Human Papillomavirus (HPV): Improving Vaccination Rates for Health Care Professionals

June 26, 2023

Housekeeping Notes

- All attendee lines are muted
- Please submit your questions to our panelists via the Q&A feature
- Questions will be addressed at the end of the session, as time permits

Disclosures

- In order to obtain contact hours you must:
  - Watch the 60-minute webinar
  - Complete evaluation & pass the post-knowledge checks (80%)
- Continuing Education
  - In support of improving patient care, this activity has been planned and implemented by Quality Insights and CAMC Institute for Academic Medicine. CAMC Institute for Academic Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.
    - Physicians: The CAMC Institute for Academic Medicine designates this live activity for a maximum of **1 hour for** AMA PRA Category I Credit(s)™ . Physicians should only claim credit commensurate with the extent of their participation in the activity.
    - Nurses: The CAMC Institute for Academic Medicine is an approved provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. This offering has been approved for **1 contact hour.**
- Speaker and other planners for this educational activity have NO relevant financial relationships with ineligible companies to disclose.
- Material reviewed May 2023. Expiration for this enduring material is 05/31/2024.

Welcome: Presenter Panel

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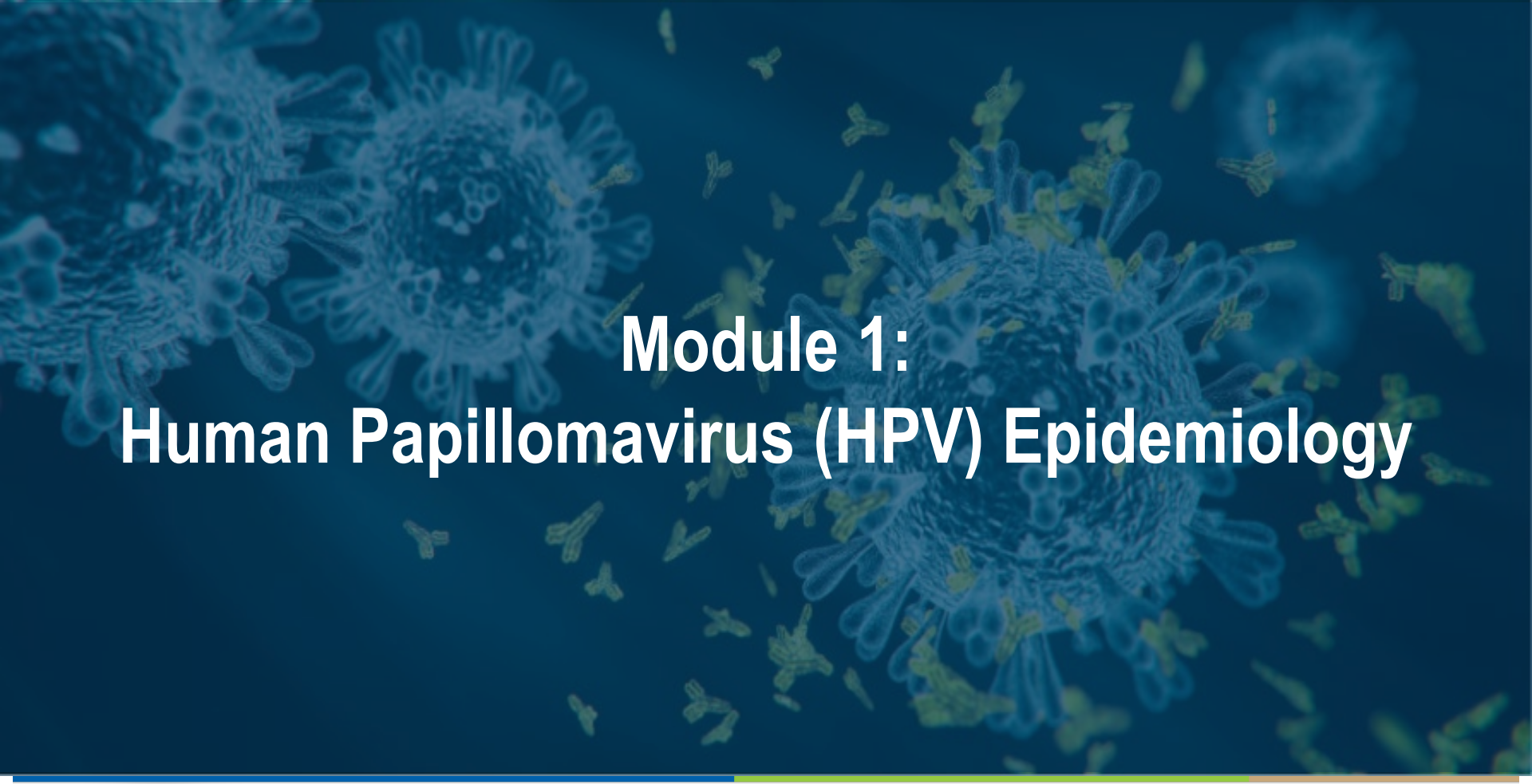
Quality Insights Overview

- Non-profit organization focused on improving health care quality in the pursuit of better care, smarter spending, and healthier people
- Strive to be a change agent, partner, and integrator of local organizations collaborating to improve care

Learning Objectives

After this course, the learner will be able to:

- Describe how Human papillomavirus (HPV) infections are associated with various types of cancers
- Explain the recommended HPV dosing schedules related to patient's age and timing of previous HPV vaccinations
- Identify at least two HPV vaccination barriers and two evidence-based strategies to improve HPV vaccination rates



Module 1:
Human Papillomavirus (HPV) Epidemiology

Survivor Story

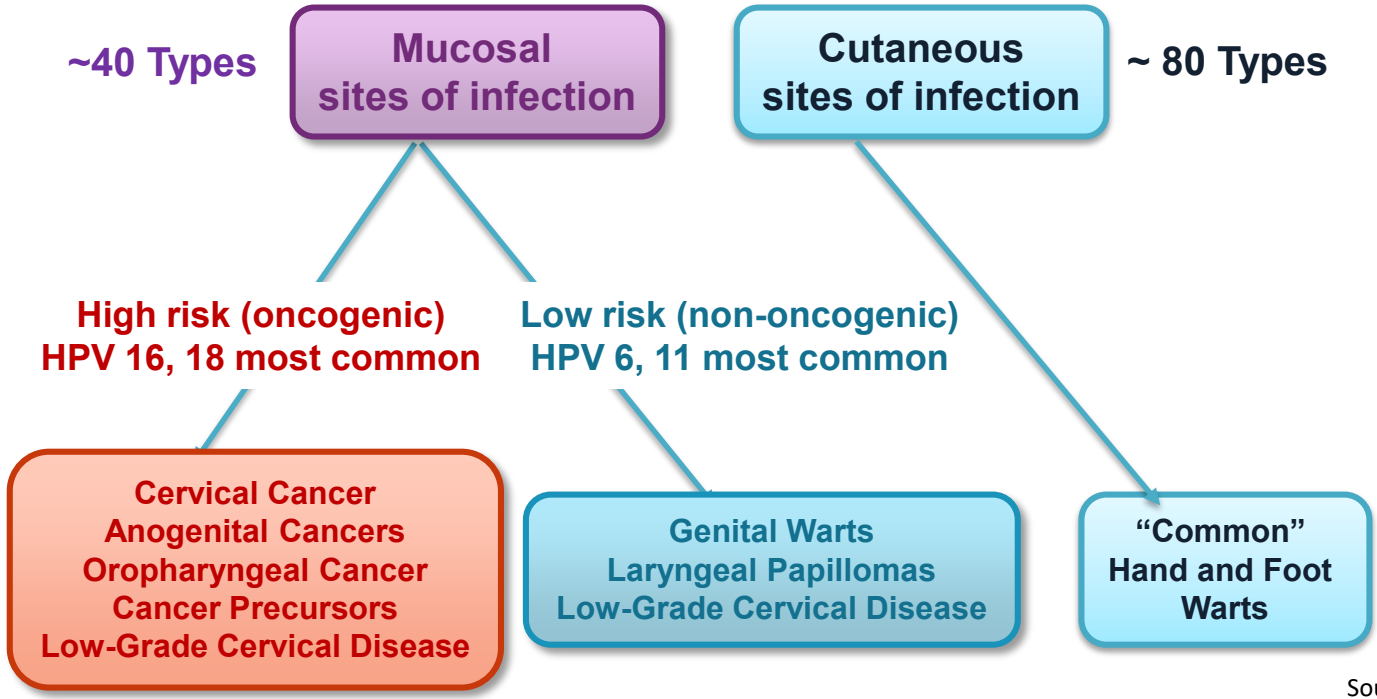
"My message is this: I had the chance to prevent my cancer. Please don't miss your chance. Vaccinate yourself and your children."

- Kristina N.H.

Cervical cancer survivor
Age at diagnosis: 34

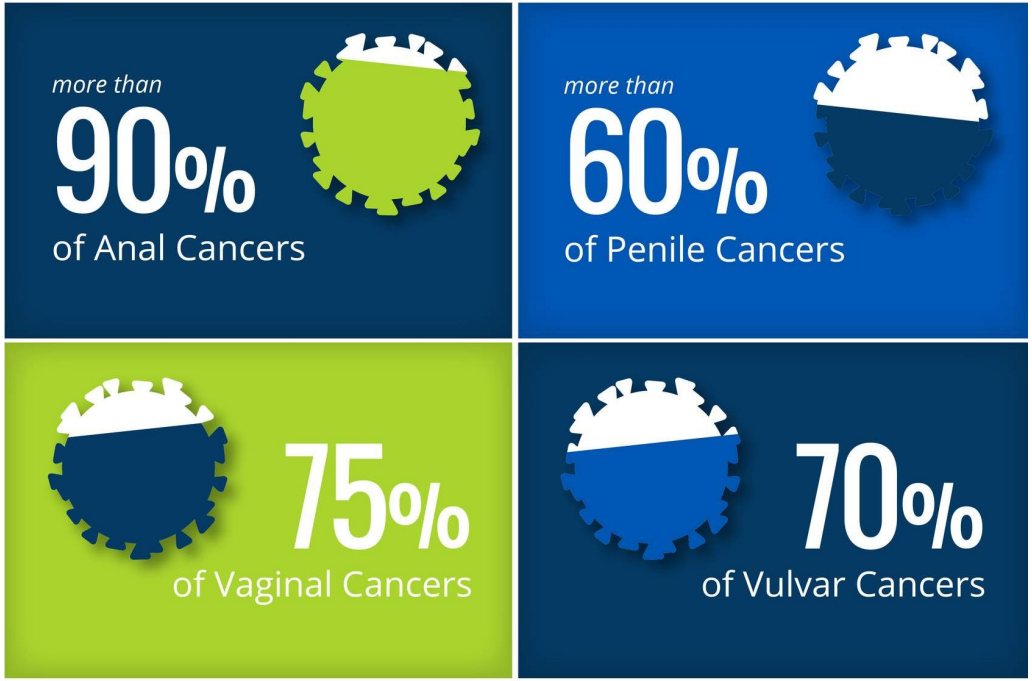
Source: CDC, 2021

HPV Infections



Source: CDC, 2022

In addition to cervical cancers, in the U.S. HPV is responsible for:



Source: Gargano, 1996

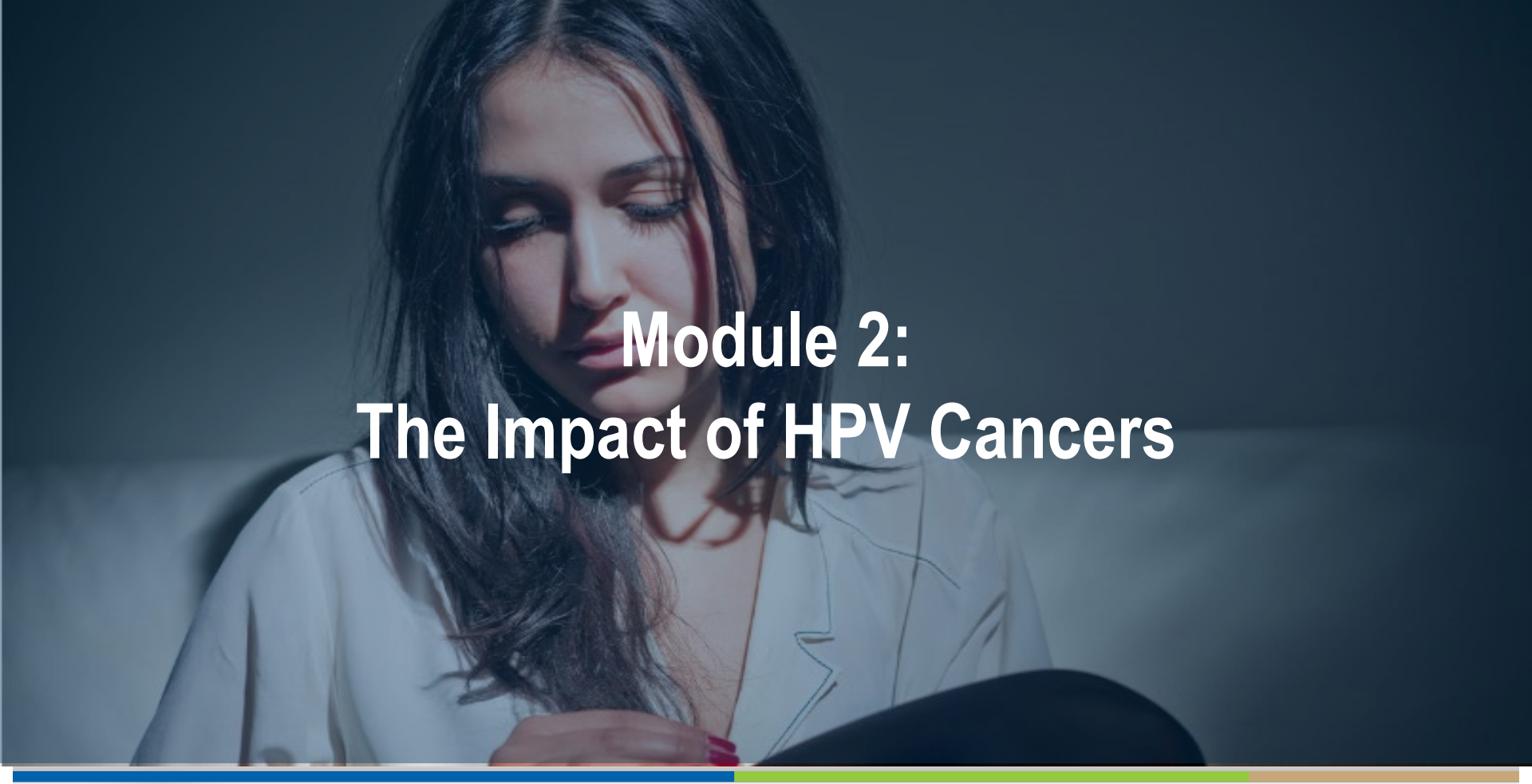
Oropharyngeal Cancers

Oropharyngeal cancers are the most prevalent HPV-related cancer in the United States.

Risk Factors

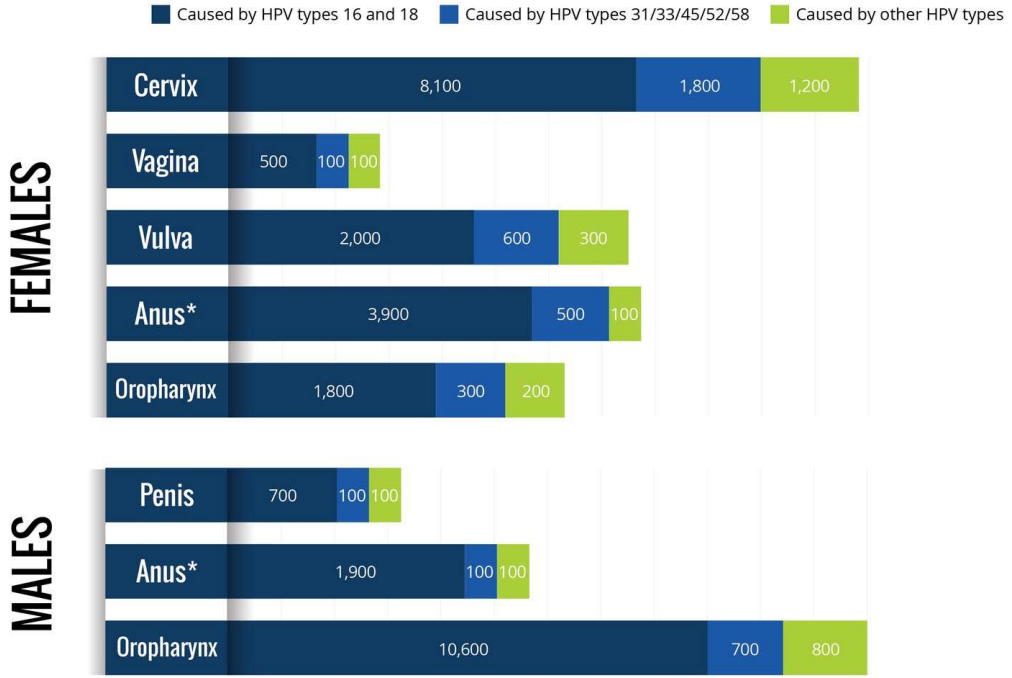
- Males
- Individuals of 40 years of age
- Tobacco and alcohol use
- Individuals exposed to HPV

Source: Oral Cancer Foundation



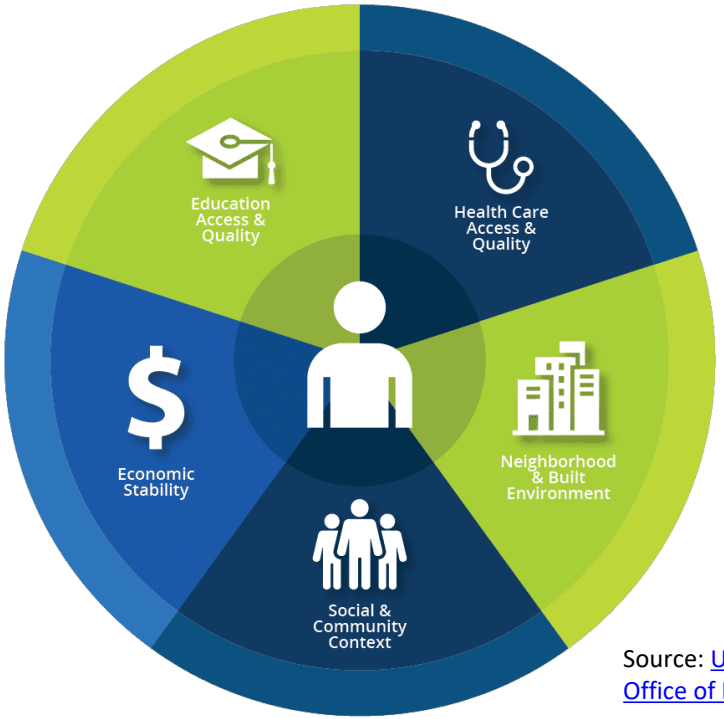
Module 2:
The Impact of HPV Cancers

Estimated Annual Number of Cancer Cases Attributable to HPV by Sex, Cancer Type, and HPV Type



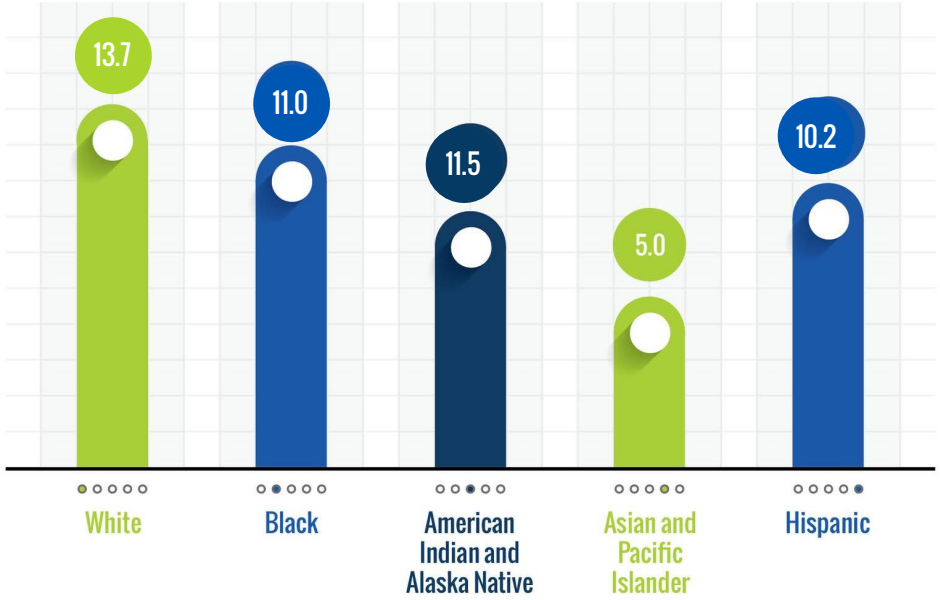
Source: CDC, 2021

Social Determinants of Health



Source: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 2020

Rate of New HPV-associated Cancers by Race and Ethnicity, Male and Female, 2019



Rate per 100,000 people

Source: U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2020 submission data (1999-2018): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; https://www.cdc.gov/cancer/dataviz, released in June 2021.

Source: CDC & National Cancer Institute, 2021

Health Equity: Why it's Important and What You Can Do

- Addressing SDOH increases health equity
- Disparities exist when health outcomes differ among populations
- Contributing factors: race, ethnicity, sex, sexual identity, age, disability, socioeconomic status, and geographic location

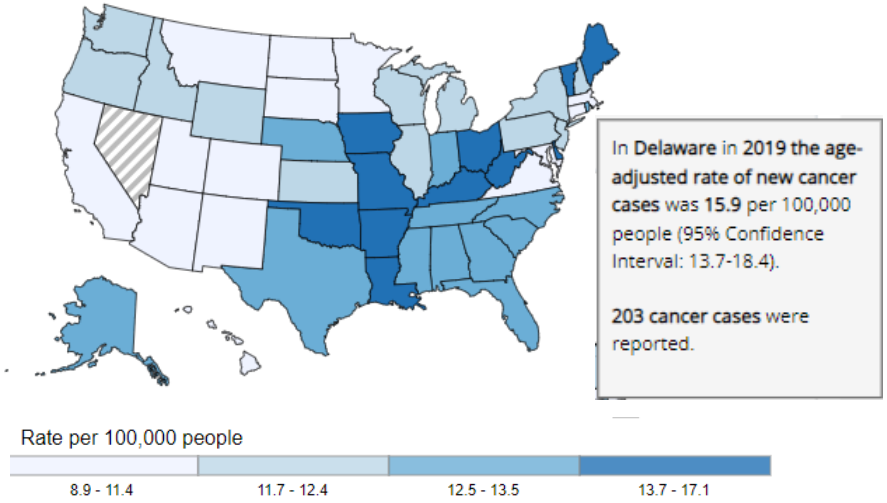
What can you do?

Collect and document race and ethnicity data

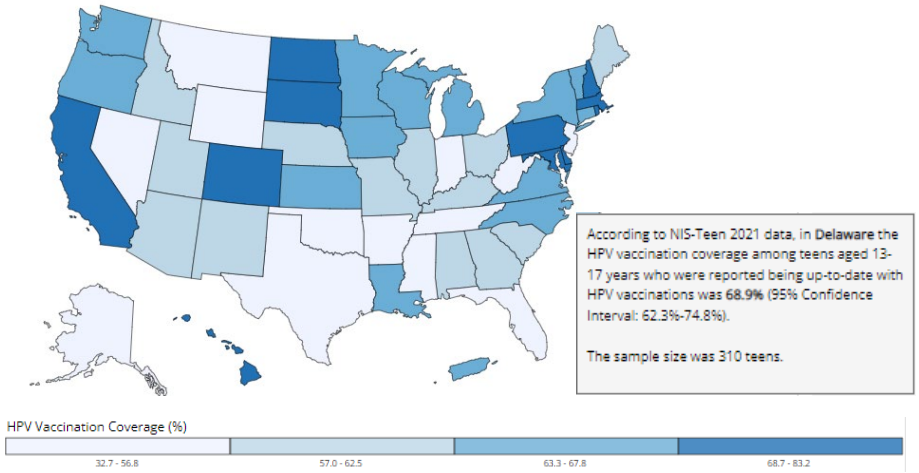
Delaware Statistics

HPV vaccination coverage among adolescents 13-17 years by State, HHS Region, and the United States, National Immunization Survey-Teen (NIS-Teen), 2019/2020

HPV-Associated Cancer Rates by State



HPV Vaccination Rate by State



Source: CDC-NIS Teen data, 2020

Maternal Risk

- Preterm delivery
- Preterm premature rupture of membranes
- Infant risk for developing respiratory papillomatosis

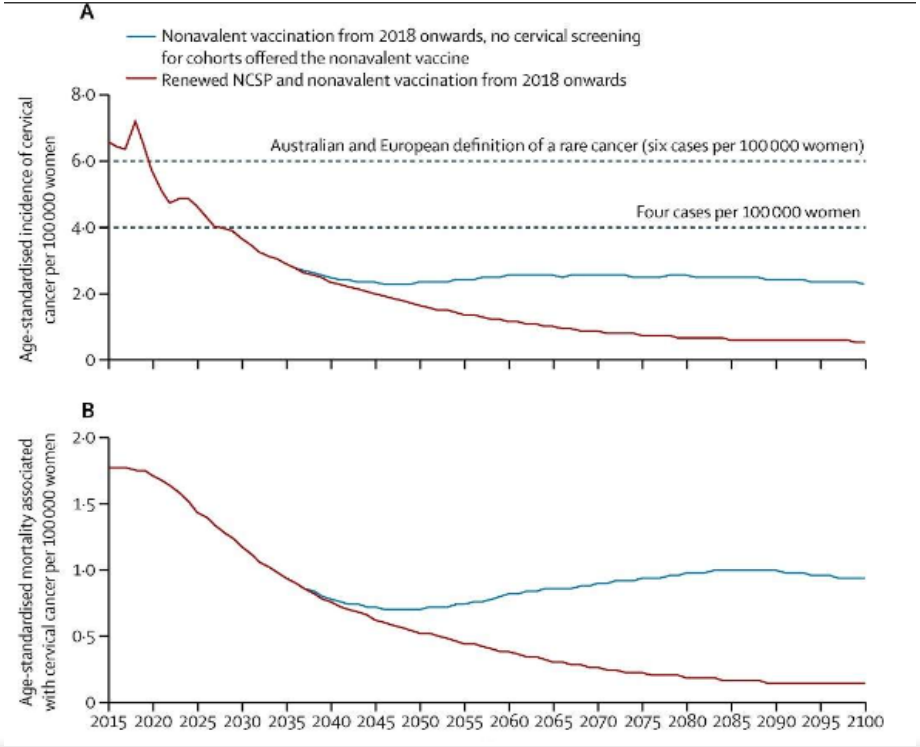
World Health Organization's Call to Action

Goals:

1. 90% of girls fully vaccinated with the HPV vaccine by the age of 15.
2. 70% of women screened using a high-performance test by the age of 35, and again by the age of 45
3. 90% of women with pre-cancer treated and 90% of women with invasive cancer managed.

Source: World Health Organization, 2020

Australia's Success Story



Source: Hall, 2019

Knowledge Check #1

Delaware's HPV vaccination series completion rate is _____ the Health People 2030 goal of 80% for patients aged 13-17.

A. Above
B. Below

Module 3: HPV Vaccination IS Cancer Prevention

On-time HPV vaccination has the ability to prevent over 90%, or about 31,200 cases, of cancers caused by HPV in the United States each year. Source: CDC, 2021

On Time Vaccination is Key

2 Dose Schedule

- Second dose should be administered 6–12 months after the first dose (0, 6–12 month schedule).
- Minimum interval between dose 1 an dose 2 in a 2-dose schedule is 5 months.

3 Dose Schedule

- Second dose should be given 1–2 months after the first dose, and the third dose should be given 6 months after the first dose (0, 1–2, 6 month schedule).
- Minimum intervals are 4 weeks between the first and second dose, 12 weeks between the second and third doses, and 5 months between the first and third doses.

Source: CDC, 2021

Clinical Scenario

- Lucia
- 14 year old female
- Establishing care and full physical
- No previous HPV vaccination

Knowledge Check #2

How many doses of the HPV vaccine will Lucia need to complete her HPV vaccine series?

A. 1

B. 2

C. 3

D. 4

Knowledge Check #3

How long after today's visit should Lucia return for her second dose?

A. 1-3 months
B. 3-5 months
C. 6-12 months
D. 1 year

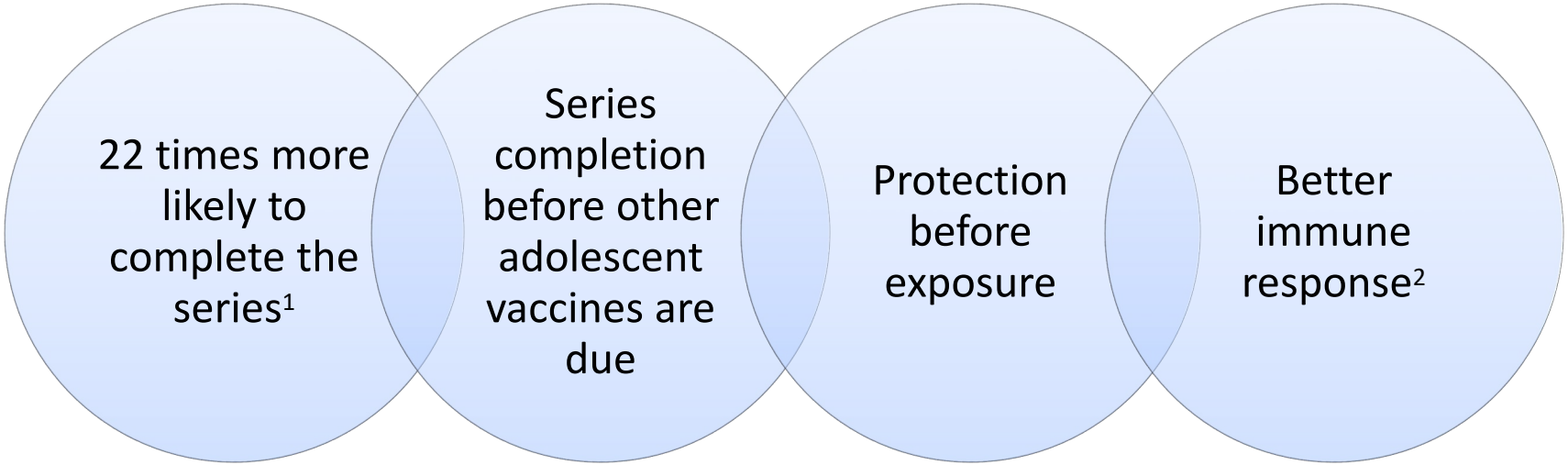
Vaccine Side Effects and Considerations

Side Effects	Contraindications
• Pain and swelling at the injection site • Potential fever and headache • Syncope	• Pregnancy • Hypersensitivity to yeast • Acute moderate or severe illness

Coverage for Bivalent and Quadrivalent Vaccines

- No additional coverage for patients who've completed bivalent or quadrivalent series
- Nine-valent vaccine can be used to complete series if bivalent or quadrivalent series incomplete

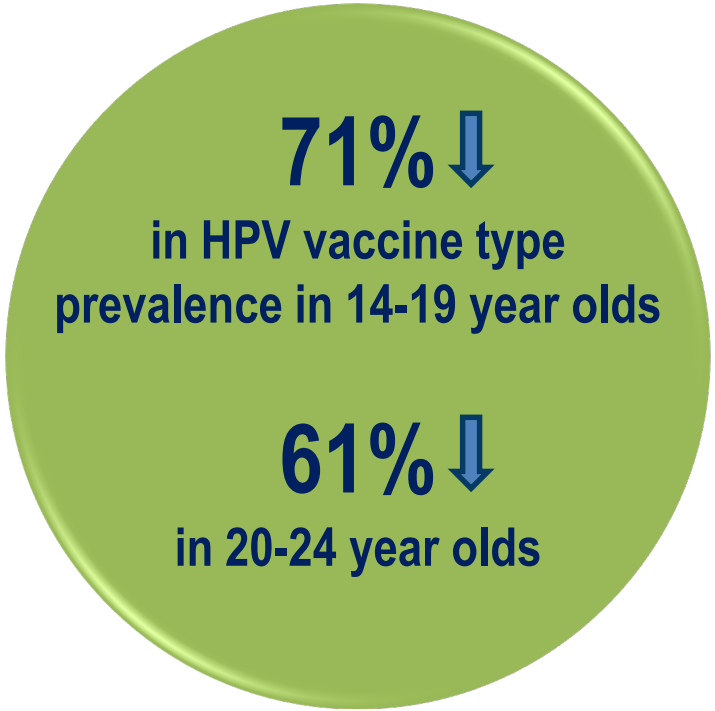
Benefits of Early Vaccination



1. O'Leary, S.T., & Nyquist, A. (2019). Why AAP recommends initiating HPV vaccination as early as age 9. *American Academy of Pediatrics - AAP News*.
2. De Vincenzo, R., Conte, C., Ricci, C., Scambia, G., & Capelli, G. (2014). Long-term efficacy and safety of human papillomavirus vaccination. *International journal of women's health*, *6*, 999–1010. https://doi.org/10.2147/IJWH.S50365

HPV Vaccine is SAFE and EFFECTIVE

- 2.5 million vaccinated individuals demonstrating an acceptable safety profile
- Continuous monitoring of safety by the FDA and CDC
- HPV vaccination provides long-lasting immune response and improved outcomes



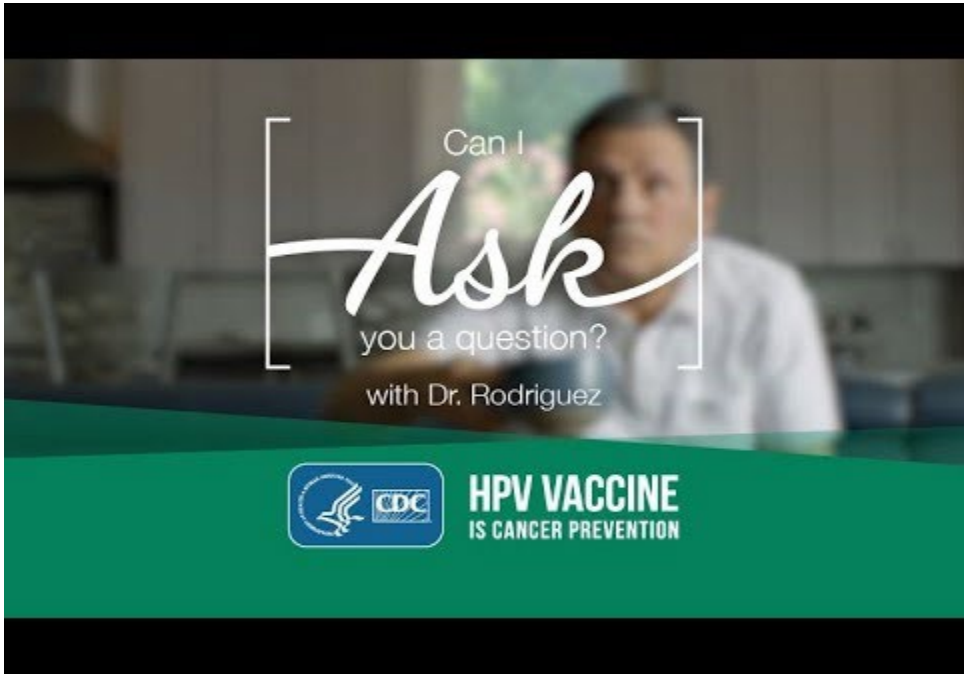
Source: American Cancer Society, 2020

Vaccination Barriers and Combatting Misinformation

- Listen to and understand parents' concerns
- Provide evidence-based answers
- Reassure that the vaccine is effective, safe, and long-lasting
- Offer fact sheets
- Share personal stories
- Use chart reminders for follow-up discussion

[CDC Tip Sheet]

Clinical Scenario



Video: https://youtu.be/nGSrYpOktJQ

Knowledge Check #4

Which of the following responses would be the best way for you to respond to Roger's concerns?

A. Ah yes, I did see that on the community social media page, there's a lot of misinformation online but Jake should be okay to receive the vaccine since he is overall healthy.

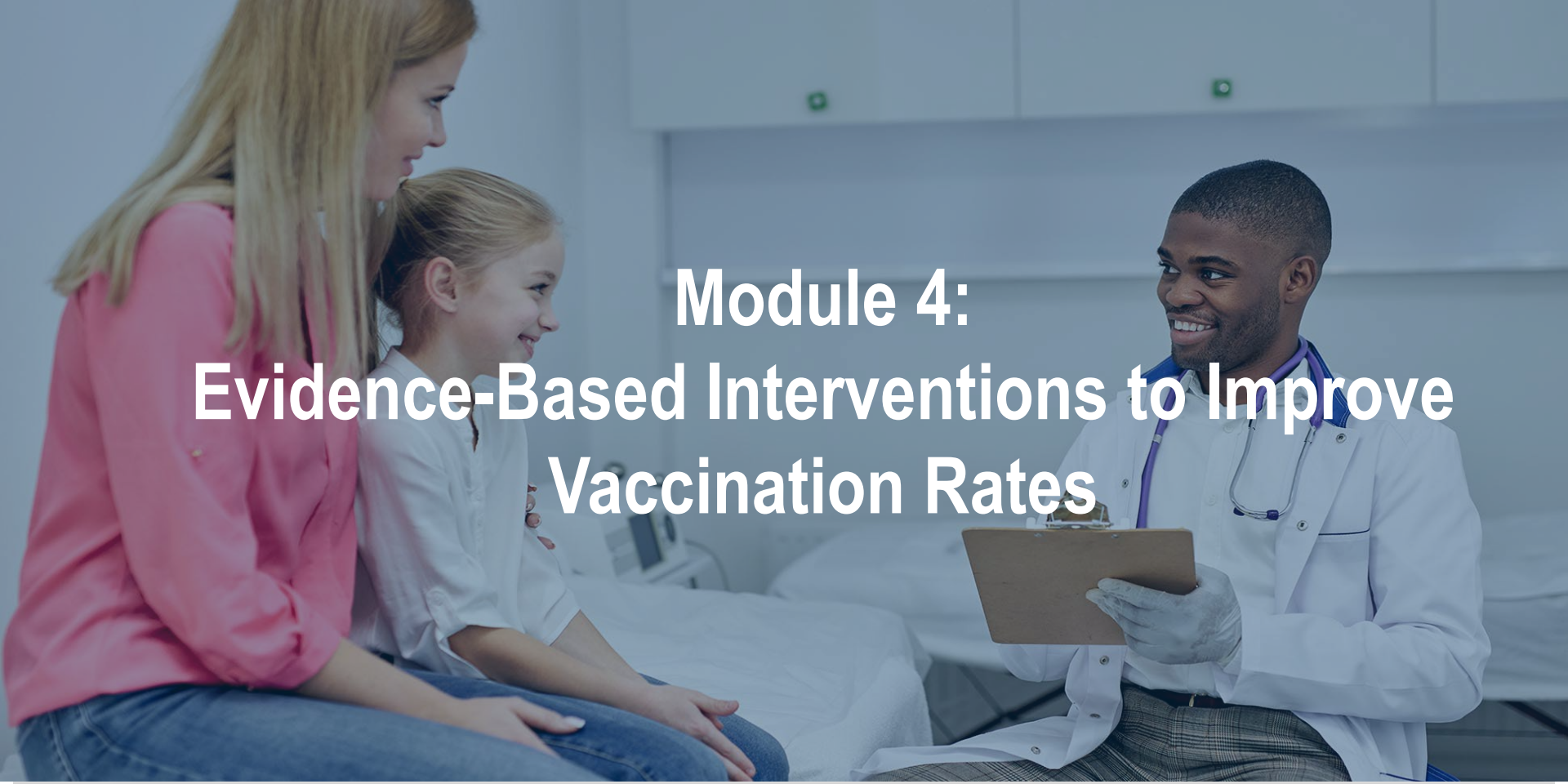
B. Mild side effects can occur, such as pain & redness at the injection site and fainting right after the injection, but after 10+ yrs of monitoring & research the HPV vaccine has been proven to be safe.

C. Yes, there are side effects that can occur after receiving the HPV vaccine. I understand if you're not ready to administer it to Jake at this time.

D. Let me take a look into what your wife saw online and I'll get back to you once I've gathered more information. I want to make sure that no harm comes to Jake if you choose to vaccinate him against HPV.

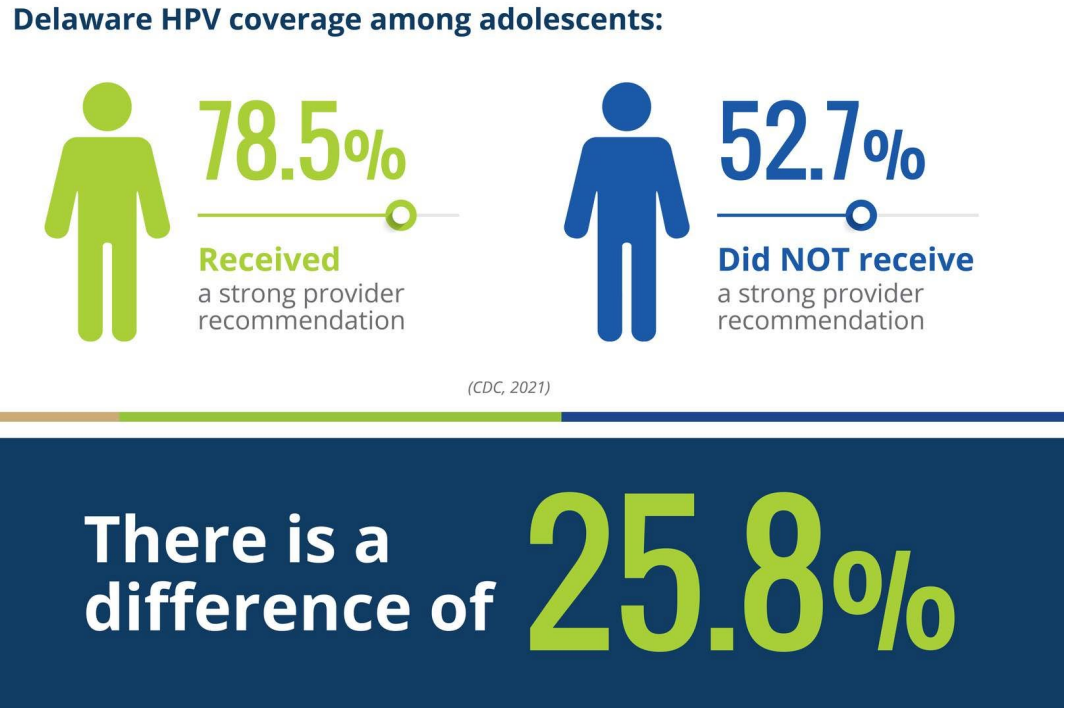
Resources: Barriers and Communication

- A Community Toolkit for Addressing Health Misinformation (Office of the U.S. Surgeon General)
- Countering Vaccine Hesitancy article (American Academy of Pediatrics)
- Talking to Parents about HPV Vaccine handout (CDC)
- More HPV videos (CDC)
- HPV Vaccine: Cancer Prevention (Quality Insights' Powtoon)
- The Vaccine Scene: Learn more about the HPV Vaccine (Quality Insights' Powtoon)



Module 4: Evidence-Based Interventions to Improve Vaccination Rates

Presumptive Recommendation



Source: CDC, 2021

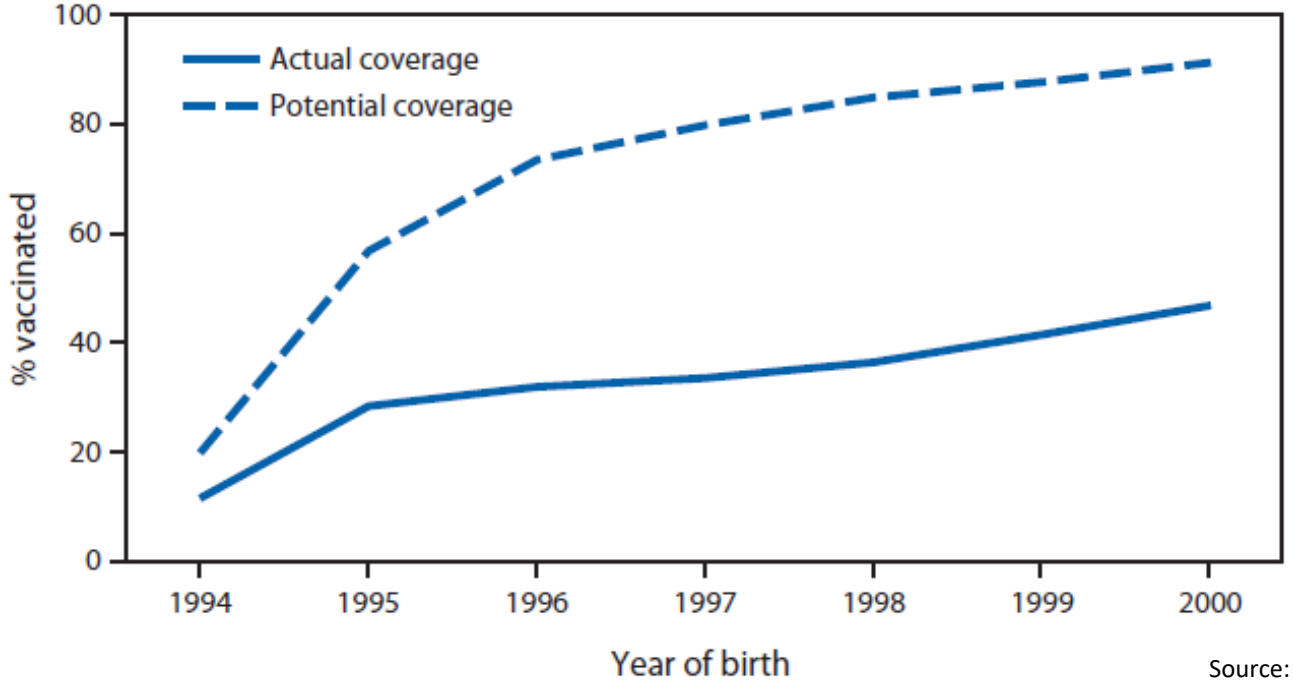
Pro-Immunization Culture

HPV Champion

- Promote immunization activities
- Deliver or coordinate immunization education
- Ensure documentation is completed
- Establish consistent messaging to parents
- Evaluate immunization workflow
- Demonstrate leadership, collaboration, and advocacy

Source: CDC, 2020

Reducing Missed Opportunities

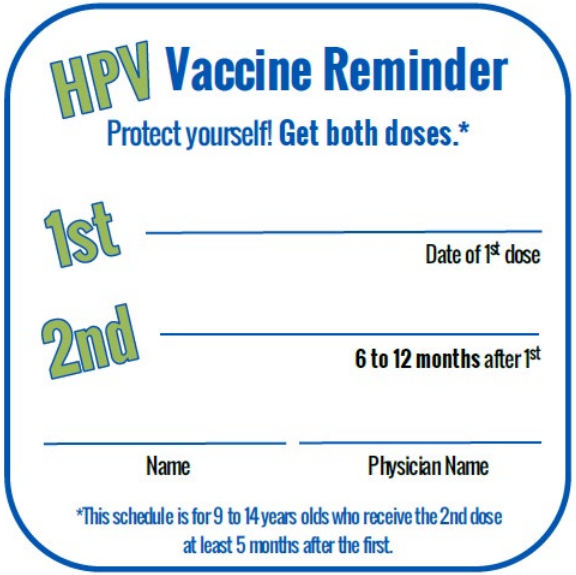


Source: Stokley, 2014

Reminder-Recall Systems

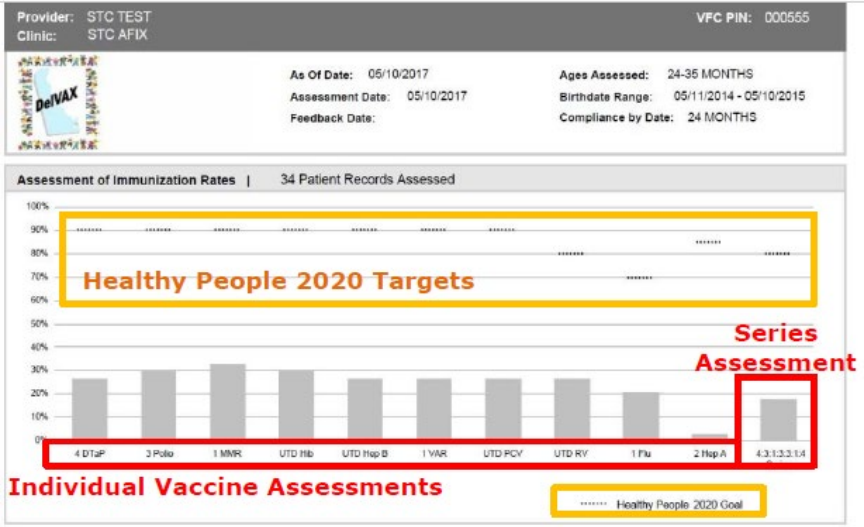
Patient Reminders:

- Mailed letters or postcards
- Appointment magnets
- Appointment cards
- Telephone calls or text messages
- Patient portal messages



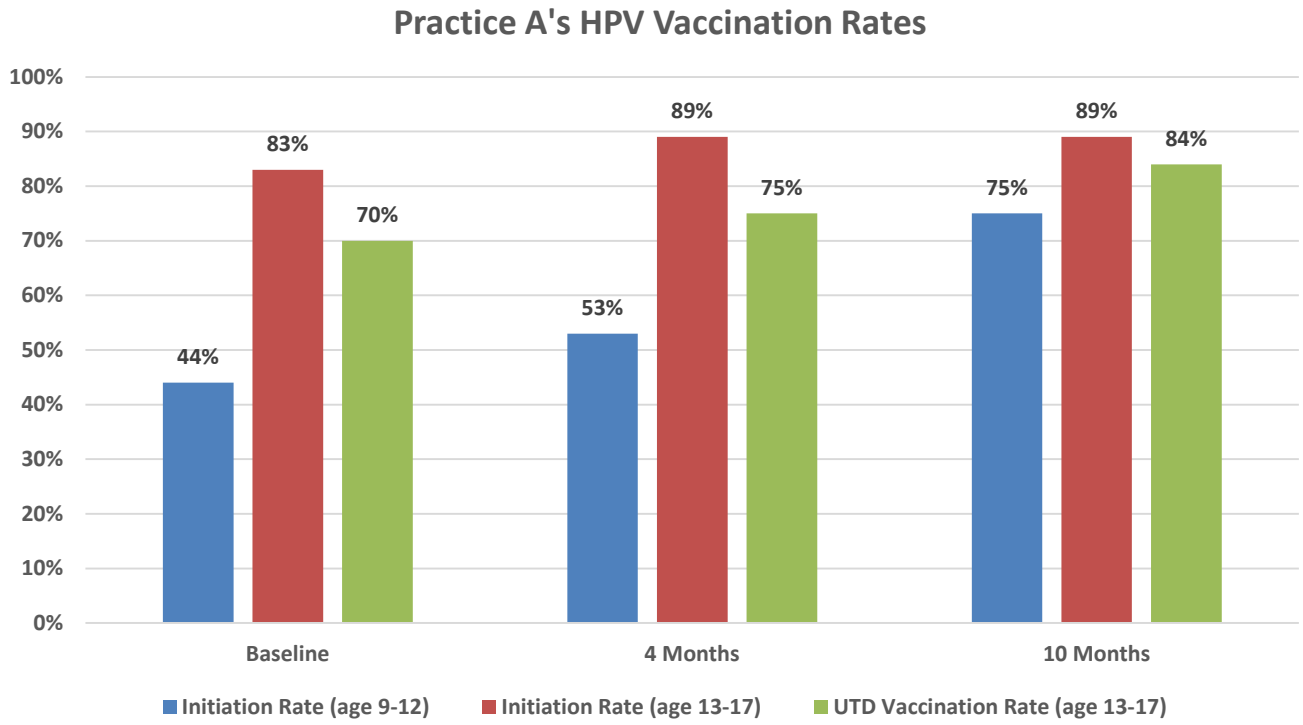
Immunization Information Systems - DelVAX

- Perform roster clean-up and patient inactivation quarterly
- Ensure appropriate staff receive DelVAX training
- Routinely monitor immunization status of patients utilizing DelVAX reports



Source: DelVAX

Case Study


Practice A's HPV Vaccination Rates
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
44%
83%
70%
53%
89%
75%
75%
89%
84%
Baseline
4 Months
10 Months
Initiation Rate (age 9-12)
Initiation Rate (age 13-17)
UTD Vaccination Rate (age 13-17)

Knowledge Check #5

Which type of recommendation is best for ensuring patients choose to vaccinate against HPV?

A. Forced
B. Suggestive
C. Conversational
D. Presumptive

Summary

- Nearly everyone who is sexually active will get an HPV infection at some point in their life.
- **HPV vaccination can prevent 90% of HPV-related cancers.**
- HPV vaccination is recommended for all adolescents at ages 11 and 12, and can be initiated beginning at age 9.
- Provider recommendation is the #1 reason parents choose to vaccinate against HPV.
- Evidence-based interventions can be implemented within the practice to ensure HPV vaccination administration and to improve vaccination rates.

Questions?

Evaluation and Post-Test

- HPV: Improving Vaccination Rates for Healthcare Professionals
  - **Evaluation: https://www.surveymonkey.com/r/HPVeval23**
  - Once you complete the evaluation you will be auto-directed to the Post-Test

QR Code
Activate the camera on your smart phone and scan this QR code to link to the **evaluation.**

Quality Insights on the Web

- Danielle Collins, RN, BSN
  - Email: dcollins@qualityinsights.org
- Visit our website
- Connect with Quality Insights on social media via Twitter and LinkedIn

Quality Insights website

@QualityInsights

www.linkedin.com/company/1259377

THANK YOU!

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