Elias Mihan

M.P.H. Candidate, Health Policy Track elias.r.mihan@vanderbilt.edu

Practicum Site: GoCheckKids

Practicum Site Supervisors: Thomas Spain M.D., M.P.H.

Increasing Photoscreening Access for Kids: Strategies and Data Analysis on Medicaid Reimbursement on Photoscreening Use

Introduction: Vision disorders remain prevalent in the United



States and globally, affecting approximately 6.8% of all children in the U.S. Underdiagnosed and untreated conditions, such as amblyopia, can lead to learning disabilities and, in severe cases, blindness, with nearly 3% of children under 18 in the U.S. diagnosed as blind or visually impaired. Photoscreening offers a safe and effective method for early detection of common vision disorders. As of 2023, Medicaid reimburses pediatricians for photoscreening in 22 states, with recent policy changes in West Virginia, Michigan, and Nevada. This study aimed to see whether Medicaid reimbursement changes would significantly change the amount of photoscreening usage by state.

Methods: A difference-in-differences analysis was conducted to assess the impact of Medicaid reimbursement on the use of GoCheck Kids photoscreening devices in West Virginia, Michigan, and Nevada post-policy intervention. Device use rates by state were adjusted for the number of pediatricians per 100,000 children and compared to states with similar pre-intervention trends.

Results: The analysis found no statistically significant change in device use following the introduction of Medicaid reimbursement in West Virginia (P = .413, 95% CI [-.203, .477]), Michigan (P = .059, 95% CI [-.362, .007]), and Nevada (P = .42, 95% CI [-.271, .410]) compared to control states.

Conclusions: Increasing the use of photoscreening by pediatricians remains an important public health goal to decrease the incidence of vision impairment and blindness in U.S. children. Medicaid reimbursement for photoscreening is a potential policy lever to increase utilization. These findings suggest that Medicaid reimbursement alone may not increase photoscreening use. Increasing awareness among pediatricians about the Medicaid reimbursement policy changes in their state could increase the utilization of photoscreening. Additional years of data and analyses from other states implementing similar policies may be necessary to determine the full effect of Medicaid reimbursement on photoscreening use because adoption of new healthcare services takes time.