

HPV Vaccine Best Practices

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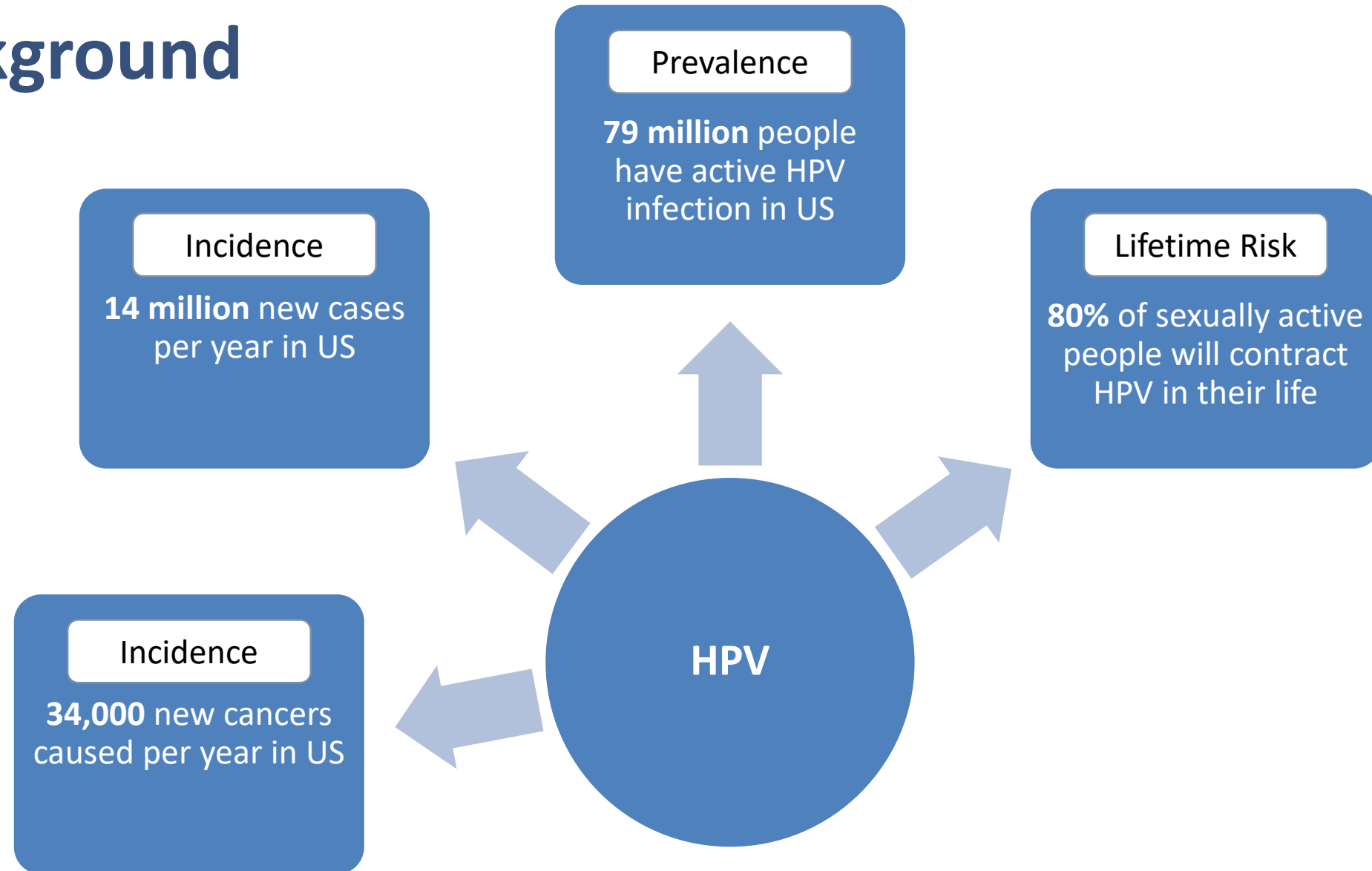
Intermountain Healthcare

OBJECTIVES

At the conclusion of this presentation, participants should be able to successfully:

- Understand HPV vaccine success
- Understand HPV vaccine rates in Utah
- Increase HPV vaccination rates by using best practice strategies

HPV- Background



HPV Vaccine Success: Personal and Population Protection

4vHPV types decreased from

- 35% to 6.7% in vaccinated females (**80.9%** decline) – direct effect
- 32.4% to 19.4% in unvaccinated females (**40%** decline) – population herd effect

Spinner C, Ding L, et. al. (Feb 2019) Pediatrics;143(2)

Incidence rate ratio of developing cervical cancer due to 4v HPV vaccine

-0.12 (95% CI, 0.00-0.34) if vaccinated before 17 years old

-0.47 (95% CI, 0.27 to 0.75) if vaccinated at 17 years or older

N Engl J Med 2020; 383:1340-1348

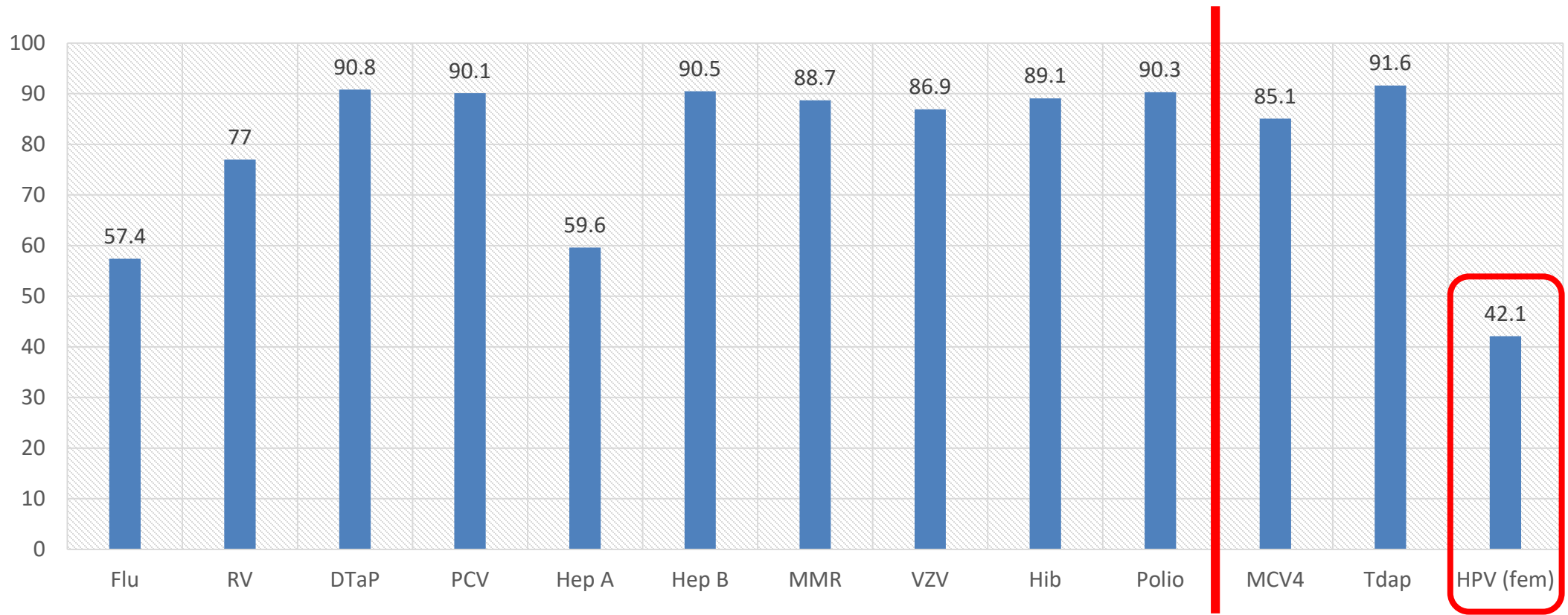
HPV Vaccine

44th



America's Health Rankings-
HPV Immunizations

UT NIS 2017 (% Completion) age 13-17 years



BEST PRACTICES

Solutions Demonstrating Improvement on Meta-Analysis

- Standing orders (Protocols)
- Provider reminder/recall (Advisories)
- Feedback to providers (Registries)
- Client reminder/recall (Work the list)
- Patient education
- Expanding access in health-care settings (Immunization clinics, shot nurse/room, walk-in)

TFCPS (The Community Guide)

Best Practice:
July 2020- American Cancer Society
recommends to start HPV Vaccine
series at age 9

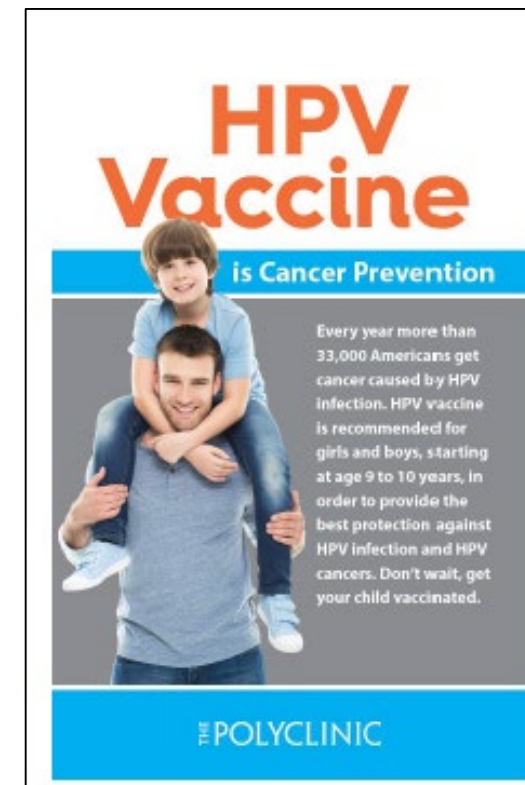
Polyclinic (Seattle, WA) Success:

By changing practice pattern, quickly increased HPV rates

- 1) Initiated HPV vaccine series at age 9-10 years
- 2) Message: HPV is cancer prevention, and presumptive recommendation with simple supportive signage
- 3) Recalled patients who had started series (phone, mail, email)

Results:

- Initiation rate <13 years: Increased from **31% to 70%** in 1 year
- Completion rate (UTD) (13-17 yrs): **87%**
- 2019 UTD rate (13-17 yrs) US – 51.1%, Utah – 43.2%



Nationwide Children's Hospital- 2018

Obstacle

Perceived need to discuss sexuality

Fewer healthcare visits in older adolescents

3 dose series in older adolescents

Answer

Initiate HPV vaccine at age 9 to increase likelihood of series completion before age 13

1. Changed EMR alert from age 11 to 9 in June 2015
2. Changed focus of discussion to cancer prevention
3. Completion rate increased to 82.9%

Effectiveness:

Immune response younger age

- FDA approved
- Higher titers^{1,2}
 - Duration of Protection³

¹HPV Package Insert – Study 2 and 9 <https://www.fda.gov/media/90064/download>

²Hernandez-Avila M, et al, Hum Vaccin Immunother. 2016 Jan: 12(1): 30-38

³Lazcano-Ponce E, et al, [J Infect Dis.](#) 2019 Jan 1;219(1):41-49. doi: 10.1093/infdis/jiy465.

HPV Vaccine Starting at Age 9- Bottom Line

Immune response is better, and we can
focus on cancer prevention

Clarifying Expectations

Message to family at Kindergarten visit –

“Your next vaccine besides your yearly influenza vaccine is a HPV vaccine when Jane turns 9.”

Establish 9 and 10 year old Well Visits as standard expectation-

Change in HEDIS Well Child Visit measure

Messaging in exam rooms-

Posters with vaccine schedule

Posters about HPV as cancer prevention

Immunization Schedule: Birth To 21 Years



Is your child up to date on immunizations?

IMMUNIZATION SCHEDULE: BIRTH TO 21 YEARS

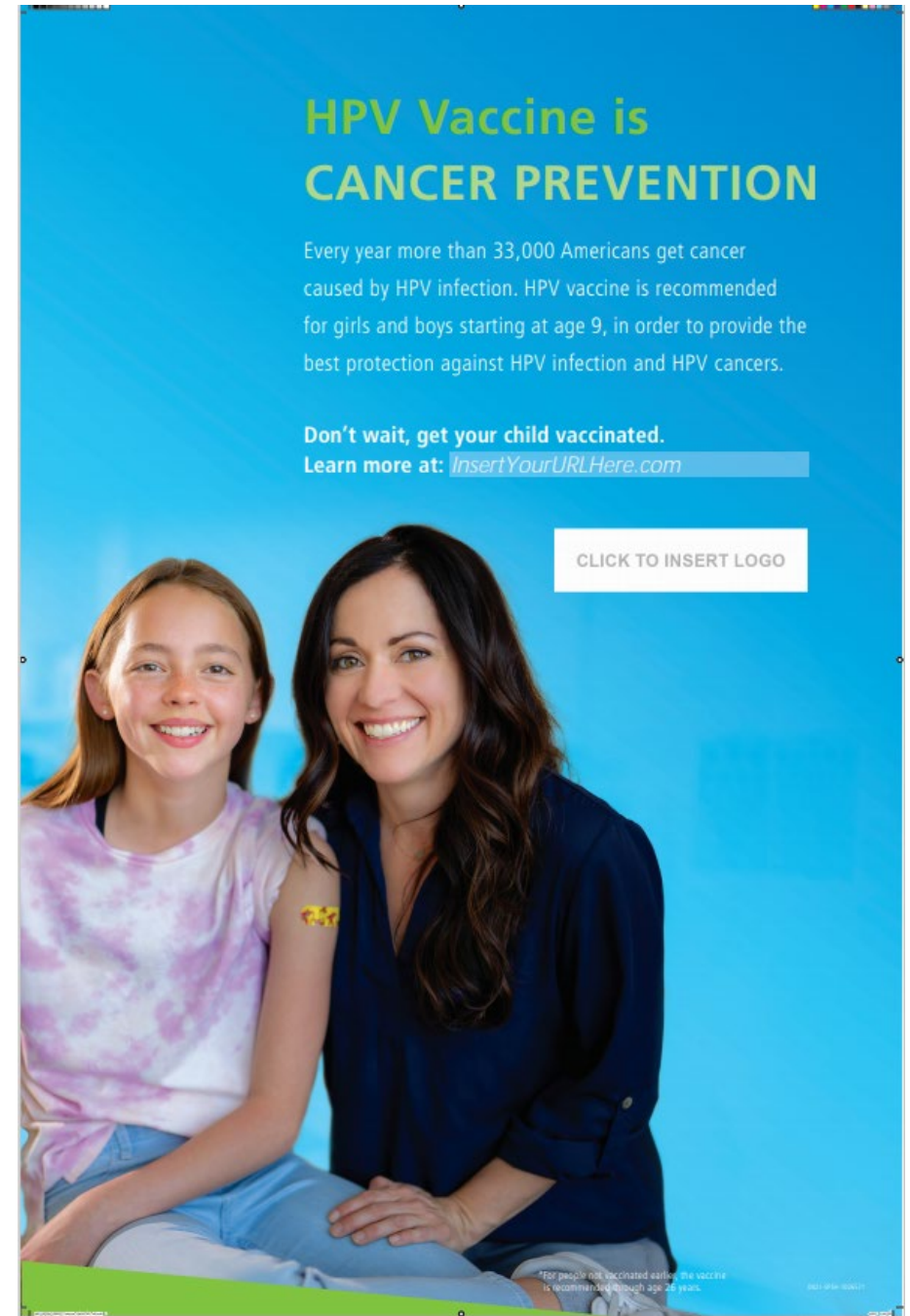
Age	Vaccine(s)
Birth	Hep B
2 Months	Hep B, DTaP, Polio, Hib, Prevnar, Rotavirus
4 Months	Hep B, DTaP, Polio, Hib, Prevnar, Rotavirus
6 Months	Hep B, DTaP, Polio, Hib, Prevnar, Rotavirus
12-15 Months	DTaP, Hib, MMR, Varicella, Hep A, Prevnar
18 Months	Hep A
4-6 Years	DTaP, Polio, MMR, Varicella
9-10 Years	HPV #1, (HPV # 2 is due anytime at least 6 months after HPV #1)
11-12 Years	Tdap, MenACWY, HPV #2 (if second dose has not already been given)
16 Years	MenACWY
19-20 Years	Tdap
Every year after 6 months of age: Influenza	

[InsertYourURLHere.com](#)

CLICK TO INSERT LOGO

Pro-HPV vaccine office environment

- HPV Vaccine Pamphlet
 - Educate staff regularly (Front desk, MA, RNs etc.)
 - Patients too
- HPV posters, rack cards in clinic with simple strong message, enough but not too much info
 - 34,000 yearly get a cancer caused by HPV
 - Recommends starting at age 9-10 for girls and boys
 - Get the vaccine to prevent HPV cancers
- Contact Marco Verdeja at Marco.Verdeja@imail.org for materials!!!

A promotional poster for the HPV vaccine. The background is a bright blue gradient. At the top, the text "HPV Vaccine is CANCER PREVENTION" is written in yellow and white. Below this, a paragraph in white text states: "Every year more than 33,000 Americans get cancer caused by HPV infection. HPV vaccine is recommended for girls and boys starting at age 9, in order to provide the best protection against HPV infection and HPV cancers." Further down, it says "Don't wait, get your child vaccinated. Learn more at: [InsertYourURLHere.com](#)". A white button with the text "CLICK TO INSERT LOGO" is positioned to the right of a photograph. The photograph shows a young girl with a yellow bandage on her arm sitting next to a smiling woman. At the bottom right, there is a small disclaimer: "For people not vaccinated earlier, the vaccine is recommended through age 26 years." and a small logo for "CDC".

**HPV Vaccine is
CANCER PREVENTION**

Every year more than 33,000 Americans get cancer caused by HPV infection. HPV vaccine is recommended for girls and boys starting at age 9, in order to provide the best protection against HPV infection and HPV cancers.

Don't wait, get your child vaccinated.
Learn more at: [InsertYourURLHere.com](#)

CLICK TO INSERT LOGO

For people not vaccinated earlier, the vaccine is recommended through age 26 years.

WHAT: HPV Vaccine is Cancer Prevention

HOW: Not just any recommendation – Presumptive recommendation

Optional:

“Do you want John to get the HPV vaccine today?”

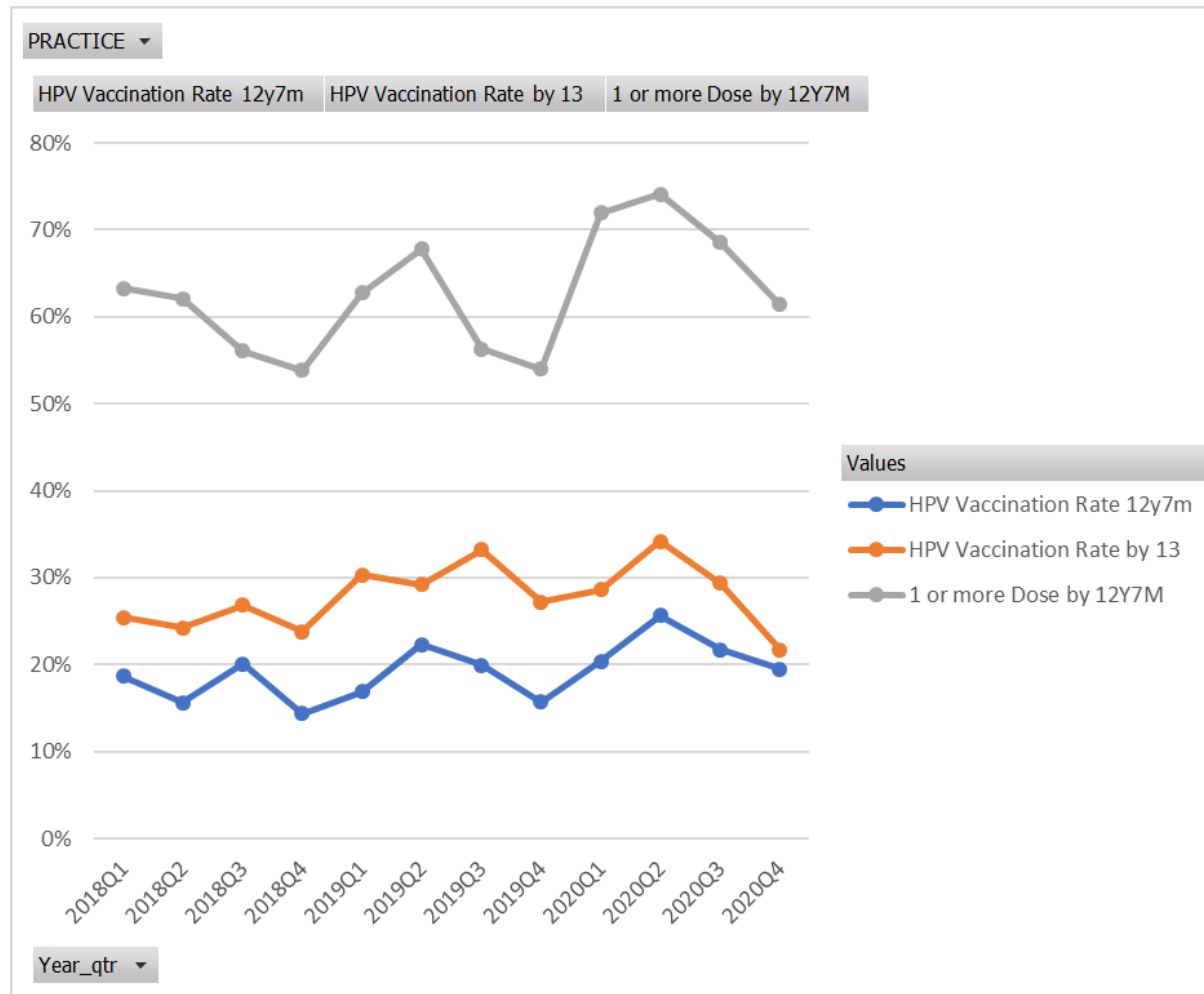
- May unintentionally imply vaccine is not important and not standard of care

Presumptive:

“Today we are going to give John his first dose of the HPV vaccine”

- Implies vaccine is important and most people get it

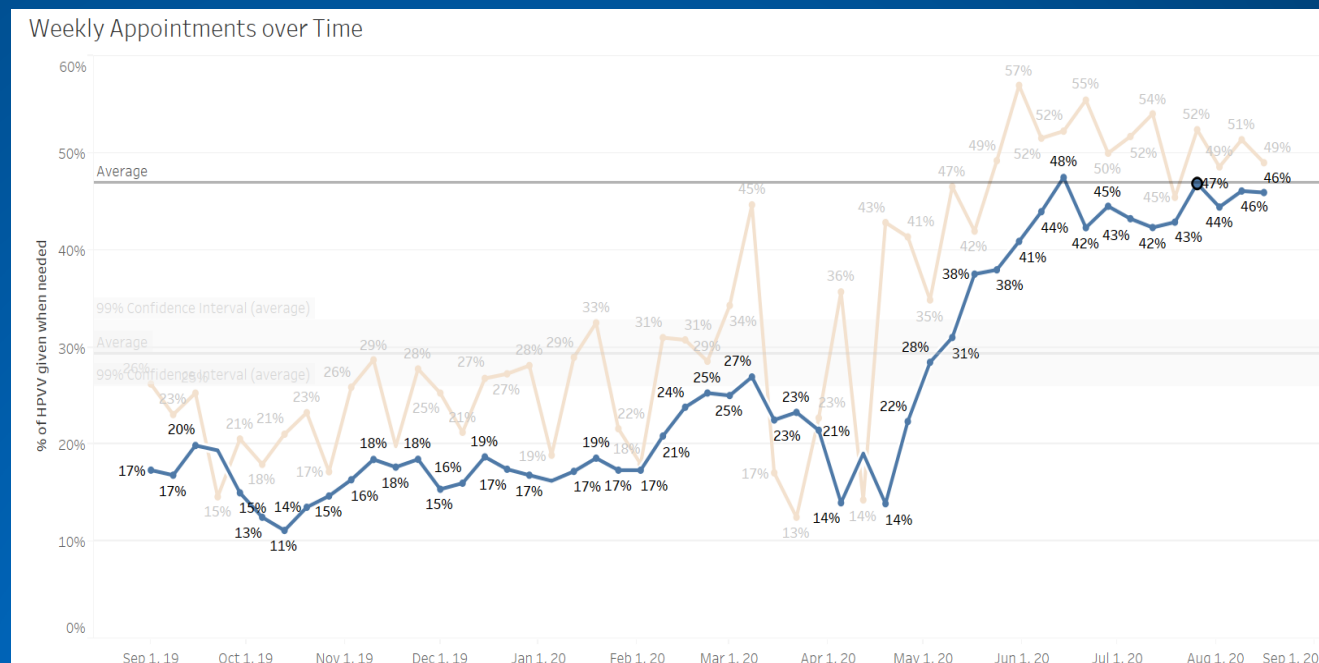
HPV Vaccine- Opportunities



Intermountain Healthcare- Experience from Pilot Work

10% increase

HPV immunizations in children 9-17
years of age for 2020



% Children who had a visit (opportunity) for a vaccine and received one when needed has increased dramatically

Key Take Aways-

1. Determine what workflow/environment changes you can make at your clinic that could impact HPV immunization rates
2. Start providing HPV vaccine at age 9-10 years
3. Involve your whole staff in the effort
4. Contact Marco.Verdeja@imail.org for clinic materials and presentation

Bibliography/References (always the last slide)

- Spinner C, Ding L, et. al. (Feb 2018). *Pediatrics*, 143(2)
- *MMWR* April 19, 2019;68(15)
- *Academic Pediatrics*, Sep-Oct 2018:18(7) 768-775
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- ²Hernandez-Avila M, et al, *Hum Vaccin Immunother*. 2016 Jan: 12(1): 30-38
- ³Lazcano-Ponce E, et al, [J Infect Dis](#). 2019 Jan 1;219(1):41-49. doi: 10.1093/infdis/jiy465

