

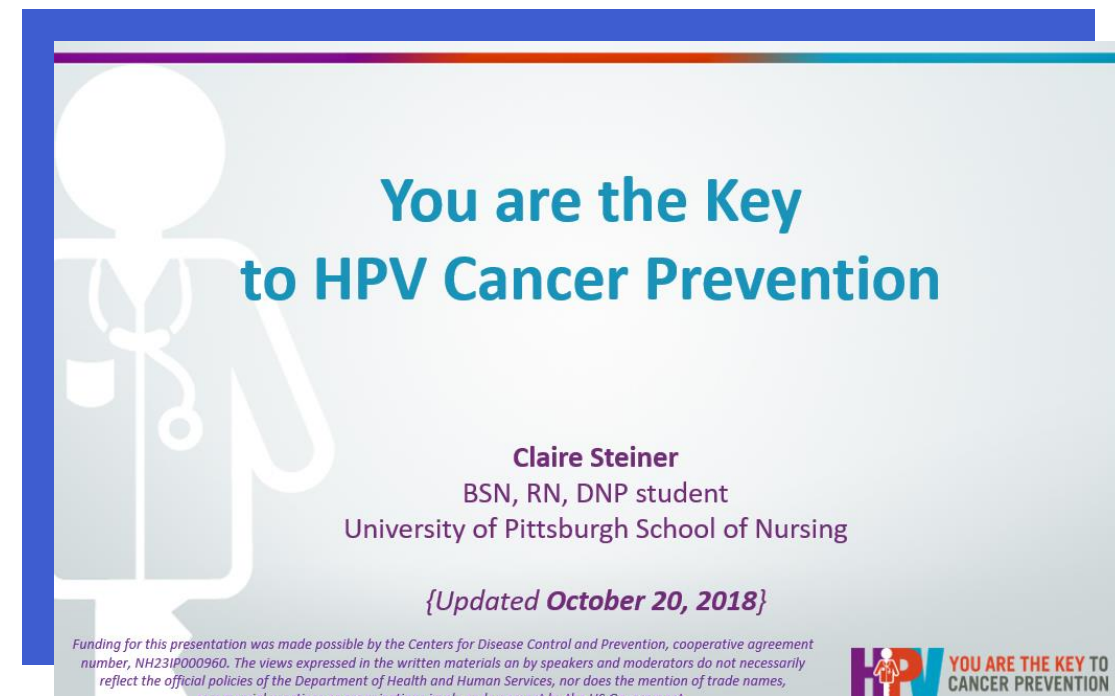


An Evidence-Based Protocol to Improve HPV Vaccine Initiation Rates at a County Immunization Clinic

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Background

Human Papillomavirus (HPV) is responsible for 26,900 cancer cases each year, including cervical, penile, and throat cancers. Vaccination with 2-3 doses of the 9-valent HPV vaccine (HPV 9) provides nearly 100% protection against the most high-risk, cancer-causing strains of HPV. The CDC recommends all 11-14 year-olds receive two doses of HPV 9. **Despite the benefits, only 60% of adolescents receive even one dose.**



Objectives

- ✓ Increase the rate of first-time HPV vaccination at a county health department immunization clinic.
- ✓ Implement and evaluate an evidence-based protocol to identify, flag, and target 11-14-year-old patients who are due for HPV vaccination.

References

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Methods

- **Design:** Vaccine initiation rates were examined before and after implementation of an evidence-based, multi-modal protocol
- **Sample:**
 - Staff-* nurses, medical assistants, and front desk staff.
 - Patients-* all 11 to 14 year-old patients presenting to the clinic during the months of October, November, and December of 2017 and 2018
- **Setting:** Nurse-run, walk-in immunization clinic

Protocol

1. Standing orders for HPV 9 are created to streamline workflow.
2. An education session targeting beliefs and skills for vaccine recommendation is presented to all clinic staff (**You Are the Key**).
3. Script and vaccination algorithm is posted in all exam rooms, bathrooms, and kitchen.
4. **At each visit:**
 - a. Staff members review immunization records in the state vaccine registry PA SIIS at every visit for every patient 11-14 years old to identify those due for HPV vaccination.
 - b. Staff members make same way/same day recommendations for HPV 9 (in the same way and on the same day as other adolescent vaccines [Tdap and MCV4]).
 - c. Vaccines are administered, acceptance or refusal of the vaccine is documented.
 - d. Reminder cards are given to patients at the end of visit with the due date of next dose.

Results

- All RNs and LPNs intended to make changes to their current practice, with the “same way/same day” recommendations being the most common change.
- All staff (n=8) reported comfort with making same way/same day vaccine recommendations.
- 160 of 209 11-14 year old patients were eligible for their first dose of the vaccine series; average age was 12.45 years in both 2017 and 2018 (SD 1.053; SD 1.113)
- Vaccine series initiation increased from 17.9% in 2017 to 35.5% in 2018 overall (p=0.019) and from 20.8% to 41.9% among male patients (p=0.041).

Acceptance of Vaccine Series Initiation			
	2017 (n=84)	2018 (n=76)	p-value
Overall	17.9% (n=15)	35.5% (n=27)	0.019*
Male	20.8% (n=10/48)	41.9% (n=18/43)	0.041*
Female	13.9% (n=5/36)	27.3% (n=9/33)	0.233

*indicates statistically significant results at the p<0.05 level

Conclusions

- Use of same way/same day recommendation practices can improve quality of care and decrease HPV-related morbidity and mortality.
- Multi-modal, workflow-focused interventions are more successful than education alone.
- Efforts to increase vaccination must focus on provider beliefs and recommendation practices.
- Inclusion of non-clinician staff, including front desk staff, likely positively contributed to vaccine initiation.

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