

# Updated Analysis of Public Policy Decisions and Factors Driving HPV Vaccination Coverage in the United States, 2023

The HPV Cancer Prevention Program at St. Jude Children’s Research Hospital partnered with FTI Consulting to examine public policy decisions and other factors that drive human papillomavirus (HPV) vaccination coverage across the United States. The analysis examined the relation between HPV vaccination initiation and series completion with regard to nine factors. Using CDC data and peer-reviewed literature, FTI Consulting performed a cost savings analysis that projected that the increased HPV vaccination series initiation and reduced HPV cancer incidence that would result from addressing four of these factors could reduce national direct health care spending by nearly \$19 million. In addition, the increased HPV vaccination series completion and reduced HPV cancer incidence could reduce the two-year national direct health care spending by more than \$24 million (Figure 1).

## POLICY RECOMMENDATIONS

Using the results of the quantitative analysis along with insights from interviews and focus groups, FTI Consulting developed five policy recommendations to improve HPV vaccination coverage.

### Recommendation 1: Leverage meningococcal conjugate vaccination as a model for HPV vaccination education and recommendations

Coverage for meningococcal conjugate vaccination had the strongest positive relationship with HPV vaccine initiation and series completion. Research shows that adolescents who receive at least one other childhood vaccine are most likely to initiate HPV vaccination. Policies should educate and empower health care providers to recommend HPV vaccination as strongly as they recommend the meningococcal conjugate vaccine. In contrast, health systems and payors should consider incentivizing providers to close the gap between HPV vaccination and meningococcal conjugate vaccination coverage.

**FIGURE 1** Total National Cost Savings from HPV Vaccine Initiation and HPV Vaccine Series Completion

Factor	Cost Savings (Initiation)	Cost Savings (Completion)
1% increase in meningococcal conjugate vaccine uptake	\$12,777,258	\$15,091,745
Medicaid expansion in the 12 non-expansion states	\$5,909,184	\$8,292,278
Access to one additional VFC provider (per 100,000 children)	\$142,569	\$205,615
Access to one additional pediatrician (per 100,000 children)	\$146,390	\$218,272
<b>Total</b>	<b>\$18,975,401</b>	<b>\$24,444,910</b>

\*At the time of the cost-savings analysis, 12 states had not yet expanded Medicaid.



**Recommendation 2: Expand health care provider and practice staff education and training related to HPV vaccination and strengthen HPV vaccination recommendations for parents and caregivers**

Parents with a college education had the second-highest positive impact on HPV vaccination initiation and series completion. Qualitative research participants confirm that the decision of parents or caregivers to vaccinate their children largely depends on a recommendation from their children’s health care provider. Participants stressed the need for consistent messaging at the national and local levels about HPV vaccination as cancer prevention. Cancer prevention partners should expand existing provider training and educational programs. These programs can help providers to share the value of HPV vaccination as cancer prevention. They can also address educational gaps among parents, caregivers, and patients at every point of care.

**Recommendation 3: Improve efforts to recruit and enroll various types of health care providers in the federal Vaccines for Children (VFC) program**

The analysis found that access to VFC providers was positively and significantly correlated with HPV vaccination uptake. Policymakers and state-level decision-makers should establish incentives to boost provider VFC participation. Furthermore, taking lessons learned from the COVID-19 pandemic, interview participants suggested recruiting pharmacists and dental health providers to increase HPV vaccination access for those living in rural areas and for those with lower incomes.

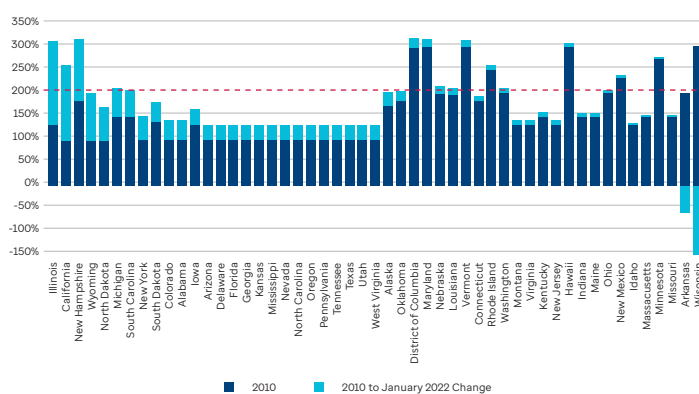
**Recommendation 4: Expand the resources available to improve HPV vaccination data collection and reporting through state immunization information systems (IISs)**

Data collection and reporting through state IISs has a significant impact on the measurement and evaluation of targeted interventions and the investment of resources to increase HPV vaccination coverage. However, HPV data collection has been inconsistent, resulting in incomplete reporting. Interview and focus group participants agreed that standardized, comparable (cross-jurisdiction) data visualizations would improve HPV vaccination series completion. State and federal officials should consider establishing reliable and standardized data collection procedures and increasing funding to improve IIS capacity and infrastructure.

**Recommendation 5: Engage in efforts to preserve and expand eligibility for Medicaid**

The analysis found that the eligibility levels for Medicaid among children/adolescents aged 6 to 18 years correlates positively and significantly with HPV vaccination coverage. Partners, advocates, and policymakers should encourage the 32 states that have eligibility levels below 200% of the Federal Poverty Level (FPL) (Figure 2) to take advantage of the opportunities related to increasing coverage. In addition, partners should consider how advocating for Medicaid expansion in the ten non-expansion states could further improve access to primary care and preventive services, including vaccination, for adults and their children.

**FIGURE 2** Change in Medicaid Eligibility for Children 6–18 Years of Age, 2010 to January 2022



**CONCLUSION**

HPV vaccination is cancer prevention. Increasing HPV vaccination coverage will reduce the incidence of HPV cancers. Increasing HPV vaccination coverage will save millions of dollars for our nation’s health care system. To realize the full potential and promise of the HPV vaccine, we must pursue policy change to address systemic barriers to HPV vaccination coverage in the United States.



**HPV Cancer Prevention Program**



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