

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

HPV VACs

Vaccinate Adolescents against Cancers





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.¹ In addition to cancers, each year there are 330,000 women who undergo treatment for new cases of pre-cancerous, high-grade cervical dysplasia.²

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 years old. 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 three-dose series.

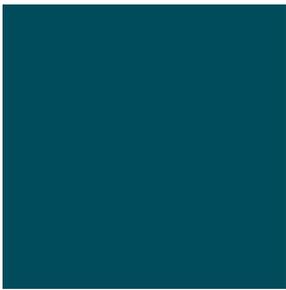
The biggest predictor of HPV vaccination uptake is a strong recommendation from a health care provider. You have the power to make a lasting impact on HPV vaccination and help reduce the HPV-related cancer burden in your community. On the pages that follow you will find detailed steps, evidence-based strategies, and tools for your clinic to increase HPV vaccination.

Benefits to Your Health System Include:

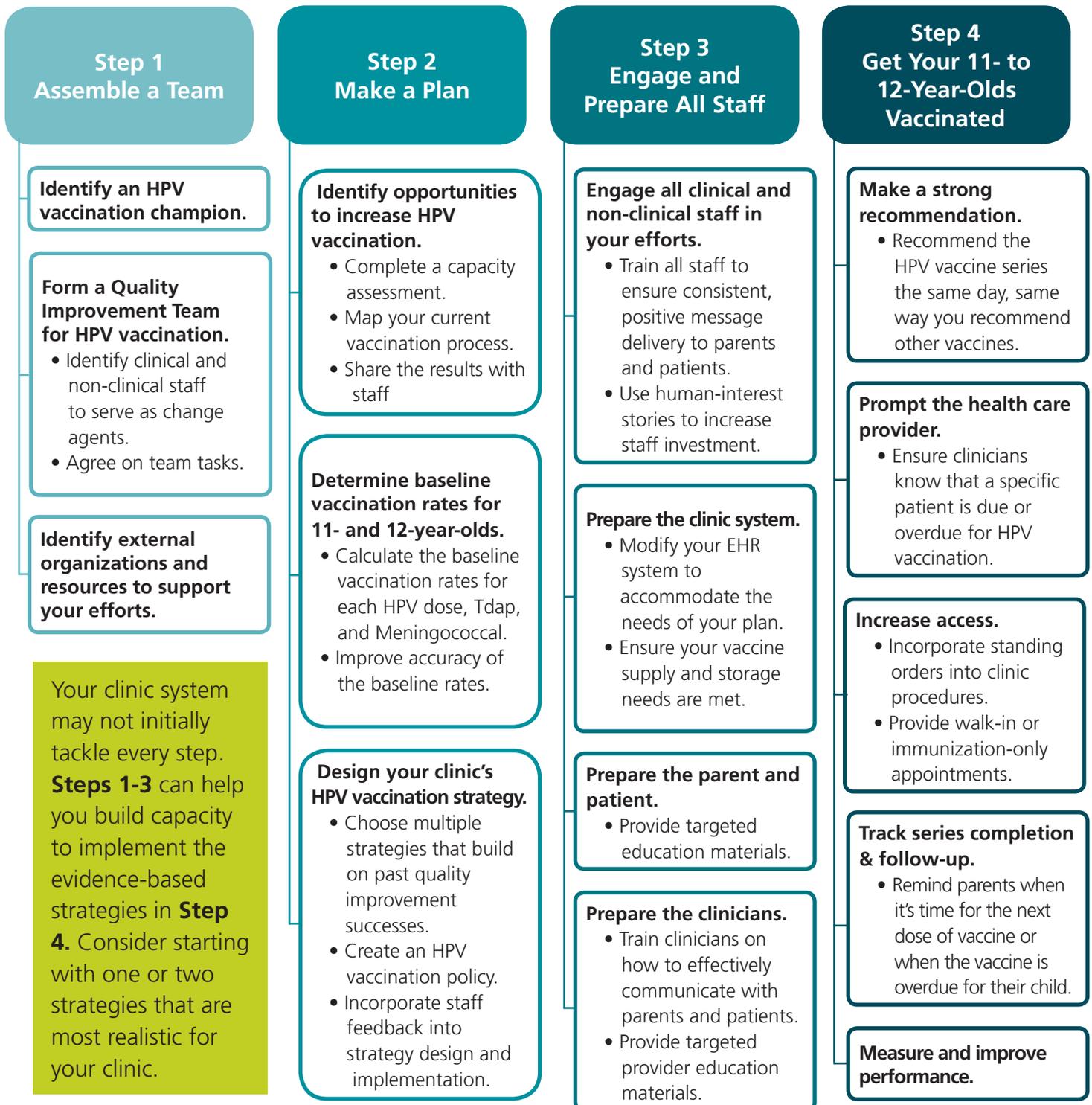
- More patients who come into your clinic and leave vaccinated
- Parents who are motivated to get their child vaccinated against cancer
- Interventions that are evidence-based and, when used consistently, can improve overall vaccination rates
- Cancer prevention integrated into existing systems of care

1. <http://www.cdc.gov/cancer/hpv/statistics/cases.htm>.

2. Schiffman M, Solomon D. Findings to date from the ASCUS-L SIL Triage Study (ALTS). *Arch Pathol Lab Med.* 2003;127:946–949.



Increasing HPV Vaccination: An Overview





Step 1: Assemble a Team

Identify an HPV Vaccination Champion

Having an HPV vaccination clinic champion who advocates for practice change is an important component to the initiation and sustainability of efforts to increase HPV rates. 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 (i.e., 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 rates 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 rates, and set benchmarks.
- Engage staff by regularly collecting feedback.
- Create and update office policies.

Identify External Organizations and Resources to Support Your Efforts

The American Cancer Society, in addition to many other organizations, is committed to increasing HPV vaccination rates and has developed tools and resources to support your clinic's efforts. Consider the following external organizations and resources:

- The HPV VACs (Vaccinate Adolescents against Cancers) Project is a Society program with staff across the country working with federally qualified health centers and state partners to increase HPV vaccination rates.
- AFIX (Assessment, Feedback, Incentives, and eXchange) is a quality improvement program created by the Centers for Disease Control and Prevention where state awardees work with Vaccines for Children providers to raise general immunization rates.
- American Academy of Pediatrics, American Pediatric Association, Centers for Disease Control and Prevention, National AHEC Organization, and National Association of County and City Health Officials have specific HPV vaccination programs and may have initiatives within your community.
- 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

The following **quality improvement** tools are available for downloading at <https://www.mysocietysource.org/sites/HPV/Pages/Step-1.aspx>

- **Child and Adolescent Immunization Office Champions Project**, American Academy of Family Physicians
- **Creating A Quality Improvement Team**, AHRQ
- **Quality Improvement Toolkit**, Minnesota Department of Health
- **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
- **Plan Do Study Act Cycle Template**, Centers for Medicaid 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 and 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

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 rates.

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

Determine Baseline Rates for Your 11- to 12-Year-Olds

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

1. Determine the best data sources: EHR, chart audit, and/or Immunization Information System (registry).
2. Determine the 12-month period for baseline.
3. Identify the patients who are 11 and 12 years old and active medical patients.
4. Identify the patients who have received vaccination for each HPV dose, Tdap, and Meningococcal.
5. Calculate your vaccination rates.

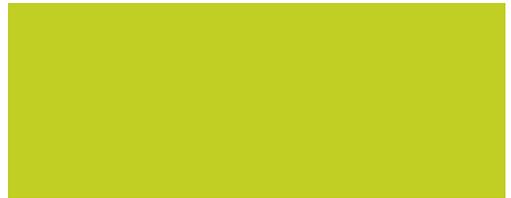
Take continuous steps to improve the accuracy of the clinic's baseline. Even after incorporating data from multiple sources, there will be patients who received HPV vaccine who are missing documentation. Establish a protocol for data entry and verification to ensure vaccination records are accurate.

Design Your Clinic's Vaccination Strategy

Leverage your clinic's strengths when choosing the best approach to increase HPV vaccination rates. 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.
- Start using 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 a regular collection of staff feedback, and check on adherence to the policy.



Tools for Your Practice

The following **planning** tools are available for downloading at <https://www.mysocietysource.org/sites/HPV/Pages/Step-2.aspx>

- **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
- **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 in Your Efforts

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-interest stories in addition to statistics to increase staff investment. A connection to a survivor of an 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. 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 and 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.

Prepare the Clinicians

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

- Conduct on-site training opportunities to increase skills and team camaraderie.
- Incorporate clinic- and system-level data to make training content specific and relevant to your staff.
- Provide continuing medical education credits to motivate health care providers to complete training.
- Disseminate prerecorded 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 who arrive in your clinic leave vaccinated. This huddle time can be used to ensure logistical needs are met and all staff members are aware of their role in the vaccination reminder, recommendation, and administration process.

Tools for Your Practice

The following **staff engagement** tools are available for downloading at <https://www.mysocietysource.org/sites/HPV/Pages/step-3.aspx>

- **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**, California Immunization Coalition
- **Someone You Love: The HPV Epidemic**, Lumiere Films
- **Measuring Use Stage 1 – How to Send Patient Reminders through Your EHR**, National Learning Consortium Resources
- **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- and 12-Year-Olds Vaccinated

Make a Strong Recommendation

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

- Recommend the HPV vaccine for all boys and girls at 11 and 12 years of age 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 Health Care 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 popups, EHR visit task lists, highlighted text in EHR chart, sticky notes in chart, checklists, preprinted note in client’s chart, or a highlighted current procedural terminology 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’s time for the next doses of the vaccine or the vaccine is overdue for their child. 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 rates. Some programs have found it helpful to provide monthly reports for the clinic system, clinic, and individual health care providers with vaccination rates. Systematically solicit feedback from staff, providers, and parents to refine and improve the impact of your efforts.



Tools for Your Practice

The following **strategy implementation tools** are available for downloading at <https://www.mysociety-source.org/sites/HPV/Pages/Step-4.aspx>

- **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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Tools for Your Practice

Below is a list of general tools that focus on multiple topics that may be helpful in increasing HPV vaccination rates in your practice and are available for downloading at <https://www.mysocietysource.org/sites/HPV/Pages/Steps.aspx>

- **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