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

HPV vaccination prevents infection with high-risk types of human papillomavirus, or HPV, that cause the majority of cervical, vaginal, vulvar, anal, penile, and throat cancers. Each year in the US, almost 35,000 men and women will receive a diagnosis of cancer caused by HPV.\(^1\) In addition to cancers, each year hundreds of thousands of women undergo treatment for new cases of pre-cancerous, high-grade cervical dysplasia.\(^2\)

**The HPV vaccine is cancer prevention.** It helps prevent infection from virus types that cause the vast majority of these cancers and pre-cancers. That’s why the American Cancer Society recommends that boys and girls get the HPV vaccine between ages 9 and 12.

More than 60% of US parents have chosen to protect their children from HPV cancers with the HPV vaccine, but this number still lags far behind other adolescent vaccines. Too many boys and girls in the US are not getting the HPV vaccination series and are missing the protection it could provide.

**The biggest predictor of HPV vaccination uptake is an effective recommendation from a health care provider.** You have the power to make a lasting impact on HPV vaccination and help reduce the HPV 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. In addition, follow the links provided in the Tools for Your Practice section of each step to access numerous valuable resources to support your practice’s quality improvement efforts to increase HPV vaccination rates.

**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

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# Increasing HPV Vaccination: An Overview

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Your clinic system may not initially tackle every step.

**Steps 1-3** can help you build capacity to implement the evidence-based strategies in **Step 4**.

Consider starting with one or two strategies that are most realistic for your clinic.
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 vaccination rates. This individual serves in a leadership role for the program and on the quality improvement (QI) 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.
- Include clinical and non-clinical staff.
- Use 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) Program is an American Cancer Society initiative with staff across the country working with health systems and state partners to increase HPV vaccination rates.

- The American Academy of Pediatrics, the American Pediatric Association, the Centers for Disease Control and Prevention, the National AHEC Organization, and the 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 may be important to engage school nurses and others who might initiate the vaccine series, but need your clinic to finish the series.

Tools for Your Practice

Visit the Step 1 web page to access downloadable quality improvement tools. This page includes links to best practices in forming QI teams and using immunization champions and links to state and national HPV vaccination initiatives and resources.

http://bit.ly/VACsStep1
Step 2: Make a Plan

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

Identify Opportunities to Increase HPV Vaccination

Inventory 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. Process mapping is a proven tool to increase understanding of practice level process and identify opportunities for systems change.

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

Determine Vaccination Rates for Your Patients

Determining your baseline rates is 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 patients who turned 13 during the measurement year.
4. Identify the patients who have received vaccination for each HPV dose, Tdap, and meningococcal by their 13th birthday.
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 clinical and non-clinical staff, incorporate a regular collection of staff feedback, and check on adherence to the policy.

Tools for Your Practice

Visit the Step 2 web page to access downloadable tools and materials. This page includes vaccination refusal forms and tools to help you determine patient vaccination rates, inventory and map your practice systems, and choose an intervention that will be successful in your clinic setting.

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 Vaccines for Children 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 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 provider-, 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.
- Ensure key training topics are covered, including how to make an effective recommendation using the announcement approach or bundled approach and providing evidence why the vaccine is best by a patient’s 13th birthday.

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.
Step 4: Get Your Patients Vaccinated By Their 13th Birthday

Make an Effective 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 between ages 9 and 12 the same day, same way you recommend other vaccines.
- Try saying, “Your child needs 3 vaccines today: Tdap, HPV, and meningococcal” or “Today your child should have 3 vaccines. They’re designed to protect them from meningitis, HPV cancers, and whooping cough.”

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 the need 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 dose before the patient leaves your clinic. Remind parents when it’s time for the next dose 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 and data on missed opportunities. Systematically solicit feedback from staff, providers, and parents to refine and improve the impact of your efforts. Conducting PDSA cycles will streamline the implementation of a practice change into a strategy that meets the individual needs of a practice and providers.

Tools for Your Practice

Visit the Step 4 web page to access downloadable strategy implementation tools. This page includes resources for making an effective HPV vaccine recommendation, sample standing orders, sample HPV vaccination PDSA cycles, and tools for provider-, clinic-, and system-level data.

Disclaimer

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Tools for Your Practice

Visit the WhatWorks web page to access a list of general tools that focus on multiple topics that may be helpful in increasing HPV vaccination rates in your practice.


This guide was adapted from the Steps for Increasing Colorectal Cancer Screening Rates: A Manual for Community Health Centers, an impactful tool created by the National Colorectal Cancer Roundtable and the American Cancer Society.