



#### HPV VACCINE STARTS AT 9: WHY? HOW? NOW! CANCER PREVENTION MADE EASY WEBINAR

May 16, 2023

#### Before We Start

- All participants will be muted for the presentation.
- You may ask questions using the Q&A box, and questions will be answered at the end of the presentation.
- Continuing education is available for physicians, nurses, medical assistants, and pharmacists/pharmacy techs attending the webinar or watching the recording.
- If you're watching in a group setting and wish to claim CE credit, please make sure you register for the webinar and complete the evaluation as an individual.
- You can find more information on our <u>Web Page</u>.

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This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the Federation of State Medical Boards and the Washington Medical Commission. The Federation of State Medical Boards is accredited by the ACCME to provide continuing medical education for physicians.

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#### Continuing Education

- This nursing continuing professional development activity was approved by Montana Nurses Association, an accredited approver with distinction by the American Nurses Credentialing Center's Commission on Accreditation. Upon successful completion of this activity, 1.0 contact hours will be awarded.
- This program has been granted prior approval by the American Association of Medical Assistants (AAMA) for 1.0 administrative continuing education unit.
- This knowledge activity was approved by the Washington State Pharmacy Association for 1.0 contact hours. The Washington State Pharmacy Association is accredited by the Accreditation Council for Pharmacy Education as a Provider of continuing pharmacy education.



#### Disclosures

The planners and speakers of this activity have no relevant financial relationships with any commercial interests pertaining to this activity.

#### Learning Objectives

- 1. Describe HPV-related cancers and HPV vaccination rates in WA and in the US
- 2. Identify at least 3 benefits of starting HPV vaccination at age 9
- 3. Discuss clinic strategies to support workflows for HPV vaccination starting at age 9

#### Presenters

#### Kathy Bay, DNP, RN

Clinical, Quality, and School Section Manager Washington State Department of Health

**Sherri Zorn, MD, FAAP** Washington HPV Free Taskforce National HPV Vaccination Roundtable, Best Practices Taskgroup

Carrie Jenner, MD, FAAP

Medical Director of Pediatrics, Franciscan Medical Group

**Amy Carter, MD, FAAP** Chief Medical Officer, Allegro Pediatrics

#### DOH HPV Vaccination Recommendation

KATHY BAY, DNP, RN



#### **Clinical Materials**

# Vaccine Advisory Committee Clinical Guidance The Vaccine Advisory Committee recommends that all vaccines are administered in accordance with the federa Committee on Immunization Practices (ACIP) schedules. • High-Dose and Adjuvanted Flu Vaccine for Persons 65 and Older (PDF) (Updated 3/2020) • Meningococcal B Vaccine Clinical Guidance (PDF) (Updated 4/9/2019) • HPV Clinical Guidance Age 9

#### **Excerpt:**

"The Advisory Committee on Immunization Practices (ACIP) recommendations for the HPV two-dose vaccination series were published in the MMWR in December 2016. I would like to emphasize the HPV two-dose series can be initiated at age 9 years."



January 06, 2020

Dear Provider,

The Advisory Committee on Immunization Practices (ACIP) recommendations for the HPV two-dose vaccination series were published in the MWR in December 2016. I would like to emphasize the <u>HPV</u> two-dose series can be initiated at age 9 years.<sup>1</sup>

#### ACIP Recommendations for HPV Vaccination

Age When Starting Series	# of Doses	Schedule/Interval
9 through 14 years	2	0, 6-12 months
9 through 14 and immunocompromised or HIV positive	2	0, 1-2, and 6 months
15 through 45 years <sup>2</sup>	,	0, 1-2, and 6 months

HPV vaccine may produce a better immune response. HPV vaccines administered to younger

- HPV vaccine may produce a better immune response. HPV vaccines administered to younger adolescents are safe and provide effective, long-lasting protection from HPV-related cancers. Studies have shown that two doses of HPV vaccine given at least six months apart to adolescents at age 9 to 14 years worked <u>as well or better</u> than three doses given to older adolescents and young adults.<sup>1</sup>
- More opportunities to vaccinate! Starting earlier allows you more time and opportunities to finish
  the two-dose series. If you vaccinate at 9 years of age, you should give them the second dose
  between 6 and 12 months after the first dose. If yene with a skipped annual visit, as long as the first
  dose is initiated before the 15<sup>th</sup> birthday, only two doses are needed. In Washington, one dose of
  Tdap is required for school when the child is age 11 years. This school requirement gives you the
  opportunity to administer that second HPV dose at age 11.
- HPV vaccine offers the best protection against HPV infection when administered before exposure to the virus. According to 2018 Washington State Healthy Youth Survey data, 4 percent of all 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders reported having had sexual intercourse by age 13 years.<sup>3</sup> About 9 percent of 8<sup>th</sup> grade students reported having ever had sexual intercourse; whereas, 26 percent of 10<sup>th</sup> graders and 47 percent of 12<sup>th</sup> graders have ever had sex.<sup>3</sup>

Please consider initiating HPV vaccination at age 9 years. Thank you for routinely recommending and administering HPV immunization.

Sincerely,

the Owien alter

Scott Lindquist, MD, MPH State Epidemiologist for Communicable Diseases

<sup>1</sup>Meites E, Kempe A, Markowitz LE. Use of a 2-Dose Schedule for Human Papillomavirus Vaccination — Updated Recommendations of the Advisory Committee on Immunization Practices. MMWR 2016;65(49):1405-8. <sup>3</sup>Meites E, Szilagyi PG, Chesson HW, Unger ER, Romero JR, Markowitz LE. Human Papillomavirus Vaccination for Adults: Updated Recommendations of the Advisory Committee on Immunization Practices. MMWR 2019;68:698–702. <sup>3</sup>Ask Healthy Youth Survey (2018). Healthy Youth Survey Fact Sheet: Sexual Behavior and Orientation for Washington State. Retrieved from <u>http://www.askhys.net/FactSheets</u>

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#### HPV@9 Initiative

- Vaccine Advisory Committee request
- Recommendations by:
  - American Cancer Society
  - American Academy of Pediatrics
  - Washington Vaccine Advisory Committee
- Beginning 20 January 2023, Washington State Immunization Information System (IIS) began prompting for first dose of HPV vaccine to be given at age 9
- Research has shown that starting @9 has a positive impact on completion and immunity

#### Poll Question

Do you or other staff log into the Washington Immunization Information System (WAIIS) to check what vaccines are forecast/recommended for patients?

A. Before the visit

B. At the end of the visit to plan for the next visit

C. During the visit to confirm with patient/parent what is recommended

D. N/A: Do not check WAIIS for vaccine forecast/recommendations

E. Both A and B

F. A, B, and/or C

#### WAIIS Forecast emphasizes: vaccination can be given starting at age 9 years

- Gives providers direction & encouragement to recommend at age 9
- Not a requirement (allows for parent and provider choice)

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					$\overline{\mathcal{V}}$	
Date of Birth:	01/01/2014	Age:			9 yrs	
Guardian:		Organization L	evel Status:		Inactive	
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	he ACIP schedule are marked with anX					
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		8 weeks	4 months	6 months	4 years	
	OPV/IPV	03/01/2014	05/01/2014	07/01/2014	01/02/2018	
		8 weeks	4 months	6 months	4 years	
	MMR	01/02/2015	01/02/2018			
		12 months	4 years			
	Hib	03/01/2014	05/01/2014	07/01/2014		
		8 weeks	4 months	6 months		
	Hep B - 3 Dose	01/01/2014	02/01/2014	07/01/2014		
		0 days	4 weeks	6 months		
	Varicella	01/02/2015	01/02/2018			
		12 months	4 years			
Corona	avirus (SARS-CoV-2)(COVID-19)	04/01/2022				
		8 years				
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#### Poll Question

The electronic health record (EHR) for my organization:

A. Provides a forecast/recommendations for the patient

B. Is electronically updated with the forecast/recommendations from WAIIS

C. Provides a forecast/recommendations but I'm not sure how the EHR recommendations work

D. No forecast/recommendations are available in my EHR

E. Both A and B

F. N/A: We don't have an EHR

#### Protect your child against viruses that can cause cancer.

HPV vaccine can be given starting at age nine. It protects children against cancers caused by the human papillomavirus.

#### Two reasons for two doses at age nine

HPV vaccines are safe and develop better immunity when given at younger ages, producing the most infection-fighting cells, or antibodies, in preteens. It is highly effective in preventing infection from certain types of HPV when given before a person is exposed to the virus.

When your child turns nine, ask your health care provider about protecting them from cancer with the HPV vaccine. Learn more at https://www.doh.wa.gov/hpv.



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#### 

At least 35,900 people in the U.S. get cancer caused by HPV each year.

The two most common cancers caused by HPV are cervical cancer in women and mouth/throat cancer in men.

Only TWO doses of HPV vaccine are needed for most kids who start the series at ages 9 to 14. THREE doses are needed for those starting at ages 15 to 26.



- Materials are available online for use in your clinics
- <u>Human Papillomavirus (HPV)</u>
   <u>Information Healthcare</u>
   <u>Providers | Washington State</u>
   <u>Department of Health</u>

Simple

### HPV Vaccine Starts at 9 Why? How? NOW! Cancer Prevention made Easy



Sherri Zorn MD May 16, 2023 WA HPV Free Task Force National HPV Vaccination Roundtable Best Practices Task Group

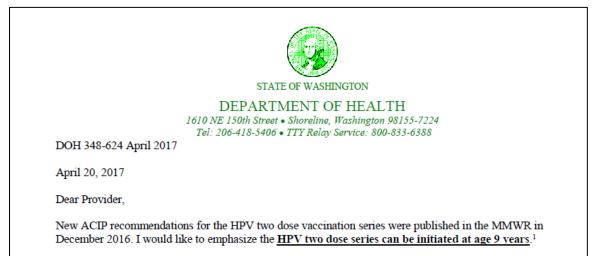
Sustainable

Successful

No conflicts of interest

# My journey started in April 2017

Dear Provider letter from WA DOH "HPV two dose series can be initiated at age 9 years"



Hmmm... age 9... that's strange... I wonder why?

Probably not worth the hassle to change our workflow

Have we measured our HPV completion rates by age 13? ...oops they're NOT that great

Maybe it's worth looking into...

- √ Safety
- ✓ Immunity... best at age 9-12
- $\checkmark$  Dosing interval... 12 months works great!
- √ Is it allowed?... Yes
- √ Any downsides?... No

Let's try it and see what happens...

- $\checkmark$  Unbundling... easier to recommend just one vaccine
- $\checkmark$  More space/time at the 9-10-year visit
- $\checkmark$  Easier conversations... less focus on sex

# **HPV Cancers**

#### In the United States:

- ~37,300 cases/year of HPV-attributable cancers
- ~200,000 cases/year of cervical precancers

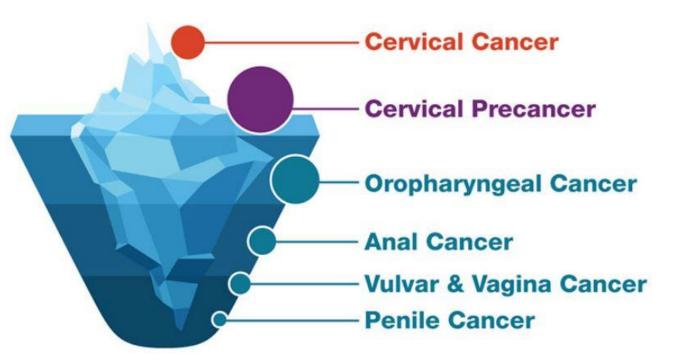
Caused by persistent HPV infections

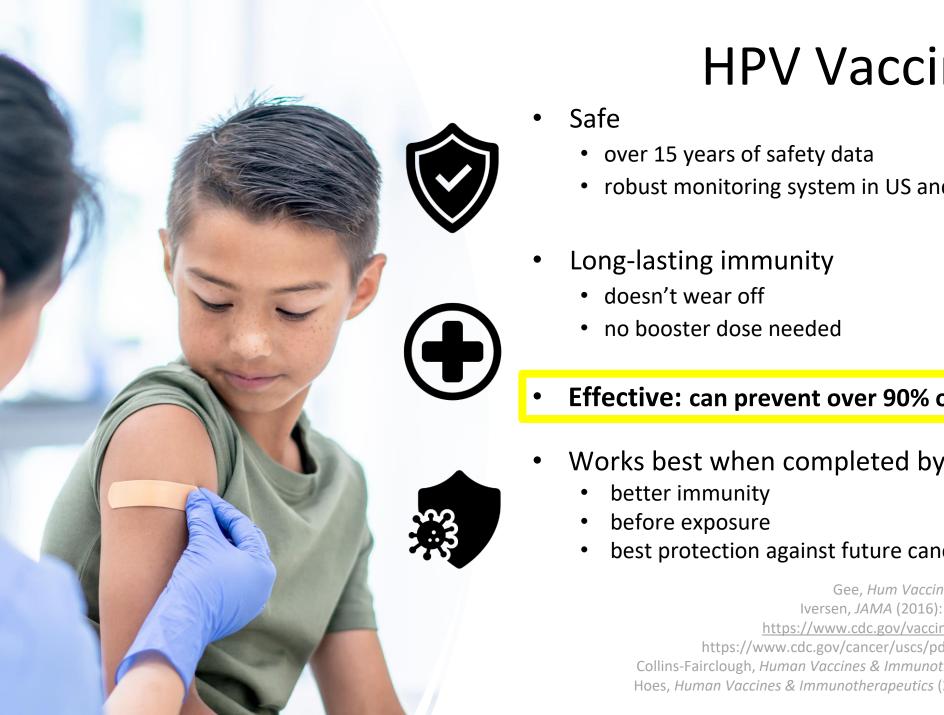
- HPV infection is usually acquired in teen and young adult years
- precancers and cancers occur years to decades later

Doesn't require sexual activity! Just skin-to-skin contact

Oropharyngeal cancers (throat & back of mouth)

- 4 out of 5 cases occur in men
- rates are rising
- more common than cervical cancers





# **HPV Vaccine**

• robust monitoring system in US and multiple other countries

- Effective: can prevent over 90% of HPV-attributable cancers
- Works best when completed by age 13
  - best protection against future cancers

Meites, MMWR (2016) & (2019) Gee, Hum Vaccine Immunotherapeutics (2016) safety review Iversen, JAMA (2016): info on titers and 12-month dosing interval https://www.cdc.gov/vaccinesafety/vaccines/hpv/hpv-safety-faqs.html https://www.cdc.gov/cancer/uscs/pdf/USCS-DataBrief-No31-October2022-h.pdf Collins-Fairclough, Human Vaccines & Immunotheraputics (2021): extended dosing interval Hoes, Human Vaccines & Immunotherapeutics (2022): review of long-term immunogenicity 18

### Age at Vaccination: Younger is better

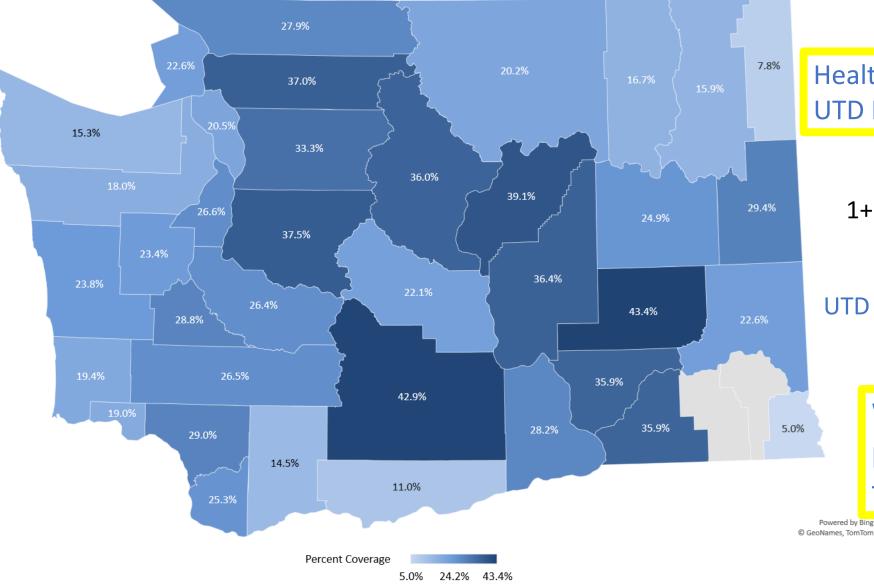
The effects of the national HPV vaccination programme in England, UK, on cervical cancer and grade 3 cervical intraepithelial neoplasia incidence: a register-based observational study

Milena Falcaro, PhD Alejandra Castañon, PhD Busani Ndlela, PhD Marta Checchi, MSc Kate Soldan, PhD

Jamie Lopez-Bernal, PhD • et al. Show all authors Published: November 03, 2021 • DOI: https://doi.org/10.1016/S0	Age at Vaccination	Reduction in Cervical Precancers (CIN3)	Reduction in Cervical Cancer Incidence
Registry based study in England	40.40	070/	070
Bivalent vaccine	12-13	97%	87%
Standard age for HPV vaccination: 12-13 years	14-16	75%	62%
13.7 million years of follow-up for women ages 20-30 years	16-18	39%	34%

Effectiveness drops when vaccination occurred above age 13

# HPV UTD rates by 13<sup>th</sup> birthday in WA, 2022



Healthy People 2030 Goal: UTD HPV = 80% for age 13-15

> 1+ HPV (initiation) = 51.3% (range 8.9-67.9%)

UTD HPV (completion) = 31.3% (range 5.0-43.4%)

> We can do better to protect our children from HPV cancers!

### Does forecasting at age 9 comply with ACIP recommendations? YES!

Name:	TEST PATIENT	SIIS Patient ID:	11867247
Date of Birth:	11/26/2013	Age:	9 yrs
Guardian:		Organization Level Status:	Inactive

The forecast automatically switches to the catch-up schedule when a patient is behind schedule

Vaccine Group	Forecasted Dose	Recommended Date	Minimum Valid Date	Overdue Date	Status
HEP-B 3 DOSE	1	11/26/2013	11/26/2013	12/23/2013	Past Due
POLIO	1	01/26/2014	01/07/2014	02/26/2014	Past Due
HEP-A	1	11/26/2014	11/26/2014	12/23/2015	Past Due
MMR	1	11/26/2014	11/26/2014	04/22/2015	Past Due
VARICELLA	1	11/26/2014	11/26/2014	04/22/2015	Past Due
Tdap	1	11/26/2020	11/26/2020	11/26/2020	Past Due
FLU	1	07/01/2022	07/01/2022	07/28/2022	Past Due
HPV	1	11/26/2022	11/26/2022	12/23/2026	Due Now
MENINGOCOCCAL	1	11/26/2024	11/26/2024	12/23/2026	Not Yet Due
MENINGOCOCCAL B, OMV (Clinical Discretion)	1	11/26/2029	11/26/2023	12/26/2029	Not Yet Due
MENINGOCOCCAL B, RECOMBINANT (Clinical Discretion)	1	11/26/2029	11/26/2023	12/26/2029	Not Yet Due

#### CDC/ACIP:

"Children and adults aged 9 through 26 years. HPV vaccination is routinely recommended at age 11 or 12 years; vaccination can be given starting at age 9 years."

#### WAIIS forecasting emphasizes:

"vaccination can be given starting at age 9 years"

- Gives providers direction & encouragement to recommend at age 9
- Not a requirement (allows for parent and provider choice)

#### Starting at age 9 is considered best practice by:

American Academy of Pediatrics (AAP) - since 2018 American Cancer Society National HPV Vaccination Roundtable

Meites, MMWR (2019)

O'Leary Sean, Why-AAP-recommends-initiating-HPV-vaccination-as-early-as-age-9, *aap.org* (2019) Saslow, *CA Cancer J Clin* (2020) Evidence-Summary-HPV-Vaccination-Age 9-12, *hpvroundtable.org* (2022) Kahn, *Human Vaccines and Immunotherapeutics* (2023)

# Why HPV at Age 9?



- Robust immunity: highest titers between ages 9-12
- Easier conversations: focus on cancer prevention NOT sex
- Fewer shots per visit: many prefer spacing shots out instead of bundling
- More time = more opportunities to vaccinate by age 13
  - More time for hesitant parents/patients to learn about the vaccine
  - Helps mitigate disruptions in care
- Higher completion rates... more cancers prevented!

O'Leary, Sean, Why-AAP-recommends-initiating-HPV-vaccination-as-early-as-age-9, aap.org (2019)

Evidence-Summary-HPV-Vaccination-Age 9-12, hpvroundtable.org (2022)

O'Leary, Sean, Human Vaccines and Immunotheraputics (2022)

### **HPV Vaccine Dosing Schedule**





CRITICAL AGES 15-26 3 Doses Ist dose at visit one 2nd dose 1-2 months later 3rd dose 6 months after 1st dose

hpvroundtable.org

Same schedule for all genders

No need to restart series if dosing interval is extended

Shared clinical decision-making for individuals ages 27-45 (not routinely recommended due to low benefit) Tip: at age 9-12 consider using a 12-month dosing interval... leads to higher titers and easier workflows (can skip the shot-only visit at 6 months)

# The Science: HPV at 9 works!

• Providers have positive experiences recommending before age 11

Biancarelli, Journal of Pediatrics (2020) - MA Zorn, Human Vaccines and Immunotherapeutics (2023) - WA

#### • Providers recommend (or are willing to recommend) HPV at age 9

Lake, *Human Vaccines and Immunotherapeutics* (2023) - USA survey in FQHCs Kong, *Academic Pediatrics* (2022) - USA survey

#### • Higher rates of on-time completion

Goodman, Pediatrics (2023) - NIS-Teen analysis Saxena, Human Vaccines and Immunotherapeutics (2023) – USA MarketScan claims analysis Zorn, Human Vaccines and Immunotherapeutics (2023) - WA O'Leary Sonja, Human Vaccines and Immunotherapeutics (2023) - CO Cox, Pediatrics (2022) - MA Casey, Journal of Lower Genital Tract Disease (2021) - MA Perkins, Pediatrics (2020) - MA St Sauver, Preventive Medicine (2016) - MN

#### • EMR prompts/alerts help promote HPV at age 9

O'Leary Sonja, Human Vaccines and Immunotherapeutics (2023) - CO Goleman, Acad Pediatrics (2018) - OH



#### and more... Special edition: *Human Vaccines and Immunotherapeutics* (2022-2023) https://www.tandfonline.com/journals/khvi20/collections/HPV-vaccination-starting-age-9

# Providers have positive experiences recommending before age 11

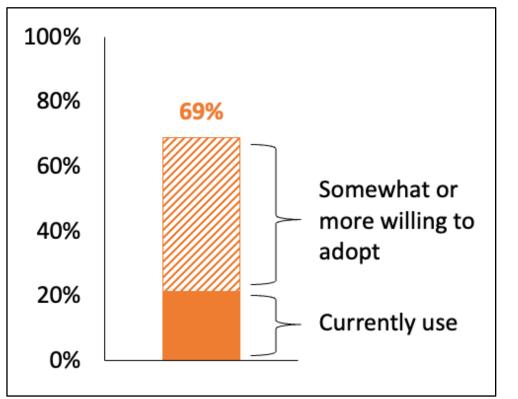
"Easier than I thought"

- Interviews with providers
- Providers uniformly report
  - high parental acceptance
  - reduced parental concerns related to sexual activity
  - fewer shots at each visit
  - more opportunities to **complete the series**

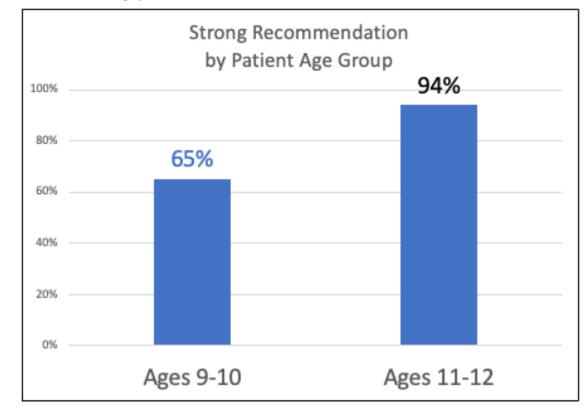
# Providers recommend HPV at age 9 (or are willing to recommend)

National survey of providers - 2021

69% currently or are willing to recommend at age 9



National survey of FQHC providers - 2021-2022 65% strongly recommend at 9-10



# Higher rates of on-time completion

Age 10 P-Chart Ages 11-12 P-Chart in-person in-persor in-perso primary can primary care \$ 55% å 50% £ 45% 40% > 35% 30% 25% 20% 8 15% 109 Mar-16 - Oct-2 Mar-16 - Ort-2 C B Age 13 Series Complete by 13th Birthday (HEDIS) P-Chart Ages 11-12 P-Chart in-perso 85% Mar-16 - Oct-2

**HPV** Initiation

On-time HPV vaccination by age 13 increased from 62% to 88% at two FQHC practices (starting at age 10)

Boston, MA 2016-2020

Casey, Journal of Lower Genital Tract Disease (2021) 27

**HPV Series Completion** 

Starting at age 9-10: Higher rates of on-time completion by age 13

age 9-10 (light blue) vs age 11-12 (dark blue)

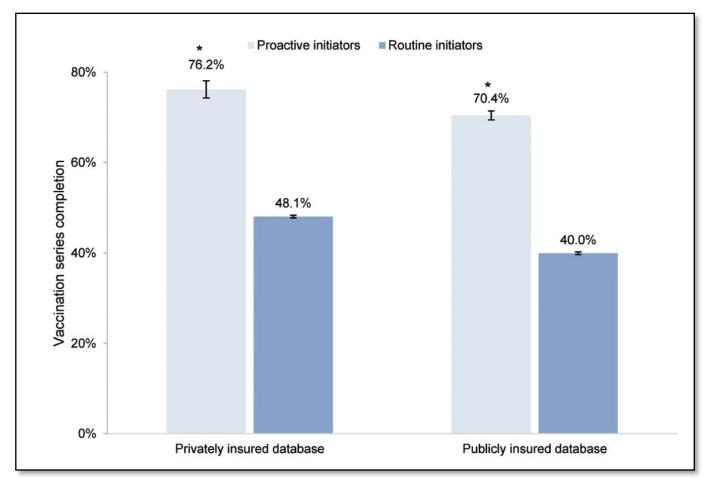


Figure 2. Percent HPV vaccination series completion by 13 years of age among proactive and routine initiators enrolled in the privately insured and publicly insured databases. Note: The base-case results are denoted by the blue bars. The error bars show the 95% confidence intervals. Asterisk indicates a statistically significant difference between proactive and routine initiators in the base-case analysis (p < 0.001).

# Knowledge Check:

What is a benefit of starting HPV vaccine recommendation and administration at age 9?

A. Robust immune response between age 9 and 12

- B. Easier conversations with parents and patients
- C. Improved on-time completion of HPV series by age 13

D. All of the above



# HPV Vax at 9 in Washington State

Multi-level quality improvement strategies to optimize HPV vaccination starting at the 9-year well child visit: Success stories from two private pediatric clinics

Zorn, Darville-Sanders, Vu, Carter, Treend, Raunio, Vasavada, Human Vaccines and Immunotherapeutics (Feb 2023)

	Clinic A:	Clinic B:
HPV Vax at 9 implementation	Started in 2018	Started in 2021 (during pandemic)
Characteristics	Urban King County	Urban/suburban King County
# of providers	10 pediatricians (MD)	85 pediatric providers (MD, DO, ARNP)
# patients (age 9-10)	1,128	11,436
Standing Orders	No: shots given after the visit	Yes: shots often given before the visit
Electronic Medical Record	Order sets: HPV at age 9-10	Prompt: HPV at 9

# HPV Vax at 9

#### **Multi-level Interventions**

Policy: HPV at 9-year and 10year well visits; 12-month dosing interval

#### **EMR Supports**

Provider/Staff Training: Strong Recommendation

HPV posters

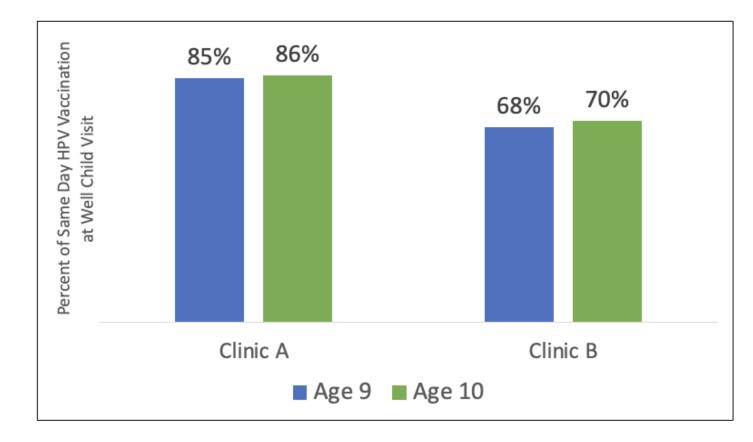
Standard Immunization Schedule posters

HPV Cue Card Sustainable

# Simple Results Easy to implement Streamlined workflows High provider, staff and parent/patient acceptance Increased vaccination rates between age 9-12 Successful More kids protected from HPV cancers

Zorn, Human Vaccines and Immunotherapeutics (2023) 31

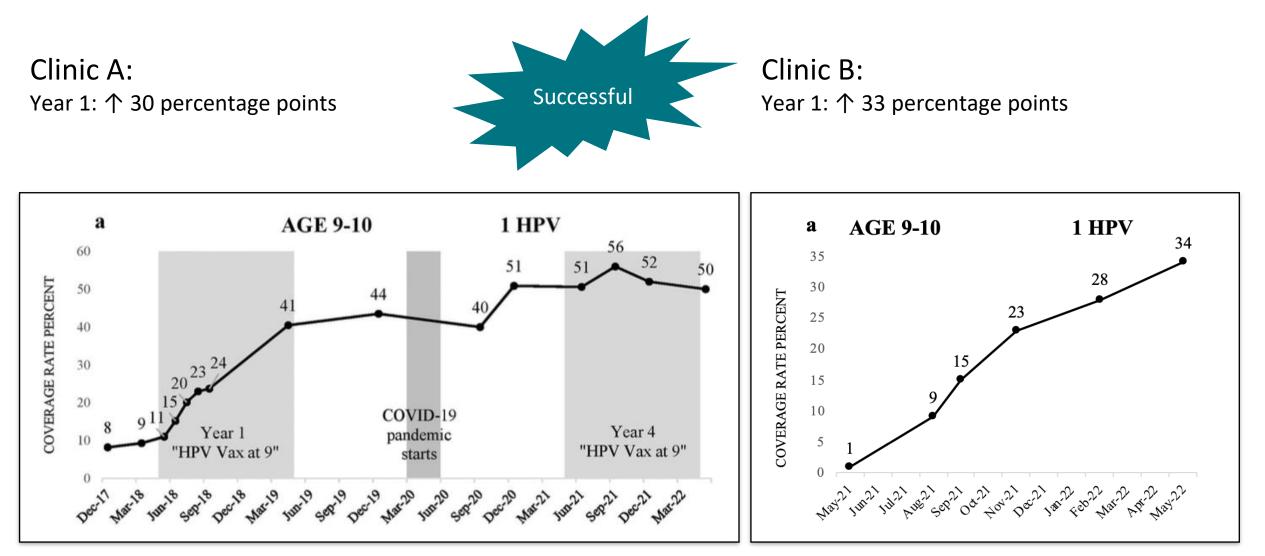
### "HPV Vax at 9" is acceptable to providers and parents!



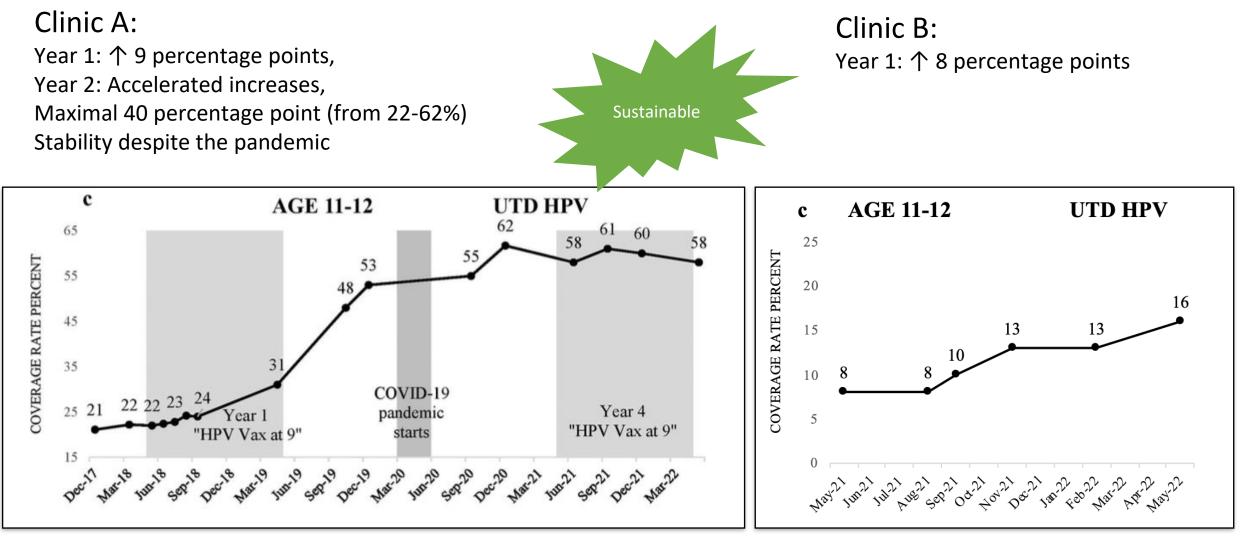
Majority of patients received the HPV vaccine on the same day as the 9-year and 10-year well child visits

"Giving a simple strong recommendation focused on cancer prevention is easier and more effective than getting into an awkward discussion about sex"

### 9-10 HPV Initiation Coverage Rates (source WAIIS)



# 11-12 HPV UTD Coverage Rates (source WAIIS)



# HPV Vax at 9 works in Rural WA too!



- 5 clinics serving rural populations in WA (36 providers) 88% of providers are somewhat or more willing to "recommend at age 9"
- Preliminary Results: measured 2 months after training
  - Same Day HPV administration at well child visits:
    - 9-year WCC: 67% received HPV
    - 10-year WCC: 50% received HPV
  - WAIIS HPV coverage rates at 9-10 years: 7 percentage point increase

"This has been an eye-opening experience and a big surprise that parents are welcoming of HPV at age 9-10" "Wow, I didn't think it would be this easy" ... referring to implementing HPV vax at 9



Providers receive MOC credit for participating



# **Implementation Steps**

- Be curious... Give it a try
- Policy: Get leadership/organizational support
  - Use the HPV Vax at 9 resource list for references and links to materials <u>www.wcaap.org/resources/vaccines/</u>
- Optimize EMR prompts to alert at age 9 (if possible)
  - Some clinics may have barriers with this... don't let that discourage you
- Prepare
  - Clear, concise, consistent messaging: "HPV vaccine is cancer prevention, Starts at 9"
  - Post your standardized immunization schedule: feature HPV at 9
  - Gather parent/patient information
- Train your team...use announcement approach
- Support your team... be open to questions or concerns
  - Acknowledge that change can be hard

#### HPV Vax at 9 Resources

Announcement Approach Pathway, HPVIQ:
https://www.hpviq.org/wp-content/uploads/2022/09/HPVIQ-flyer-src\_edit\_Sep2022\_v3.pd

HPV Cue Cards:
 https://hpvroundtable.org/wp-content/uploads/2023/03/Starts-at-9-Kits\_Cue-Card\_PRINT.pdf

Toolkits:

WA DOH HPV Resources:

 https://doh.wa.gov/public-health-healthcare-providers/public-health-system-resources-and services/immunization/hpv-information

apillomavirus-hpv

American Cancer Society: www.cancer.org/HP

American Academy of Pediatrics: www.aap.org/hp

05:

WCXX

National HPV Vaccination Roundtable: HPV Vaccinations: 9 Benefits of Starting at Age 9 ( <2 min) https://www.youtube.com/watch?v=hCpN1Rv9YQ

- AAP: Patient/parent video "When is the best time for HPV vaccination? | AAP" (20 seconds https://www.youtube.com/watch?v=FwsMv2LTFvA
- AAP: HPV at age 9 in Rural Setting: (5 min)
   https://players.brightcove.net/605665225001/default\_default/index.html?videoId=6311436

Posters: Create your own co-branded HPV Posters and Customizable Immunization Schedules

```
    American Cancer Society Brand Toolkit: HPV poster: Protect your Kids from Cancer

    <a href="https://brandtoolkit.cancer.org/">https://brandtoolkit.cancer.org/</a> Register as a new user. If any difficulties, contact ACS at

    www.brandtoolkit@cancer.org or 1-800-227-2345
```

```
    JOOK Customizable immunization Schedule poster template on Canvex.com. Use it as a template or
as inspiration to create your own off orfer as it lither as 54 per poster Sites 18 x 24 or 12 x 16
inch). https://www.canva.com/design/DAFg2mlkto8/Qa6NM_JMYK/sLxiarK8_Hg/view?utm_cont
entroDAFg2mlkto8Butm_campaign=designshare8utm_medium=link&utm_source=publishsharelink
&mode=preceive
```

Amerigroup

4.23.2023



# Optimize EMR (if possible) Make it easy to start at 9

- Change prompt to age 9
- Well child order sets
  - HPV pre-selected at age 9-10 years



- Caution: EMR barriers
  - EMR team might not understand "Why age 9"
  - Concern about conflict with ACIP
  - Competing priorities for EMR team
  - Large or multi-state organizations may need buy-in from other organizations if they share an EMR platform



# Clear, Concise Messaging



#### La vacuna contra el VPH es prevención del cáncer. Vacune a sus hijos, niños y niñas por igual, a partir de los 9 años para protegerlos del Virus del Papiloma Humano (VPH) y los 6 tipos de cáncer que este virus puede causar. boy all r

#### Messaging

HPV vaccine prevents HPV cancers Starts at 9

A picture is worth a 1,000 words boys and girls all races and ethnicities pre-teens age 9-12

American Cancer Society Brand Toolkit https://brandtoolkit.cancer.org/BMS/

co-branding available 4 image choices

Tip: Consider posting in lobby, exam rooms, immunization room, weigh station

# Post Standardized Immunization Schedule

Indicates vaccines are important and routine

Talking point – low tech visual cue

- Parents:
  - Appreciate knowing what is next
  - Helps parents be firm
  - May reduce alternative schedules
- Staff:
  - Promotes standard workflow
  - Reduces confusion...easier for staff
  - Reduces errors
- Providers:
  - Adds authority to strong recommendation
  - "Like a 2<sup>nd</sup> voice"

ADOLESCENT IMMUNIZATION SCHEDULE Influenza vaccine is recommended Adolescents (age 9-18) need 4 vaccines to annually starting at 6 months protect against meningococcal disease, some cancers, whooping cough, and other serious Children and teens should stay diseases, according to national guidelines up-to-date with COVID-19 vaccine IMMUNIZATIONS AGE More info: www.cdc.gov/vaccines • HPV dose 1 9-10 Birth 12 months 9-10 years • HPV dose 2 (6-12 months after dose 1) More language MMR HPV (2 doses) HepB Varicella between 9-12 years HepA PCV 15 months • HPV doses 1 and 2 (if not given at ages 9-10) 2 months 11-12 years 11-12 MenACWY dose 1 DTaP-IPV-Hib-HepB DTaP Tdan • Tdap (one dose) PCV Hib MenACWY Rotavirus (oral) 4 months 18-24 months 16 years MenACWY dose 2 DTaP-IPV-Hib-HepB HepA MenACWY MenB dose 1 PCV MenB dose 2 (1-2 months or 6 months Rotavirus (oral) after dose 1, depending on brand) 6 months 4 years 16-18 years DTaP-IPV-Hib-HepB MMRV MenB (2 doses) PCV DTaP-IPV Discuss with your • Flu Vaccine (every year, every age provider YEARLY for adolescents) Combination Vaccines (subject to availability Vaccine Key DTaP: Diphtheria, HepA: Hepatitis A Vaxelis: includes DTaP-IPV-Hib-HepB etanus, Pertussis (whooping cough) Pentacel: includes DTaP-IPV/Hib Pediarix: includes DTaP-HepB-IPV Stay up-to-date on COVID-19 Vaccination HepB: Hepatitis B ProQuad MMRV: includes Measles Mumps, Rubella and Varicella Hilb Haemonhilus influenzae tune HD: Haemophilus Initiana HPV: Human Papillomaviru IPV: Inactivated Polio Virus Quadracel/Kinrix includes DTaP-IPV See full schedule at cdc.gov/vaccines HEALTH MenACWY: Meningococcal A, C. W. Y (meningitie ት MenB: Meningococcal B (meningitis MMR: Measles, Mumps and Rubella OH 348-739 March 202 PCV: Pneumococcal (pneumonia Tdap: Tetanus, Diphtheria, Pertussis ( Varicella: Chickenpox

Available in 6 languages

Modifiable template English & Spanish www.wcaap.org/resources/vaccines/

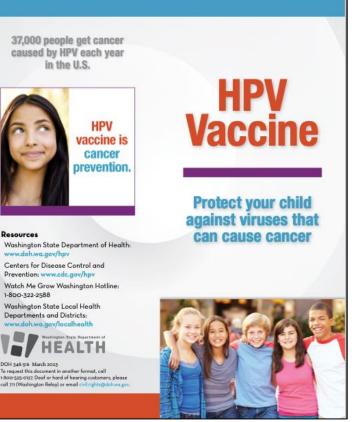
"The giant poster is amazing... low tech, but powerful"

"It was our simplest, cheapest and BEST intervention"

#### Tip: Make it large! 18 x 24 inch Feature HPV at age 9 Consider your patients' primary language

# **Gather Parent-Patient Information Materials**





#### HPV at 9 resources from WA DOH... translated into 5+ languages: Spanish, Russian, Ukrainian, Vietnamese, Marshallese (flyer also in Chinese)

#### HPV at 9 Toolboxes:

#### "Made in Washington"

- <u>https://doh.wa.gov/public-health-healthcare-providers/public-health-system-resources-and-services/immunization/hpv-information</u>
- www.wcaap.org/resources/vaccines/
- www.aihc-wa.com (coming soon)

#### "Made in USA"

- <u>www.cancer.org/HPV</u>
- www.aap.org/hpv
- <u>www.hpvroundtable.org</u>

# Train your team



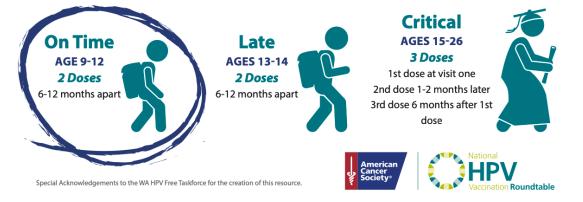
Who? All kids (both boys and girls) should get the vaccine starting at age 9.

What? The human papillomavirus (HPV) vaccine is a cancer prevention vaccine.

#### Why?

- The HPV vaccine prevents 6 different cancers (mouth/throat, cervix, vulva, vagina, penis and anus).
- The HPV vaccine prevents most genital warts.
- The HPV vaccine is safe and effective, with no long term side effects.
- The HPV vaccine has been given for more than 15 years and provides long lasting protection.

#### When?



#### HPV Cue Card:

https://hpvroundtable.org/wp-content/uploads/2023/03/Starts-at-9-Kits Cue-Card PRINT.pdf

#### The Announcement Approach for Increasing HPV Vaccination

Take these steps to more effectively recommend HPV vaccination. They will save you time and improve patient satisfaction.

..... If a parent is be

#### ANNOUNCE

1

Start with a presumptive appouncement that assumes parents are ready to vaccinate. This is an effective way to recommend adolescent vaccines, including HPV vaccine.<sup>1</sup>



ANNOUNCEMENT EXAMPLE

"Marcus is now 9, so today he'll get a vaccine

that prevents six HPV cancers."

#### 2 - CONNECT & COUNSEL

Connect with parents by asking for their main concern about HPV vaccine. Counsel parents by using a research-tested message to address their concern.<sup>2</sup> Then clearly recommend getting HPV vaccine today.



HPV

3

HPV vaccine or plan to soon.

#### Announcement Approach:

https://www.hpvig.org/wp-content/uploads/2022/09/HPVIQ-flyersrc edit Sep2022 v3.pdf

### Try it! Recommend HPV vaccine at age 9

- Use presumptive announcement ٠
- Focus on cancer prevention

"Marcus is now 9, so today he'll get a vaccine that prevents six HPV cancers"

If hesitant, connect with parents, ask for their

main concern

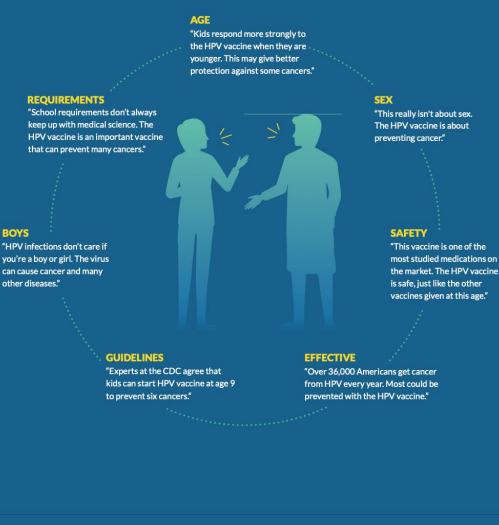
- Don't be afraid of questions
- Counsel using research-tested messages
- If the parent declines, try again another day; 70% of parents who initially decline HPV,

eventually say YES

Brewer, Pediatrics, 2017 Shah, Pediatrics, 2019 Kornides, Academic Pediatrics, 2018 https://www.hpvig.org/wp-content/uploads/2022/09/HPVIQ-flyer-src edit Sep2022 v3.pdf

#### **Research-tested Messages to Address HPV Vaccine Concerns**

1,200 parents told us these were the best messages to use when addressing their concerns.<sup>2</sup>





# Knowledge Check

Which is essential for implementing age 9 recommendations?

A. Electronic Medical Record (EMR) prompt changed to age 9

- B. 100% of providers and staff on-board
- C. Curiosity... willingness to give it a try
- D. Robust reminder recall and outreach system in place

HPV Vaccine is Cancer Prevention

# It starts at age 9

Successful

Give it a try!

Simple

Sustainable

# HPV at 9: Just Give it a Try!

Dr. Carrie Jenner

Change can be Scary

- I joined the WA HPV Taskforce 2 years ago.
- After hearing that other providers were giving HPV at nine, I decided to give it a try on just 1 patient.
- No one likes change, especially me, so I was nervous. I wasn't sure I wanted to change.
- I recommended it to the parent of a 9 year old at a well child visit and she said YES!
- I decided to keep offering it at 9 and 10 and it became easier every time.
- Now I have no hesitancy about offering HPV at 9

Sharing the recommendation with my colleagues I asked the other 3 Pediatricians in my clinic to start recommending the HPV vaccine at 9.

2 out of 3 embraced it quickly.

It was easier to recommend at age 9 rather than at 11, as it was just 1 vaccine to discuss.

There were fewer questions and conversations about sex when recommending at ages 9 and 10.

We presented HPV as a cancer prevention vaccine with good efficacy and safety data behind it.

Next Step: Adding a Poster to Exam Rooms

- The WA HPV Taskforce offered free, branded posters with the Preteen-Teen schedule that recommended starting HPV vaccine at age 9
- I ordered large size (18 x 24) posters for the exam rooms of our 2 largest Pediatric clinics
- I discussed the new recommendation with the MA/Nursing staff
- A poster was also placed in the Waiting Room

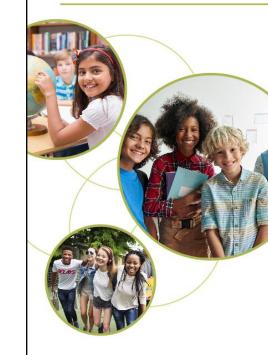
Poster from the National HPV Roundtable in Exam Room



### The Poster has all recommended vaccines from ages 9 thru 16

### **Protect Your Preteen/Teen** with Vaccines

Protect them from serious diseases including HPV cancers, meningitis, tetanus, whooping cough, flu, and COVID-19.



#### **AGES 9 - 10**

- HPV dose 1 (human papillomavirus)
- HPV dose 2 (6 12 months after dose 1)

#### AGES 11 - 12

- Meningitis dose 1 (MenACWY)
- Tdap (tetanus, diphtheria, pertussis)
- HPV (if 2 doses haven't been given)

#### **AGE 16**

- Meningitis dose 2 (MenACWY)
- Meningitis B series (MenB)

#### YEARLY

Flu (seasonal influenza)

Preteens and teens should stay up-to-date with COVID-19 vaccine to help protect them from COVID-19.



This publication was supported in part by funding from the Centers for Disease Control and Prevention through Cooperative Agreement grant number 6 NU066IP000682. The content of this publication does not necessarily represent the official views of, nor an endorsement by, the CDC/HIS or the U.S. Government. The Poster Speaks for Itself!

## AGES 9 - 10

- HPV dose 1 (human papillomavirus)
- HPV dose 2 (6 12 months after dose 1)

# AGES 11 - 12

- Meningitis dose 1 (MenACWY)
- Tdap (tetanus, diphtheria, pertussis)
- HPV (if 2 doses haven't been given)

The Poster has been an Easy and Effective Tool

## •Since adding the posters:

- I often walk into the exam room and the Patient or Parent asks ME about the HPV vaccine
- I can point to the poster to let the family know that the HPV vaccine is recommended today
- The poster adds authority to my recommendation
- Helps parents stay firm in getting a vaccine that day
- Prepares patients to get the HPV vaccine at 9

# Bump in the Road - EMR

- I have asked my healthcare system to change our EMR (Epic) to start forecasting HPV vaccine at 9 in the Health Maintenance/Care Gap prompts
- There is push back to change the EMR because our Epic build is across multiple states that don't have a clear recommendation to start at 9
- I will keep pushing for this change to align with the WA DOH recommendation and the change in the forecast of the WA-IIS as well as backing from the AAP, American Cancer Society and other groups

Despite the bump in the road, we still have the posters as an easy, effective tool.

I recommend <u>you</u> try recommending HPV vaccine at age 9 once and see how it goes.

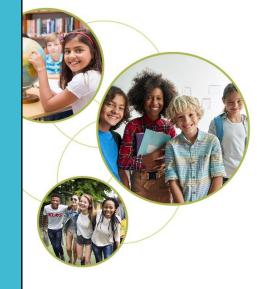
It's easier than you think.

The ultimate goal is to get better cancer protection for our patients.

HPV at 9 will lead to more adolescents being complete with the 2 dose series by age 13.

#### **Protect Your Preteen/Teen** with Vaccines

Protect them from serious diseases including HPV cancers, meningitis, tetanus, whooping cough, flu, and COVID-19.



#### AGES 9 - 10

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# How We Operationalized HPV Vaccination at Age 9

### Amy Carter, MD Chief Medical Officer, Allegro Pediatrics



### Pearls for Implementation



Involve all patient-facing staff



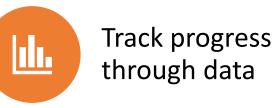
Create clear, simple goals



Take time to educate



Provide opportunities for feedback



communication

### Project Design Included Everyone in Clinics

Sponsored by CMO & Director of Clinical Services (RN)



8 clinic teams with local champions (MD, NP, RN, MA, PSR)



Met monthly to review data and ask for feedback



Communicated progress

Monthly organization trends to all Monthly clinic trends to each clinic



# Clear Simple Goals



Why? Prevent cancer

Offer HPV at 9 years



How?

What?

Standard workflows

Updated EMR to prompt HPV vaccine starting at 9 years

Bidirectional connection between EMR and WA-IIS to ease verification

# Standard Workflows

MAs to prep all visits to flag when HPV vaccine was due

Clinic care team huddles allow verbal order to give vaccine at the start of the visit when due and parent accepts

### Took Time to Educate Care Teams

#### Offered Multiple Modalities for Learning

- In person & asynchronous
- Audio & visual options
- Iterative messages reinforced over 6-month project

#### Safe to Ask Any Question

• Vaccine hesitancy exists, even for staff, so we addressed all myths and welcomed all questions

#### See, Do, Teach

- Each person involved was empowered to
  - Learn, then
  - Teach a colleague, then
  - Educate a patient family

#### Local Support

• Clinic level champion in each role served as education/support and a safe way to give feedback

Trained a Consistent Message

Tailored to Care Team Role

"The more energy you put into the medical assistants to use the practical pitch [script], the better it works."

#### PROVIDERS (MDs, DOs, ARNPs)

- Standards changing based on updated research
- Works better at younger ages
- Protection is long-lasting
- Safe during mild illness

#### NURSES (RNs)

• Detailed understanding to empower discussions during phone advice, nurse visits, vaccine-only visits

#### **MEDICAL ASSISTANTS (MAs)**

- Simplify visit prep to reduce missed opportunities
- Clear recommendation + parent choice works best
- If YES > give shot so provider exam during 15 min. observation
  - defer to provider if patient is sick
- If UNSURE or NO > provider can answer any questions

#### PATIENT SERVICE REPRESENTATIVES (PSRs)

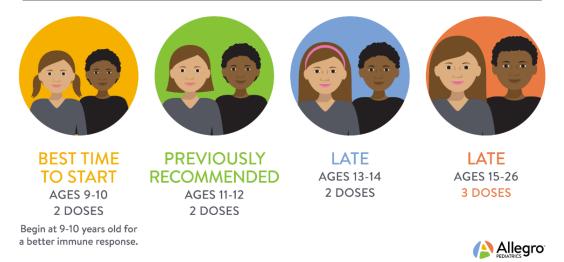
- Focus on cancer prevention
- Empower to answer questions about HPV schedule

# Communication to Patient Families



#### HPV Vaccine Schedule & Doses

# Social Media





🖸 SHARE 🛛 🖬 🗹 ...)

HPV (Human papillomavirus) infections can cause cancers of the cervix, mouth, and throat. About 85% of people get an HPV infection in their lifetime. Fortunately, the HPV vaccine is safe and highly effective against HPV infections. It is important for both boys and girls to receive this vaccine.

The vaccine schedule was updated to recommend beginning the 2-dose HPV vaccine series at the 9 year-old Well Child Check-up, instead of at the 11–12 year old Well Child Check-up. Studies have shown that receiving the HPV vaccine earlier produces a better immune response, and there is no evidence that protection wears off over time. Additionally, if your child waits to start the HPV vaccine series until they are 15 or older, they will need to receive a third dose of the vaccine for it to be fully effective. It has been proven that vaccinating just 202 people can prevent 1 case of HPV-related cancer. Please help protect your child from HPV and be sure to schedule their well child checkups and routine immunizations.

#### HPV Vaccine Schedule & Doses



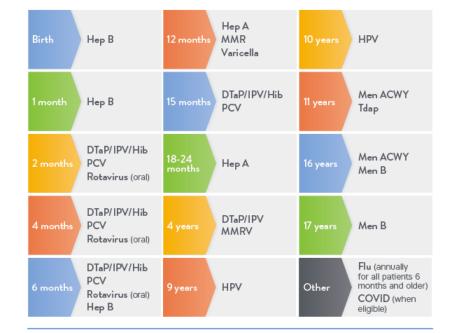
Website Blog

### Exam Room Poster

"The giant poster of the immunization schedule is magic."

"...conversation started by patient families before I entered the room."

# KEEP YOUR CHILD UP TO DATE ON Routine Immunizations



#### VACCINE KEY:

Pertussis (whooping cough)       Men B: Meningococcal B         DTaP/IPV/Hib: Diphtheria, Tetanus, Pertussis, Polio, and Haemophilus Influenza B       MMR: Measles, Mumps, Rubella and Varicella         Hep A: Hepatitis A       MMRV: Measles, Mumps, Rubella, and Varicella         Hep B: Hepatitis B       PCV: Pneumococcal         Hib: Haemophilus Influenza B       Tdap: Tetanus, Diphtheria, and	
Pertussis, Polio, and Haemophilus       MMR: Measles, Mumps, Rubella         Influenza B       MMRV: Measles, Mumps, Rubella, and Varicella         Hep A: Hepatitis A       and Varicella         Hep B: Hepatitis B       PCV: Pneumococcal         Hib: Haemophilus Influenza B       Tdap: Tetanus, Diphtheria, and	Men B: Meningococcal B
Hep A: Hepatitis A     MMRV: Measles, Mumps, Rubella, and Varicella       Hep B: Hepatitis B     PCV: Pneumococcal       Hib: Haemophilus Influenza B     Tdap: Tetanus, Diphtheria, and	
Hep 8: Hepatitis B     PCV: Pneumococcal       Hib: Haemophilus Influenza B     Tdap: Tetanus, Diphtheria, and	
Hib: Haemophilus Influenza B Tdap: Tetanus, Diphtheria, and	
ruop. retailos, Dipritriena, and	
HPV: Human Papillomavirus Pertussis booster	
IPV: Polio Varicella: Chickenpox	





### HPV VACCINE INFORMATION

# Patient Family Handout

"Giving a simple strong recommendation focused on cancer prevention is easier and more effective than getting into an awkward discussion about sex."



HPV (Human papillomavirus) infections can cause cancers of the cervix, mouth, and throat.

About 85% of people get an HPV infection in their lifetime.

Fortunately, the HPV vaccine is safe and highly effective against HPV infections.

It is important for both boys and girls to receive this vaccine. Receiving the vaccine earlier, as early as 9 years old, poduces a better immune response.



Visit the Washington State Department of Health for helpful information regarding the HPV vaccine and cancer prevention:



# Multiple Opportunities for Ongoing Feedback

Email created: "HPV Project" Local champions asked teammates for each monthly meeting

CMO in clinics weekly

### Regular Review of Data

.....

7



Organization level (to entire company) Clinic level (to each clinic) Provider level (privately to each provider)

6-month project end

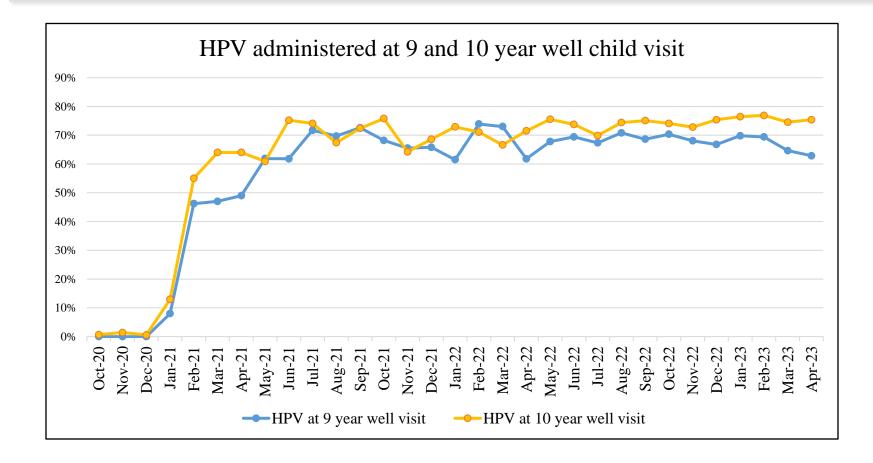
12-month update

2 years later

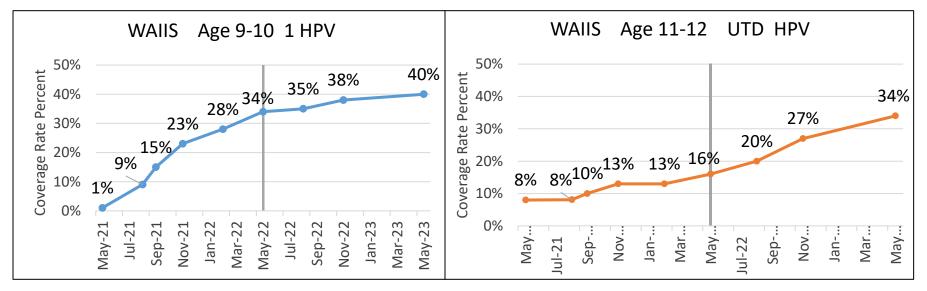


Progress Sustainable without Additional Work

"This intervention will continue to make a major impact on cancer prevention because the changes to the system will remain in place indefinitely with minimal ongoing effort."



### HPV Coverage Rates continue to rise throughout year 2



May 2023: 12,401 patients ages 9-10 years

HPV first dose coverage rates: Females (41%) vs. Males (40%) May 2023: **12,156** patients ages 11-12 years

Small Intervention = Big Impact to Patients

### Additional Resources

- Department of Health Office of Immunization
- Department of Health School and Child Care Immunization Requirements
  - Information and resources regarding school and child care immunization requirements
- Immunization Quality Improvement for Providers (IQIP)
  - Promote and support the implementation of provider-level quality improvement strategies designed to increase vaccine uptake. Available for providers enrolled in the Washington Childhood Vaccine Program

Video (less than 2 minutes) HPV Vaccinations:

9 Benefits of Starting at Age 9 https://www.youtube.com/wa tch?v=hCpNJ1Rv9YQ



### Obtaining Continuing Education

•Continuing education is available for physicians, nurses, medical assistants, pharmacists and pharmacy technicians

- There is no cost for CEs
- •Expiration date is 5/16/24
- •Successful completion of this continuing education activity includes the following:
  - Attending the entire live webinar or watching the webinar recording
  - Completing the evaluation after the live webinar or webinar recording
  - On the evaluation, please specify which type of continuing education you wish to obtain

•Please note: CE certificates are NOT generated after evaluation completion—CE certificates will be sent by DOH and the CME provider via email within a few weeks after evaluation completion

•If you have any questions about CEs, contact Trang Kuss at <u>trang.kuss@doh.wa.gov</u>





Washington State Department of Health is committed to providing customers with forms and publications in appropriate alternate formats. Requests can be made by calling 800-525-0127 or by email at <u>civil.rights@doh.wa.gov</u>. TTY users dial 711.