

HIYA! Improves HPV Vaccination Rates among Young Adults in Family Practice: A Quality Improvement Project

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Background

- Human papillomavirus (HPV) is the most common STI in the United States
- CDC recommends HPV vaccination in all males and females ages 11 to 26 years.

Significance

- HPV affects >80% of individuals in their lifetime.
- Vaccination can prevent >90% HPV-related anogenital and oropharyngeal cancers.
- Only 21.5% of young adults in the United States had completed the HPV vaccine series in 2018.
- Many studies examine strategies to improve HPV vaccination in children, but no studies focus specifically on young adults.
- Multi-modal strategies that include measures pre-, during, and post-visit can increase HPV vaccination rates in family practice.

Purpose & Aims

This quality improvement (QI) project sought to improve HPV vaccine series initiation and completion rates among young adult patients in a small, private family practice in suburban New Jersey through implementation of the *HIYA!* intervention strategy.

Aim 1

Increase HPV vaccination status assessment rates

Aim 2

Increase HPV vaccine initiation & completion rates

Methods

Design

Pre/post QI project implemented over a 12-week period, and compared to the same 12-week control period in 2019.

Setting

A private sports and family medicine practice in suburban New Jersey

Participants

Intervention and control groups included all average risk male and female patients ages 18 to 26 years presenting for primary care visits

Sample Size

n = 33

Power Analysis using alpha = 0.05 and beta = 0.8

Data Collection

Retrospective chart review

Data Analysis

Descriptive statistics

Logistic regression

Results

Total sample: n = 245

Intervention: n = 129

Control: n = 116

Aim 1

Logistic regression determined that the *HIYA! Intervention* significantly increased HPV vaccine status assessment rates.

Aim 2

Logistic regression determined that the *HIYA! Intervention* significantly increased HPV vaccine series initiation and completion rates.

	Control Group n (%)	Intervention Group n (%)	p-value	OR (95% CI)
Assessed for HPV vaccine status	36(34)	103(74)	<0.001*	0.16 (0.08-0.3)
Change in HPV vaccine initiation status during visits	3(3)	5(4)	0.01*	0.09 (0.01-0.57)
Change in HPV vaccine completion status during visits	1(1)	6(5)	0.04*	0.09 (0.01-0.86)



Discussion & Conclusions

HIYA! can be implemented as a feasible, effective, and evidence-based strategy to promote HPV vaccination among young adult patients in family practice settings.

Implications for Practice & Clinical Significance

- Potential for reduced spending on diagnostics and treatments for HPV-related complications
- Increased awareness of HPV vaccination
- Expanded approval of Gardasil-9 up to age 45 years necessitates further investigation of strategies to promote adult vaccination.
- HIYA!* was effective despite national challenges within primary care during the COVID-19 pandemic. Future research should examine strategies to promote vaccination during a pandemic.

Implications for Policy

- There is a need to build adequate infrastructure to support and promote adult vaccination.

Opportunities for Future Research

- Future research should examine why young adults are disproportionately unvaccinated against HPV compared to children.

Limitations

- Changes to “usual care” due to COVID-19
- Specific impact of each intervention strategy within *HIYA!* not measured
- 12-week measurement period shorter than requisite six months for full three-dose series.

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