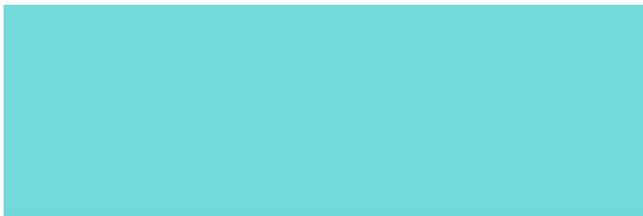


# Steps for Increasing HPV Vaccination in Practice

An Action Guide to Implement Evidence-Based Strategies for Clinicians\*

\*Includes pediatricians, family physicians, general internists, obstetrician-gynecologists, nurse practitioners, physician assistants, nurses, medical assistants and their office managers.





## Saving lives through Cancer Prevention

Nearly all cases of cervical cancer are caused by infection with high-risk types of human papilloma virus (HPV). The virus also has been linked to cancers of the vagina, vulva, anus, penis, and throat. Each year, in the United States, an estimated 26,000 new cancers are caused by HPV. In addition to cancers, each year there are 330,000 women who undergo treatment for new cases of pre-cancerous, high grade cervical dysplasia.

**The HPV vaccine is cancer prevention.** It prevents infection by virus types that cause the vast majority of these cancers and genital warts, but the vaccine works only if given well before an infection occurs. That's why, in part, the American Cancer Society recommends it at ages 11 to 12. Vaccination at these younger ages also leads to a greater immune response.

Despite the power of HPV vaccination to prevent cervical cancer, only one-third of adolescent girls have completed the 3-dose series. The CDC reports that vaccination coverage increased slightly between 2012 and 2013 but still remains too low.

Even with compelling evidence that HPV causes cancer and that a safe, effective vaccine is available, it can be a challenge to encourage parents to vaccinate their adolescent and to engage staff in the process. That's why it's so important to have a plan that implements practice changes to increase HPV vaccination coverage.

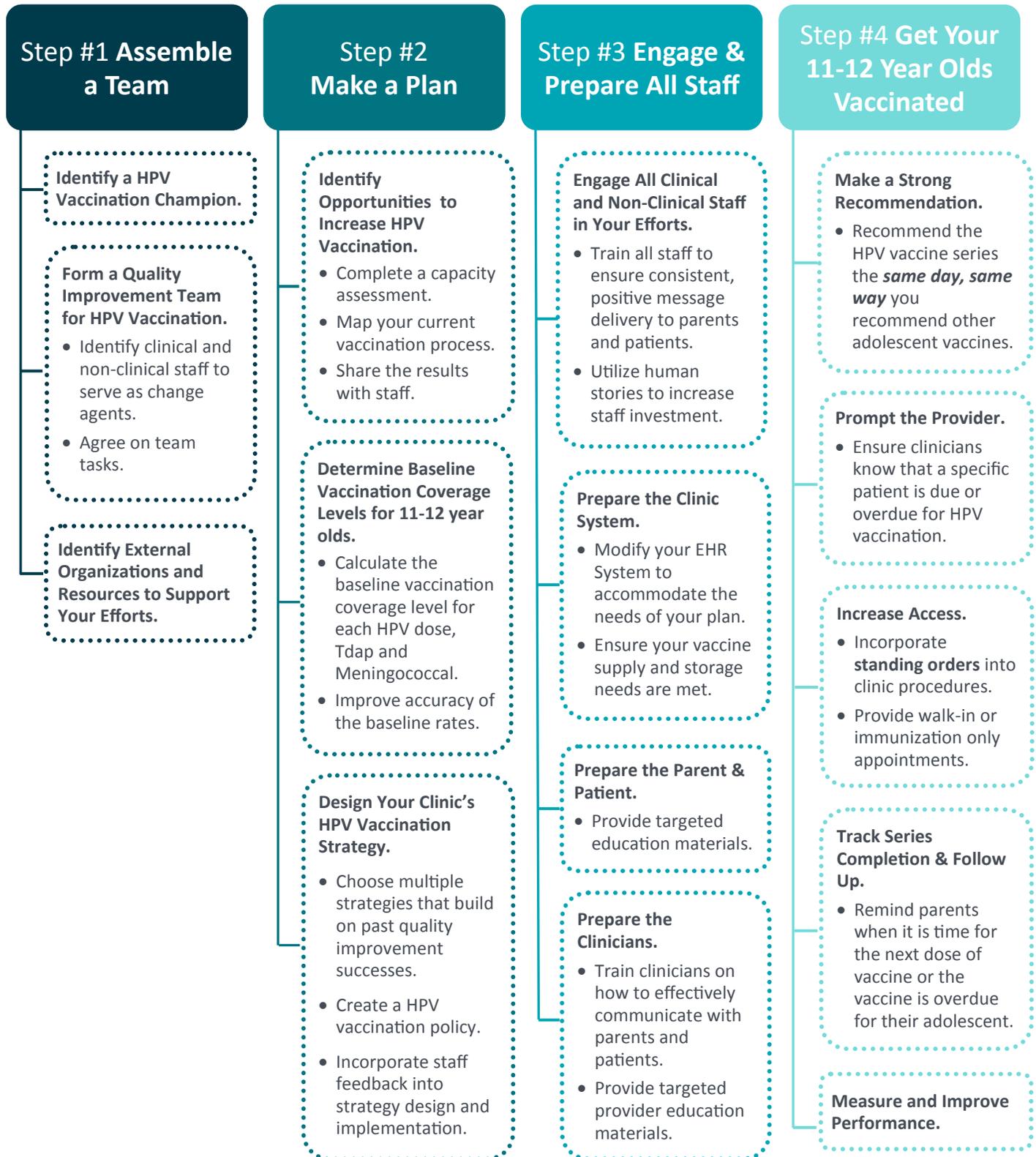
On the pages that follow you will find concrete steps, evidence-based strategies and tools for your clinic to increase HPV vaccination.

### Benefits to your health system include:

- Cancer prevention integrated into existing systems of care.
- More patients who come into your clinic and leave vaccinated.
- Parents who are motivated to get their adolescent vaccinated against cancer.
- Interventions that are evidence-based and, when used consistently, can improve overall vaccination coverage.



# Increasing HPV Vaccination: An Overview





## Step #1: Assemble a Team

### Identify a HPV Vaccination Champion

Having a HPV Vaccination Clinic Champion who advocates for practice change is an important component to the initiation and sustainability of efforts to increase coverage levels. This individual serves in a leadership role for the program and on the quality improvement team. They should be enthusiastic about the work, have the authority to implement practice changes and have scheduled administrative time to guide the initiative. To ensure full coordination consider having multiple champions, for example one medical and one administrative or one champion in each clinic location.

### Form a Quality Improvement Team for HPV Vaccination

A team based approach to quality improvement is key for continued improvement. Members of a QI team focused on increasing HPV vaccination coverage should represent different roles within the vaccination process. This group will be a driving force for practice change and continuous improvement. Successful QI teams:

- Meet regularly.
- Utilize the Model for Improvement and a PDSA (Plan-Do-Study-Act) Process.
- Review coverage levels and setting benchmarks.
- Engage staff by regularly collecting feedback.
- Create and update office policies.

### Recruit External Organizations and Resources to Support your Efforts

The American Cancer Society, in addition to many other organizations, are committed to increasing HPV vaccination coverage levels and have developed tools and resources to support your clinic's efforts. Consider the following with identifying external organizations and resources:

- HPV VACs (**V**accinate **A**dolescents against **C**ancers) is a program of the American Cancer Society with staff across the country working with FQHC and State Partners to increase HPV vaccination coverage levels.
- AFIX (Assessment, Feedback, Incentives and eXchange) is a quality improvement program created by the CDC where state awardees work with VFC providers to raise general immunization coverage levels.
- American Academy of Pediatrics, American Pediatric Association, Centers for Disease Control, National AHEC Organization, and National Association of County & City Health Officials have specific HPV Vaccination Programs.
- Depending on your clinic and community it could be important to engage school nurses and others who might initiate the three dose series, but need your clinic to finish the series.

### Tools for Your Practice

- [Child and Adolescent Immunization Office Champions Project](#), American Academy of Family Physicians
- [Creating A Quality Improvement Team](#), AHRQ
- [Quality Improvement Toolkit](#), HRSA
- [Creating Capacity for Improvement in Primary Care](#), AHRQ
- [How to Improve: The Model for Improvement](#), Institute for Healthcare Improvement
- [Eliminating Missed Opportunities: One Performance Improvement At A Time](#), Massachusetts League of Community Health Centers
- [PDSA Cycle Template](#), Centers for Medicare and Medicaid Services
- [Plan Do Study Act Worksheet](#), Institute for Healthcare Improvement
- [HPV VACs Flyer](#), American Cancer Society
- [AFIX City/State/Territory Staff](#), CDC
- [AHEC HPV Regional Project Coordinators](#), National AHEC Organization
- [Chapters & Districts](#), American Academy of Pediatrics
- [Guide to HPV Resources for Local Health Departments](#), National Association of County & City Health Officials



## Step #2: Make a Plan

A strategic plan is key for creating sustainable systems change. Once your plan is developed, document it and share it with everyone in your clinic.

### Identify Opportunities to Increase HPV Vaccination Coverage.

Assess your existing HPV vaccination policy and practices. A clear picture of existing systems allows you to identify strengths and the most impactful opportunities to increase coverage.

Consider the following when conducting your assessment: Provider behaviors, EHR system capabilities, patient flow and staff capacity.

### Determine Baseline Coverage Levels for your 11-12 Year Olds.

Determining your baseline coverage level is critical to measuring practice improvement at the end of the implementation process. This requires a few steps:

1. Determine the best data source: EHR, Chart Audit or Immunization Information System (registry).
2. Determine the 12 month period for baseline.
3. Identify the patients who are 11-12 and active medical patients.
4. Identify the patients who have received vaccination for each HPV dose, Tdap and Meningococcal.
5. Calculate the vaccination coverage levels.

Take continuous steps to improve the accuracy of the clinic's baseline. Even after incorporating data from multiple sources, there will be patients who received HPV vaccine who are missing documentation. Establish a protocol for data entry and verification to ensure vaccination records are accurate.

### Design Your Clinic's HPV Vaccination Strategy

Leverage your clinic's strengths when choosing the best approach to increase HPV vaccination coverage levels. To maximize the impact of your efforts choose multiple evidence-based interventions that build on past quality improvement successes.

Create a policy with a standard course of action for HPV vaccination. Consider including the following when creating or updating your HPV vaccination policy:

- Assess vaccination status and recommend HPV vaccination at every opportunity.
- Follow an agreed upon vaccination schedule.
- Implement use of a vaccine refusal form and recommend HPV vaccination again at future visits.

Document the clinic's HPV Vaccination Policy, share it with all team members, incorporate regular collection of staff feedback and check on adherence to the policy.

### Tools for Your Practice

- [Mapping and Redesigning Workflow](#), AHRQ
- [The IHI Improvement Map](#), Institute for Healthcare Improvement
- [Performance Management and Measurement](#), HRSA
- [Analytic Guide for Assessing Immunization Coverage Using IIS](#), American Immunization Registry Association
- Free Software to determine coverage levels: [CoCASA \(Comprehensive Clinic Assessment Software Application\)](#), CDC
- [Adolescent Vaccination Schedule](#), CDC
- [2015 Recommended Immunizations for Children from 7 Through 18 Years Old](#), CDC
- [Vaccination Refusal Form](#), Immunization Action Coalition
- [Refusal to Vaccinate Form](#), American Academy of Pediatrics



## Step #3: Engage and Prepare All Staff

### Engage All Clinical and Non-Clinical Staff

Train all staff to ensure consistent positive message delivery to parents and patients. Even if a staff member is not directly engaged in the process of recommending or administering the HPV vaccine, they can potentially impact the process by delivering misinformation to patients and parents. Understand the HPV vaccine administrative schedule, insurance and VFC regulations that may create administrative barriers.

Provide human stories in addition to statistics to increase staff investment. A connection to a survivor of HPV related cancer is a powerful tool to overcoming negative perceptions of the vaccine. In addition to survivors and caregivers, oncologists are resources for providing powerful messages.

### Prepare the Clinic System

Modify your EHR system to ensure effective data collection and reporting. Your EHR system should track each dose of vaccine administered or a reason for refusal. Some EHR systems are equipped with the functionality needed to build a robust HPV vaccination program. Other systems will require the needed functionality to be built, “turned on” or populated with data. When implementing new EHR functionality, training staff on how to enter and extract data is a key step. Regularly collecting feedback and sharing data with staff will prevent inaccurate data from being entered into the system.

Your efforts will increase the need for the vaccine and vaccine storage. Ensure you have adequate supply and storage for all HPV vaccine doses to prevent potential access barriers.

### Prepare the Parent & Patient

Decide on the parent and patient educational materials that are best suited for your clinic setting. Consider the following:

- Create an official procedure for how these materials are distributed and displayed. Incorporate this procedure into your HPV vaccination policy.
- Determine the clinical and non-clinical staff who will distribute the materials and at which point in the patient’s office visit they will be distributed.
- Train clinic staff and providers on the agreed upon procedure and collect feedback for process improvement.

The Centers for Disease Control and Prevention’s *You Are The Key* campaign provides free resources for the clinic setting including posters and brochures. There are several videos that can be utilized on your clinic’s website or on a waiting room video system. Many of these resources are available in multiple languages to meet the needs of a diverse patient population.

### Prepare the Clinicians

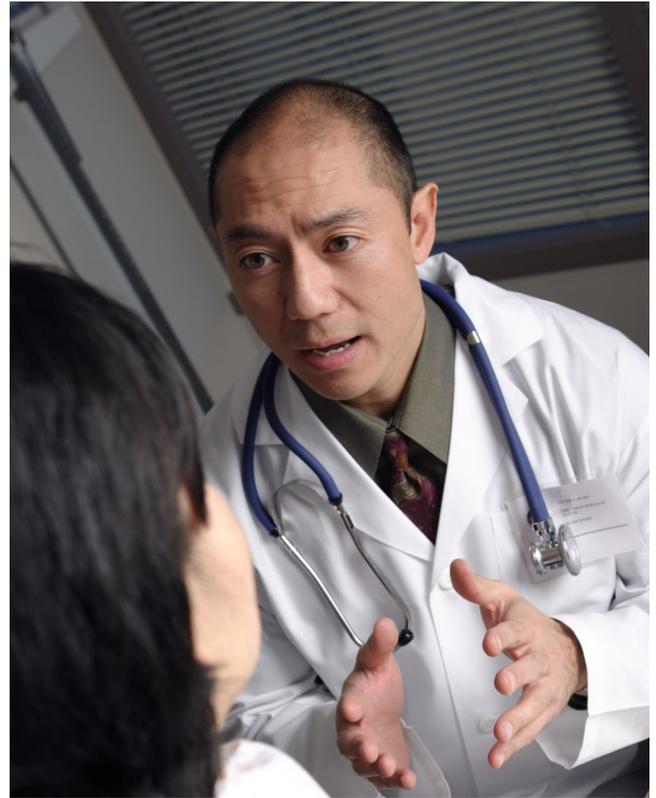
Provide clinician training through multiple formats. Consider the following when developing your training plan:

- Conduct onsite training opportunities to increase skills and team comradery.
- Incorporate clinic and system level data to make training content specific and relevant to your staff.
- Provide CMEs to motivate providers to complete training.
- Disseminate pre-recorded webinars to add a flexible training option.

In addition to training sessions, you can prepare your clinicians by incorporating HPV vaccination into your daily team “huddle” to ensure that the patients that arrive in your clinic leave vaccinated. This “huddle” time can be used to ensure logistical needs are met and all staff are aware of their role in the vaccination reminder, recommendation and administration process.

### Tools for Your Practice

- [You Are the Key to HPV Cancer Prevention CE](#), CDC
- [Evidence-Based Strategies for Increasing HPV Vaccination Rates](#), Massachusetts Department of Public Health
- [Shot by Shot Survivor Stories](#)
- [Someone You Love: The HPV Epidemic](#), Lumiere Films
- [Measuring Use Stage 1—How to Send Patient Reminders through your EHR](#)
- [Print Materials for Preteen and Teens](#), CDC
- [Immunization PSAs](#), CDC
- [Adolescent Vaccination Messaging for Practice Hold Lines](#), CDC
- [Communicating Safety and Efficacy of HPV Vaccine to Parents and Preadolescents CME/CE](#), Medscape
- [Adolescent Immunizations: Strongly Recommending the HPV Vaccine](#), American Academy of Pediatrics
- [HPV Champion Toolkit: Huddle Your Way to Better Immunization Rates](#), American Academy of Pediatrics



## Step #4: Get Your 11-12 Year Olds Vaccinated Against Cancers

### Make a Strong Recommendation

A recommendation from a healthcare provider is the single most persuasive reason adolescents get vaccinated. To increase the effectiveness of a HPV vaccine recommendation, consider the following:

- Recommend the HPV vaccine for all boys and girls at age 11-12 the **same day, same way** you recommend other vaccines.
- Try saying, *“Your child needs 3 vaccines today: HPV, Tdap, and meningococcal”* or *“Today your child should have 3 vaccines. They’re designed to protect him from the cancers caused by HPV and from meningitis, tetanus, diphtheria, and pertussis.”*

### Prompt the Provider

Ensure clinicians know that a specific patient is due or overdue for HPV vaccination. Patient specific prompts can come from your EHR, nursing staff or both. Prompts can take many forms. Consider the following when developing your prompting system: EHR automatic pop-ups, EHR visit “task lists”, highlighted text in EHR chart, sticky notes in chart, checklists, preprinted note in client’s chart or a highlighted CPT code on a visit summary.

### Increase Access

Assess for and administer the HPV vaccine at every opportunity. Consider the following types of encounters: well child visits, sick visits, sports physicals and nurse only visits. Incorporate standing orders into clinic procedures. Provide walk-in or immunization only appointments.

### Track Series Completion and Follow Up

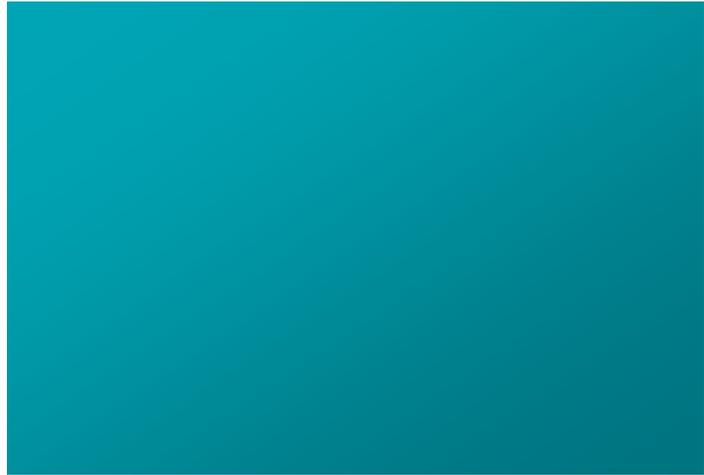
Schedule follow-up appointments for the next doses before the patient leaves your clinic. Remind parents when it is time for the next doses of the vaccine or the vaccine is overdue for their adolescent. Ensure your privacy statement includes: phone, mail, email and text message as options for communication.

### Measure and Improve Performance

A program measures its success by demonstrating an improvement from baseline coverage levels. Some programs have found it helpful to provide monthly coverage level reports for the clinic system, clinic and individual providers. Systematically solicit feedback from staff, providers and parents to refine and improve the impact of your efforts.

### Tools for Your Practice

- [Tips and Time-savers for Talking with Parents about HPV Vaccine](#), CDC
- [Recommending HPV Vaccine Successfully](#), Medscape and CDC
- [Addressing Common Concerns](#), American Academy of Pediatrics
- [Another Shot: Reframing the HPV Vaccine](#), Minnesota Department of Health
- [Letter: Give a strong recommendation for HPV vaccine to increase uptake!](#), Multiple Organizations
- [PDSA Cycle: Strong Recommendation](#), American Academy of Pediatrics
- [PDSA Cycle: Provider Prompts](#), American Academy of Pediatrics
- [Standing Orders for Administering Human Papillomavirus Vaccine to Children and Teens](#), Immunization Action Coalition
- [PDSA Cycle: Standing Orders for HPV Vaccination](#), American Academy of Pediatrics
- [Immunization Reminder and Recall Systems](#), American Academy of Pediatrics
- [Reminder/Recall in Immunization Information Systems: A Mini-Guide](#), American Immunization Registry Association (AIRA)
- [HPV Vaccination Report Card](#), American Cancer Society



## Disclaimer

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## We gratefully acknowledge the contributions of the following individuals:

Debbie Saslow, PhD  
Marcie Fisher-Borne, PhD, MSW, MPH  
Molly Black  
Rebecca Perkins, MD, M.Sc.  
Noel Brewer, PhD

## Tools for Your Practice

- [HPV Vaccination Resource Book for Area Health Education Centers](#), National AHEC Organization
- [HPV Champion Toolkit](#), American Academy of Pediatrics
- [The Community Guide: Increasing Appropriate Vaccination](#), Community Preventative Services Task Force
- [Top Strategies for Increasing HPV Vaccination Coverage](#), American Academy of Pediatrics
- [Five Key Steps To Improve HPV Vaccination Rates in Your Practice Infographic](#), National Foundation for Infectious Diseases
- [Adolescent Immunizations: Office Strategies CME](#), American Academy of Pediatrics
- [Framing the Conversation With Parents About the HPV Vaccine CME/CE](#), Medscape
- [Immunization Training Guide](#), American Academy of Pediatrics
- [President's Cancer Panel Report: Accelerating HPV Vaccine Update: Urgency for Action to Prevent Cancer](#), National Cancer Institute



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