

Racial Disparities in Childhood Vaccination Rates

Neal Hayhurst¹, Meagan O'Neill²

¹Indiana University School of Medicine; ²Indiana University School of Medicine, Department of Pediatrics

Background: Despite the high efficacy and safety of routine vaccinations, most of the United States is currently falling well short of the Healthy People 2020 goals for childhood vaccination rates. A large racial disparity exists within the IU Health (IUH) system, with about a 26% difference between Black/African American (BAA) and white patient vaccination rates as of 2022. Within IUH, the most commonly missed appointment is the 4-month well child check, a critical appointment for staying up to date on vaccinations. In response to this disparity, a pilot program was launched to assist BAA patients in scheduling, attending visits, and getting vaccinated. This study also investigates the roles of insurance, race, ethnicity, and gender in racial disparities of routine vaccination rates among IU Health pediatric patients at the Riley Pediatric Care Center (PCC).

Project Methods: A cohort of patients at the PCC clinic who were not meeting vaccination recommendations were compared to the PCC patient population as a whole to identify drivers of under-vaccination. These patients were also compared to patients within the pilot vaccination program to assess program efficacy in scheduling and attending 4-month well child checks.

Results: The largest differences between the cohort not meeting the vaccination measure and the PCC patient population were race and insurance status. Patients not meeting vaccination recommendations were more likely to be BAA and to use Medicaid. The pilot program patient population had much higher rates of attendance at 4-month well child checks and vaccination rates for rotavirus among BAA patients than the IUH BAA patient population as a whole.

Conclusions: The data from this study will help identify drivers of racial disparities in vaccination rates and guide data-driven and community-informed interventions to ameliorate the disparity. The pilot program has shown great success and warrants strong consideration for increased investment and expansion.