

Strategies to Implement Changes in Practice for HPV Vaccination

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Objectives

- Identify barriers for vaccination
- Practice overcoming the barriers to increase HPV vaccination
- Identify educational resources

Disclosures

- I have nothing to disclose.
- This presentation does mention Gardasil[®]-9 as that is the only HPV vaccine currently available in the US, I have no affiliation with Merck & Co, Inc.

Vaccination Barriers

- Side effects
- Low perceived risk of contracting disease
- Low awareness of availability
- Limited recommendations by medical providers/mixed messages
- Limited access
- Inadequate coverage
- Failure to attend well visits
- Lack of adequate reminder systems

Side Effects for HPV Vaccine

- Serious
 - hypersensitivity reaction, anaphylactoid reaction, anaphylaxis (rare)
 - Allergy to yeast (severe reaction), polysorbate 80 or amorphous aluminum hydroxyphosphate sulfate are a contraindication to Gardasil®-9

Side Effects, continued

- Common

- Injection site reaction (89% pain, 48 % swelling, 34% redness)
- Headache (11%)
- Syncope (observe for 15 minutes after administration)
- Fever
- Nausea
- Dizziness
- Sore throat
- Vomiting
- Cough
- Fatigue

Data from package insert for
Gardasil®-9

Low Perceived Risk of Contracting Disease

- Parents do not feel that young teens are at risk
- Couples in monogamous relationships aren't "worried about exposure"
- The future is uncertain, vaccination offers protection...

Low Awareness of Availability

- Vaccine information in waiting rooms or exam rooms
- Regularly discussing (at every visit) what vaccines patients are due for and how to access them if they are not available in office
 - Pharmacy
 - Local Health Department
- Utilizing a reminder system

Limited Recommendations by Medical Staff

- Physicians not having the time or education to give a recommendation
 - Allowing a vaccine discussion to stop at "NO" without asking why
 - Not giving equal weight to HPV vaccine (along with Tdap and meningitis)
 - Evaluate staff (all office) in confidence in recommending HPV vaccination, improve shortcomings
- Missed vaccine discussions (patient not in for preventative visit)
- Staff not encouraging vaccines (or only mentioning "required vaccines")
- Review updates about changes to vaccine schedule at department meetings so everyone is up-to-date

Inadequate Coverage/Limited Access

- Identify VFC providers
- Local Health Department
- School Vaccine Initiatives
- Mobile Vaccine Units
- Clinics outside regular office hours/ability to walk in without appointment

Failure to Attend Well Visits

- Use EMR or registry to identify vaccine eligible patients
 - Send correspondence (mail, email, text) encouraging scheduling, perhaps even a birthday card for 11- and 12-year-old patients to come in for wellness appointment
- Review of vaccines on every patient at every visit (by physician or nurse/MA)
- Students completing a sports physical at an urgent care or chiropractor office and not being offered vaccines

Lack of Adequate Reminder Systems

- Using EMR alerts/setting future reminders
 - Try to schedule a second vaccine dose before leaving office—then they will get a reminder message. Can set a chart alert as well in case of a "no show"
- State Immunization Registry (Ohio ImpactSIIS)

Real Life

How are we going to get this done during a busy office day?

Workflow

- Nursing staff reviews vaccines as part of the rooming process or pre-visit planning
 - Nursing to pull Ohio IMPACTSIS day before visits
- Use standing orders so that vaccines can be given without individual physician order

Workflow

- ***Be prepared for questions/hesitation***
 - Use motivational interviewing techniques, don't stop at "NO" without discussion
 - Talk directly to adolescent about vaccines/consider having vaccine discussion as part of "confidential" teen visit. Even if parents decline—adolescent has been educated and can make an informed decision (even if it is at 18)
 - Have educational resources readily available
 - Videos on a practice website
 - Poster on exam room wall
 - Handouts

Motivational Interviewing

1. Ask permission
2. Ask patient/family open-ended questions about objections
3. Express empathy/reflective listening
4. Summarize

Common HPV questions and concerns

Giving the HPV vaccine to my 11-year-old will give them permission to be sexually active at a younger age.

False

- This was reviewed in a 2016 systemic review in *Human Vaccines and Immunotherapeutics* that showed no earlier incidence of sexual activity related outcomes (STD testing, pregnancy, contraception counseling)

Questions and Concerns, continued...

Why at 11? Why not wait until they are older?

- Better immune response
- Completed vaccine coverage before exposure/onset of sexual activity
- Fewer doses
- Possibly cheaper—if VFC eligible, would be free until 19

My kid is a good kid, they will not engage in high-risk behavior.

- CDC estimates that there are currently 79 million Americans infected with HPV, and 14 million new cases every year.
- Nearly everyone will be exposed to HPV at some point in their life.
- Partner(s) may have a history of high-risk behavior

Questions and Concerns, continued...

This vaccine is new.

- It was licensed in 2006

It is just for girls.

- Recommendation for vaccine to be given to both boys and girls was given in 2011.
- Boys can also get HPV-related cancers (penile, anal, rectal, oropharyngeal) and can transmit HPV to partner(s)

Questions and Concerns, continued...

This vaccine causes infertility.

- Multiple studies have shown no increased rates of premature ovarian insufficiency in vaccinated vs. non-vaccinated
- HPV (and procedures needed to treat it) can certainly affect pregnancy outcomes

If not infertility, then certainly other illnesses, right?

- POTS, Chronic Fatigue, Complex Regional Pain Syndrome and autoimmune diseases have all been looked at post HPV vaccine, without any correlation found.

Teen Cases

- Two sisters, ages 11 and 14 present to office with dad , one for scheduled well child visit, the other just for vaccines.
 - 11-year-old is the nurse visit for vaccines, dad tells nurses "just required vaccines"
 - 14-year-old is being seen for well child visit, has not had HPV vaccination, she is otherwise up to date.

What are our next steps?

Motivational Interviewing

- **Ask permission for discussion:** consider talking to teens alone
- **Express empathy/use reflective listening**
- **Ask opened-ended questions:** I asked dad his reason for refusal, he stated he has done "research" and did not elaborate further.
- **Summarize:**
 - Dad was not overly open to discussion, the children did not offer alternative opinion
 - I reaffirmed that HPV vaccine was for prevention of HPV-related cancers and genital warts
- **Decision:** I gave patient handouts so that dad (and daughters) could do more research from approved scientific sources; they will review resources, I will review vaccine again at the next encounter.

Case 2

- 11-year-old female (youngest of three daughters) presents for well child visit. She is still in 6th grade, so mom was not planning for vaccines at this visit (nor was the patient).
 - Vaccines discussed; mom is planning to wait until summer before school starts.
 - Offered HPV vaccine at current visit and her second dose with her Tdap and meningitis this summer.
 - Mom is unsure about HPV after "reading more" since her older daughters were vaccinated.
 - Mom is a nurse at our local hospital.

What?

- Ask permission for discussion
- Express empathy/use reflective listening
- Ask patient/family open-ended questions: I asked mom what specifically she was worried about in her recent reading. She did not have a specific example. Patient was just generally adamant that she did not want any vaccines at this visit.
- Summarize
 - Reviewed with mom that older daughters had not had issues with vaccine, patient was not mentally prepared for vaccines at this visit. Mom in agreement that they will proceed with vaccination at a future visit.
 - I reviewed that this is a cancer preventing vaccine.
- Decision: encouraged scheduling first HPV dose to allow second dose when she gets her other vaccines this summer

Case 3

- Two siblings present for well child visits, ages 11 and 9. Eleven-year-old will be starting his HPV vaccine series at this visit. Offered to mom that both children can do HPV today, then their nurse visits for the second dose will be at the same time. She agreed.

Teen Recap

- Review vaccines at all visits because you might not see them for a preventative visit
- Use EMR to identify eligible teens to come in for appointment
- Use equal language when referring to the 7th grade vaccines.
- Be prepared to discuss vaccine with patient and parent(s)
- Provide education and offer to bring them back for a later appointment if they are not ready for vaccine today. Ask again the next time you see them (even if the interval is very short).
- Emphasize this is a cancer reducing/preventing vaccine

Educational Resources

- CDC
 - Several videos, handout specifically on parent questions
- Children's Hospital of Philadelphia Vaccine Education Center
 - One-page informational handout, several videos
- Ohio Academy of Pediatrics
 - HPV Vaccine Brochure, Handout on Vaccine Hesitancy in Black Communities
 - Vaccine Reminder Card (to mail to families)
- Ohio Department of Health
 - Five-page handout on HPV vaccination
 - Two-page handout on Cervical Cancer stats from 2022

- Let's Talk Vaccines by Gretchen LaSalle, MD

What about the adults?

- Consider catch-up vaccination for ages 18-26
- Shared decision making for patients 27-45
- Know where to refer adults who want vaccines
 - Local health department
 - Pharmacy

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- When do we have these conversations?
 - Well women visits/contraception counseling
 - Patient presenting for colposcopy or have a history of an abnormal pap
 - Patients with head and neck cancer (and/or their families)
 - Conversations with these groups can be patient specific, but they can also provide information and get them thinking about getting children (or even grandchildren) vaccinated.

Adult Cases

- 43-year-old female presenting for her annual wellness visit. History of cervical cancer diagnosed five years ago. Prior to her diagnosis, she had an LGSIL pap during pregnancy. She got lost to follow-up after delivering her son premature (29 weeks), he is currently 8.

What do we discuss with her?

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- She was never vaccinated for HPV.
 - She is still age eligible for vaccination, but will she benefit?
 - Her son will soon be age eligible, she was unaware that HPV vaccination was available for boys. Vaccination for him when he is eligible was strongly encouraged.

Adult Cases

- 47-year-old female presented for cervical cancer screening after many years without screening. Pap smear with HPV co-testing was obtained, she is positive for High-Risk HPV 16. Colposcopy was completed, she has a High Grade (CIN III) lesion. She has been referred for further treatment.

What do we discuss with her?

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- She was never vaccinated for HPV and now has aged out of recommended age group.
 - She has custody of her two young grand-daughters. Discussed vaccination for them when they become age eligible.

Summary

- Use all available appointments as an opportunity to discuss vaccines
- Educate staff to be knowledgeable and supportive of vaccines
- Present HPV vaccination equally to Tdap and meningitis, not optional
- Offer vaccines outside of regular office hours or office location (Saturday morning/weekday evening, school-based vaccinations)
- Talk about HPV. All of the HPV cancers are bad, we don't want our patients to suffer because we would not talk about the subject.

Be a Vaccine Champion!

References

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