

## **Increasing Human Papillomavirus Vaccination Rates Among Early Adolescents with Low Socioeconomic Status**

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**Background:** Almost 43,000 people in the United States have an HPV-associated cancer each year, with cancers in varying sites including the oropharynx, vulva, vagina, cervix, penis and anus. A majority of these cancers can be prevented through the 9-valent human papillomavirus (HPV) vaccination and studies have shown the efficacy and safety of this vaccine. Unfortunately, the rates of HPV series completion in the United States is only 49%. In Nebraska, 71% of males and females ages 13-17 have received one or more doses of the HPV vaccination; however, only about 58% are up-to-date on their vaccination status.

**Methods:** The goal of our study was to analyze the HPV vaccination rate of vaccine eligible patients between the ages of 9-15 years attending a community Children's Physician Pediatrics Clinic in Omaha, Nebraska and assess missed opportunities (MO) before and after intervention. After an initial lunch and learn education session about HPV vaccination, two provider focused interventions were used to increase vaccinations. The methods were: 1) have students review daily schedules to avoid missed opportunities for vaccinations, and 2) send a series of 6 emails with HPV information to providers.

**Results:** The data showed an increase of immunization rates during intervention periods as compared to data from the year before, with a further increase during the second intervention compared to the first. The conclusion of the study is that provider-focused interventions can significantly improve HPV vaccination rates and reduce missed opportunities.