young Amari with family



"Growing up in Southeast D.C., I always said that I would never let my environment dictate my future. Being a part of IMPACT DC as a child, I now realize that my environment actually inspired my future. Asthma has affected my life in many ways, and now I have decided to make sure it has a positive effect."

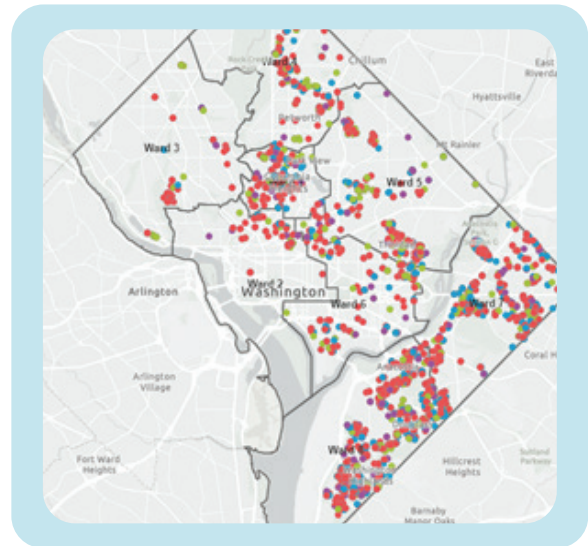
— Amari McDuffie

The Healthy Housing Map

IMPACT DC successfully collaborated with Children's Law Center and Yachad (a D.C.-based home remediation organization) to develop an interactive Healthy Housing Map. It identifies multi-family buildings in Washington, D.C., that pose structural risks that can make pediatric asthma worse.

This "precision public health tool" enables us to identify where substandard housing is impacting the health and welfare of children living with asthma. The map uses data from Children's National, Children's Law Center, the DC Department of Consumer and Regulatory Affairs and other public agencies.

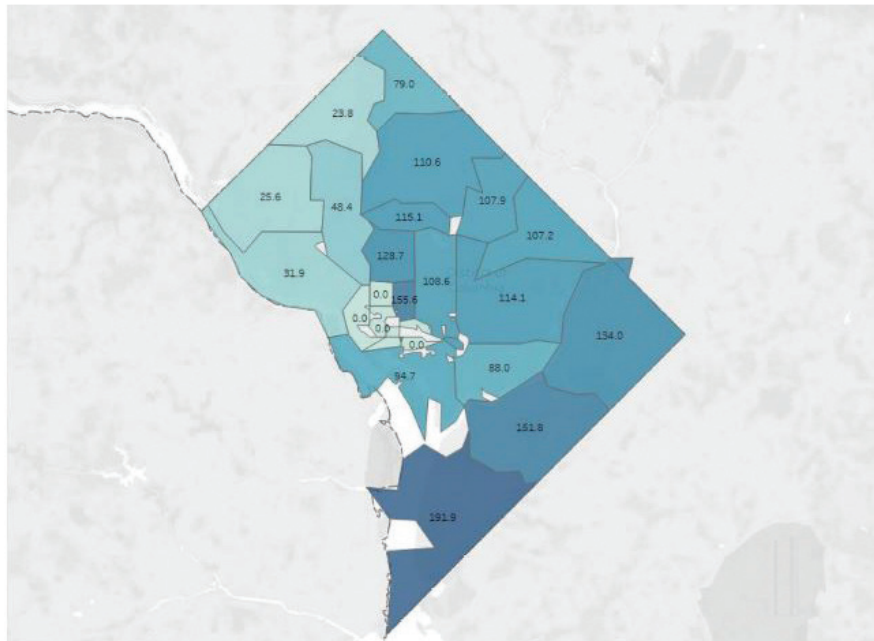
In 2023, the collaborative will engage with multi-sector stakeholders to plan a healthy housing remediation project. It will take place at one of the high-risk multifamily properties identified via the Healthy Housing Map.



Innovations through Research

DC Pediatric Asthma Registry

IMPACT DC is developing a novel, population-health pediatric Asthma Registry with multi-year funding from the DC Department of Health. The registry uses electronic medical records to identify more than 16,000 Washington, D.C., children living with asthma. The registry is a one-of-a-kind population health tool. It enables IMPACT DC to view real-time trends for more than 90% of children with asthma in the city. These include demographic, healthcare utilization patterns and gaps in care. The IMPACT DC team validated this powerful tool in an academic publication, “Creation and Validation of a Citywide Pediatric Asthma Registry for the District of Columbia,” published in the Journal of Asthma.



At-risk rates of emergency department visits in 2020 by District residents, ages 0–17 years by zip code (visits per 1,000 residents with asthma).

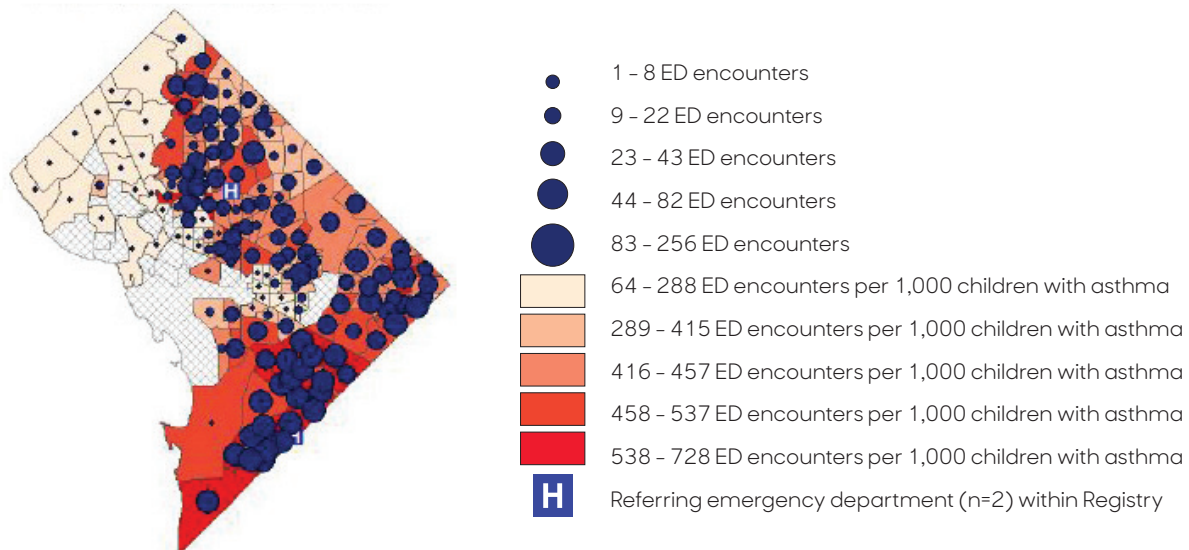
The Role of Social Determinants of Health in Shaping Asthma Morbidity

IMPACT DC fuels the work of Jordan Tyris, M.D., a hospital-based pediatrician at Children's National who cares for inpatients with asthma. Dr. Tyris and IMPACT DC collaborated to study the contribution of place-based social determinants of health (SDOH) to pediatric asthma morbidity. These determinants can include violence, low education or underemployment. The study – published in the prestigious national medical journal *Pediatrics* – used geospatial analysis on data from the DC Pediatric Asthma Registry and the Healthy People 2030 SDOH framework. It found that decreased educational attainment was significantly associated with at-risk rates for emergency department visits. This highlights the need for place-based interventions. It also addresses SDOH as an opportunity to reduce asthma morbidity among children with asthma.



Dr. Tyris successfully applied to the NIH for a prestigious K12 mentored career development grant. This three-year award will sustain her work on the association between highly localized adverse social determinants of health.

Emergency department (ED) encounters





A Clinical Trial Shows Promising Results

Stephen Teach, M.D., M.P.H., who leads the hospital's Department of Pediatrics and the IMPACT DC research team, guides multiple investigations into therapies for asthma. Among the most promising is Mepolizumab Adjunctive Therapy for the Prevention of Asthma Exacerbations in Urban Children (MUPPITS-2). The project is an NIH-funded clinical trial conducted at nine urban medical centers in the U.S. Children and adolescents, ages 6–17 years who live in under-resourced urban neighborhoods, participated in the study. The randomized trial compared mepolizumab (a biologic therapy that targets interleukin-5) injections once every four weeks for 52 weeks with a placebo. Children's National randomized 43 of the 290 subjects – the highest of any participating site. MUPPITS-2 found that therapy with mepolizumab reduced asthma flareups. The study – published in the prestigious journal *Lancet* – confirmed that this approach is a viable alternative for care for this at-risk population.

Asthma and Depression

IMPACT DC conducted a secondary analysis of data from Dr. Teach's BEAMS trial funded by the Patient-Centered Outcomes Research Institute (PCORI). Dr. Margolis examined the relationships among stressful life events (SLE), caregiver depression and asthma symptom free days (SFDs) in publicly insured Black children aged 4–12 years with persistent asthma. The study – published in the *Journal of Asthma* – found that caregiver depression negatively associates with child SFDs while aggregate SLE does not. A recent family accident or illness negatively associates with child SFDs, but only when the caregiver is depressed. These results highlight the need for healthcare providers to screen for caregiver depression in all clinical encounters with children living with asthma.

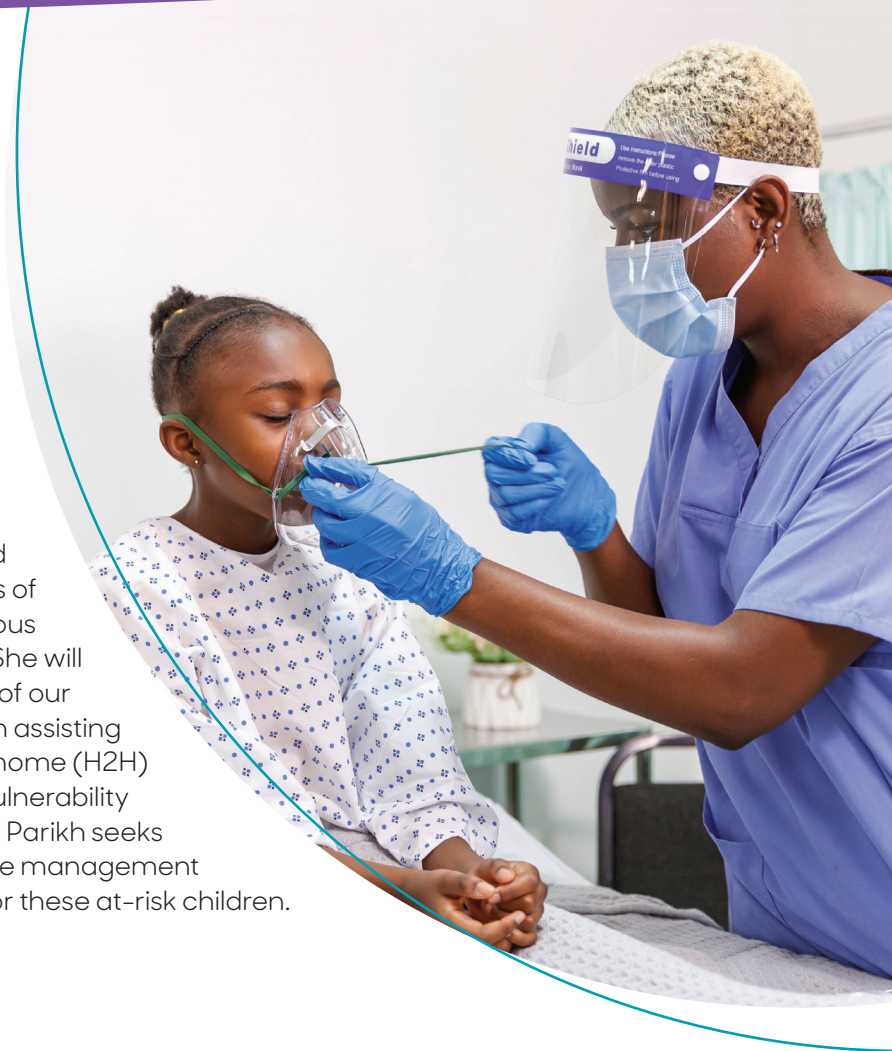


Investigating the Value of Our New Asthma Navigator Position



Kavita Parikh, M.D.

Kavita Parikh, M.D., is a hospital-based pediatrician at Children's National, providing care for inpatients living with asthma. Dr. Parikh generated the pilot data and successfully applied to National Institutes of Health for a prestigious five-year R01 grant. She will study the significance of our new Asthma Navigator in assisting families with the hospital to home (H2H) transition. This is a period of great vulnerability for families experiencing a lack of resources. Dr. Parikh seeks to demonstrate that modest investments in case management services can improve the care and outcomes for these at-risk children.



Our Gratitude

Community health remains central to our vision for the future. Because of our donors, children with asthma in the Washington, D.C. region have access to care that helps them grow up stronger. Thank you for helping us create a healthier city through your support of IMPACT DC's clinical, advocacy, research and education goals.

"We are deeply grateful for your support. It allows us to care for hundreds of kids struggling with asthma while advancing our missions in advocacy and research."

— Dr. Stephen Teach

