

## Impact of Dental Visit Vaccination on Patterns of Primary Care Utilization in Federally Qualified Health Centers

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**Background:** Medical-dental Integration (MDI) is an emerging platform designed to bolster vaccination rates among children. With successes in other non-traditional vaccination settings including retail pharmacies and schools, the MDI model was tested in the setting of a large, integrated, safety-net healthcare system, serving predominantly publicly insured and uninsured populations in Denver, Colorado. This novel study found an 8.6% increased likelihood of receiving a dose of the human papillomavirus (HPV) vaccine in the setting of MDI utilization. Still, the question remains if administering vaccines outside of the medical home will impact primary care utilization.

**Objective:** To characterize patterns of primary care utilization before and after receipt of a vaccination with an oral health provider at a federally qualified health center (FQHC) in Denver, CO.

**Methods:** We conducted a retrospective cohort study of patients ages 9-17 who had at least one dental visit and were eligible to receive an HPV vaccine between June 1, 2022 and May 31, 2023. Primary care utilization patterns were analyzed between June 1, 2021 and May 31, 2024.

Chi square models were used to compare sociodemographic components and primary care utilization patterns among patients who received or declined HPV vaccination at a dental visit.  $p < 0.05$  was statistically significant.

**Results:** Among the 1694 eligible patients during the intervention period, 375 same-day HPV vaccines were administered. Most eligible patients were under 12 years of age (69.5%), identified as Hispanic (59.4%), and were insured by Medicaid (78.3%). Patients who received a vaccine were more likely to be male ( $p=0.0087$ ), identified as Hispanic ( $p < 0.0001$ ), Spanish speakers ( $p=0.0019$ ), and born outside of the United States ( $p=0.0117$ ). Almost half of the patients did not have a well child visit in the year prior to or the year following the intervention (43.7% and 46.6%, respectively) (Table 2). There were no significant differences in primary care utilization between patients who received an HPV vaccination at a dental visit and those who declined.

**Conclusions:** This study explored whether receipt of an HPV vaccination via MDI in a FQHC had adverse effects on primary care utilization. Notably, there was no difference in primary care utilization among patients who received HPV vaccination at an oral health appointment compared to those who declined vaccination. This study demonstrates that medical-dental integration is a viable option for increasing vaccination rates without concern for detriment to primary care utilization.