Assessing HPV Vaccine Uptake and Access Barriers Among Young Adults Enrolled in Post-Secondary Educaton in Oregon: Recommendations for Targeted Outreach

Human papillomavirus (HPV) remains one of the most common sexually transmitted infection in the United States and a leading cause of cervical, anal, oropharyngeal, and other cancers (Office on Women's Health, 2025). Despite being highly preventable through vaccination, HPV continues to cause over 37,000 cancer diagnoses annually (National Cancer Institute, 2025). While an effective vaccine exists, public health efforts have largely focused on children and adolescents through programs like the federally funded Vaccines for Children (VFC) initiative (Centers for Disease Control and Prevention [CDC], 2024). Young adults aged 18 to 26, particularly college students, often find themselves without comparable access or outreach. This group faces mounting barriers to vaccination, including financial constraints, limited healthcare access, and the competing demands of academic life. This period also represents a pivotal stage in an individual's life, often characterized by leaving the family home and beginning the process of independent identity formation. At this stage, individuals are more likely to prioritize immediate concerns over long-term health risks. The Knight Cancer Institute's Mobile Outreach program, a statewide initiative to reduce cancer disparities through community-based prevention, aims to address these gaps by bringing HPV vaccination directly to underserved populations. Our capstone project supported these efforts by identifying key challenges and opportunities to improve vaccine uptake among Oregon college students.

Methods

This study utilized a qualitative and descriptive methodology. Semi-structured interviews (n = 6) were conducted with campus health staff across Oregon's public colleges and universities to understand institutional barriers and facilitators. A self-selected, anonymous student survey (n = 13) was also distributed to assess vaccination status, awareness, and attitudes. Although survey participation was limited, interview data provided rich and consistent insights. Thematic analysis guided data interpretation and informed our final recommendations.

Findings

Due to the limited number of student survey responses, the primary research relied predominantly on interviews with health center staff, revealing key themes around awareness, access, and institutional capacity. Most campuses had minimal structured HPV outreach, often limited to clinic visits and constrained by staffing and incomplete vaccination records.

Vaccine availability varied. Some clinics maintained on-site stock, while others had discontinued offering the vaccine due to high costs and low demand. Financial sustainability, rather than physical capacity, was the primary challenge, highlighting the need for external support or just-in-time vaccine delivery. Many institutions lacked the billing infrastructure or insurance support to offer the vaccine affordably. As a result, students were frequently referred to off-site providers, adding another layer of complexity and delay.

Additional barriers included stigma, logistical issues, and vaccine hesitancy. International students and healthcare program participants showed higher vaccination rates, supported by insurance coverage or institutional requirements. Larger universities typically had better resources and systems for on-site

vaccination, while smaller and rural schools faced greater limitations, such as reduced staff capacity, fewer bilingual outreach efforts, and discontinued services.

An important additional finding was that many community colleges and smaller institutions lacked on-campus health centers entirely. These schools relied on referrals to off-site clinics not associated with the college, which further limited access and created equity gaps.

Despite these challenges, there was strong interest among institutional stakeholders in external partnerships—including mobile outreach and pop-up clinics—as promising ways to expand access and improve vaccine equity across campus populations.

Recommendations

Based on findings from both primary and secondary research, the following strategies are recommended to enhance HPV vaccination outreach among young adults in Oregon:

Support OHP Enrollment During Outreach Events. Embed Oregon Health Plan (OHP) eligibility screening and enrollment assistance into mobile outreach efforts to reduce financial and administrative barriers for uninsured or underinsured students.

Target Rural and Community Colleges. Prioritize mobile outreach to rural campuses and community colleges where clinics often lack vaccine stock, billing capacity, or public health staffing—and where interest in collaboration is already present.

Increase Awareness of On-Campus Vaccine Access. Partner with student health centers to clarify what services are offered, what's covered by student plans, and how students can access low- or no-cost vaccines through programs like the 317 Fund.

Establish Cost-Sharing and Pop-Up Clinic Partnerships. Work with local health departments and immunization programs to deploy pop-up clinics and supply loaner stock—reducing the burden on campuses unable to store or purchase HPV vaccines on their own.

Leverage Peer-Led and Digital Strategies. Amplify HPV education and reduce stigma through peer ambassador programs, culturally relevant social media campaigns, and student-centered messaging that emphasizes cancer prevention and series completion.

Conclusion

Improving HPV vaccine access for young adults in Oregon's higher education system will require a combination of strategic outreach, financial support, and institutional partnerships. While student survey participation was limited, findings from interviews yielded consistent themes that informed practical, scalable recommendations. By addressing barriers related to cost, awareness, and delivery, programs like the Knight Cancer Mobile Outreach initiative can play a pivotal role in reducing disparities, expanding access, and advancing long-term cancer prevention goals across diverse college communities.

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