Missed Opportunities for HPV Vaccination: Supporting Providers Can Help

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Human Papilloma Virus (HPV) is a common sexually transmitted disease that can cause cervical and other cancers as well as genital warts. Approximately 14 million people are infected with HPV each year in the United States, and 26,000 new cases of HPV-related cancer are diagnosed each year. An effective 3-dose vaccine series is now widely available and has been approved for use in boys and girls as young as 9. However, rates of HPV vaccination in adolescents remain lower than for other vaccines, with only 38% of girls and 14% of boys receiving the 3 doses that are needed for full protection.

One major reason adolescents are not vaccinated is that they frequently have "missed opportunities," or times when adolescents who are due for the HPV vaccine come to their doctor's office for care but don't receive the vaccine. Missed opportunities are very common – a recent report by the Centers for Disease Control and Prevention found that in 2013, over 80% of unvaccinated 13-year old girls had a missed opportunity for HPV vaccination. This report estimated that if these missed opportunities had not occurred, more than 90% of girls would have received at least the first dose of the HPV vaccine. Missed opportunities happen for several reasons. Providers may not recommend the vaccine strongly enough to patients, and parents may choose to not vaccinate their children or wait to vaccinate until an older age. Also, adolescents often don't attend regular check-ups, and only come to the doctor when they are sick. Even when patients are sick, they can receive the HPV vaccine. Unfortunately, missed opportunities for vaccination are particularly common at sick visits.

Our research team at PolicyLab studied the effect of supporting primary care providers in recommending the HPV vaccine to patients through education, electronic medical record (EMR) vaccine alerts, and feedback on missed opportunities. The study, published in the American Journal of Preventive Medicine, was a new analysis from a large clinical trial that studied the effect of supporting providers, families, or both on HPV vaccination. In the new study, we found that missed opportunities for adolescent girls decreased when their doctors received this support, particularly for the first dose of the vaccine and at sick visits. Supporting families through reminder phone calls about the vaccine did not have an effect on missed opportunities.

Our research provides a potential solution to significantly improve the percentage of vaccinated girls. If doctors, particularly primary care providers, are provided with education, EMR alerts, and feedback on missed opportunities, then vaccination rates will increase. And if vaccination rates increase, then cervical cancer rates

will decline. We hope that we are within reach of a day where tens of thousands of women will not get cervical cancer because they received the HPV vaccine when they were younger.

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