

Understanding the HPV Vaccine and Patient Follow-Through

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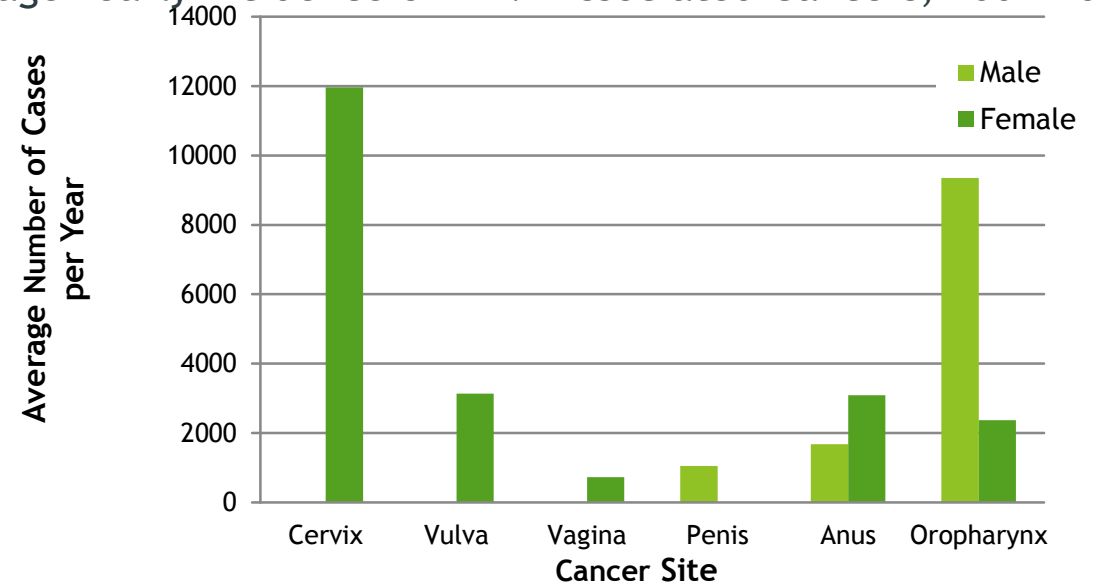
Learning Objectives and Activities

- ▶ Describe the potential consequences of not completing a HPV vaccine series.
- ▶ Identify the HPV vaccine series rate for each Mary's Center clinic.
- ▶ Develop and implement questionnaire for patients to identify parents attitude toward the HPV vaccine.

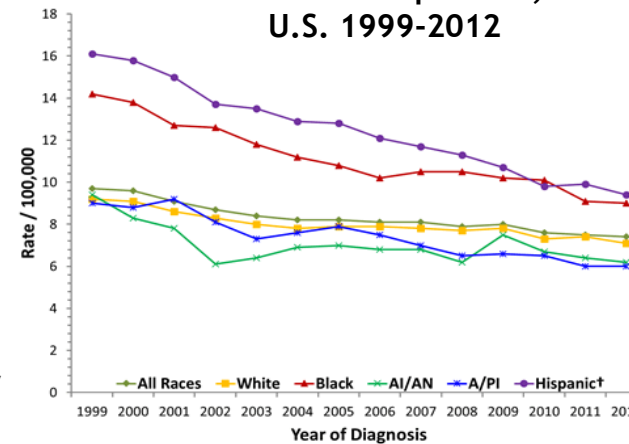
Background

- ▶ Human papillomavirus (HPV) is the most common sexually transmitted infection. It is estimated over 90 percent of men and 80 percent of women will be infected at least once.
- ▶ More than 200 strains of HPV have been identified and over 40 types affect the genital areas. HPV strains are categorized into two groups according to their relation with cancer: low-risk HPV (non-oncogenic) and high-risk HPV (oncogenic).
- ▶ Most infections go away on their own within one to two years, but sometimes the infection remains undetected. HPV infections can lead to genital warts and various types of cancers.
- ▶ Overall, high-risk HPV strains are responsible for about 5% of all cancers globally.

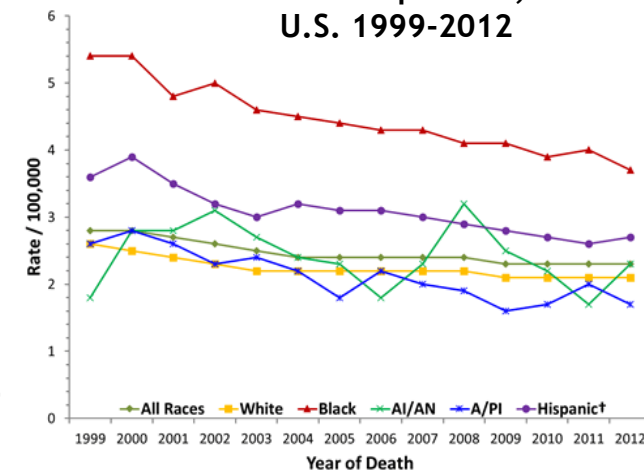
Average Yearly Incidence of HPV- Associated Cancers, 2004-2008



Cervical Cancer Incidence Rates per 100,000 U.S. 1999-2012



Cervical Cancer Death Rates per 100,000 U.S. 1999-2012



Background

- ▶ The HPV vaccine prevents most types of cervical cancer and genital warts. The vaccine is administered in a series of three doses over a period of six months.
- ▶ The CDC recommends the vaccine for children ages 11 to 12. Catch-up vaccines are also recommended for female's ages 13 to 26; males ages 13 to 21; and for men who have sex with men, ages 22-26.
- ▶ Mary's Center served over 36,000 participants in 2014:

- ▶ Age of participants:

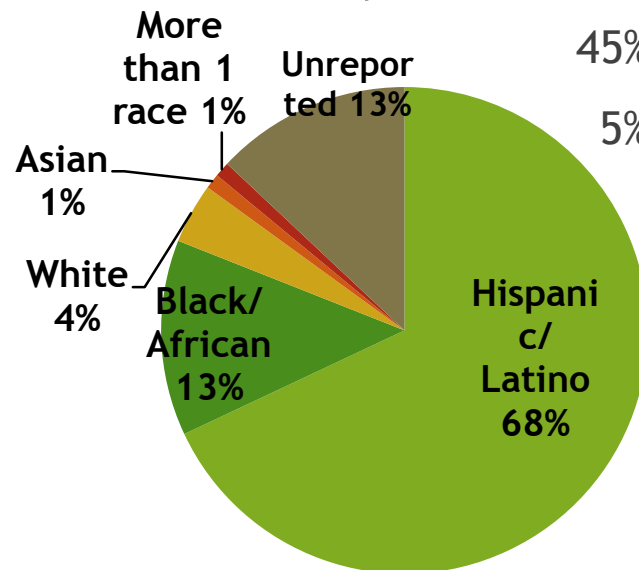
32% are children (0-12)

18% are young adults (13-24)

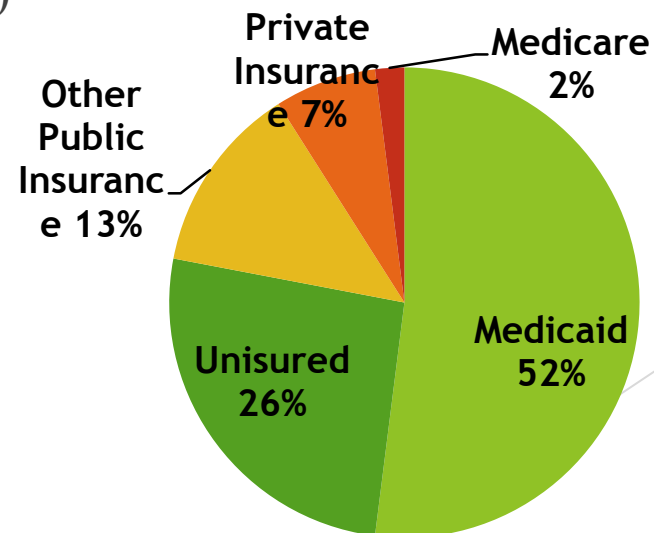
45% are adults (25-54)

5% are seniors (55+)

Race/ Ethnicity



Insurance Status



Completing the Vaccine

- ▶ No evidence was found to suggest incomplete vaccination series causes negative effects.
- ▶ Studies of the Gardasil and Cervix vaccines have followed vaccinated individuals for ten years and have found no evidence of protection decreasing over time.
- ▶ While there is a minimum interval in the dosing schedule (0, 1-2, and 6 months), there is no maximum interval; people who have exceeded the recommended interval for the next dose by months or even years, may be given the next dose needed.

Mary's Center Children Vaccinated 2014

HPV Vaccine Status by Age	Georgia				Ontario				Flower				Adelphi				Overall			
	13 yo		19 yo		13 yo		19 yo		13 yo		19 yo		13 yo		19 yo		13 yo		19 yo	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Total number of children	168		176		128		106		46		50		76		26		418		358	
Total number of children who have completed only 1 dose of HPV vaccine	22	13%	22	13%	8	6%	11	10%	2	4%	4	8%	6	8%	1	4%	38	9%	38	11%
Total number of children who have completed only 2 doses of HPV vaccine	24	14%	25	14%	17	13%	14	13%	9	20%	4	8%	11	14%	1	4%	61	15%	44	12%
Total number of children who have completed the HPV vaccine series	96	57%	36	20%	91	71%	31	29%	27	58%	6	12%	52	68%	4	15%	266	64%	77	22%
Total number of children who have not received the vaccine at all	26	15%	93	53%	12	9%	50	47%	8	17%	36	72%	7	9%	20	77%	53	13%	199	56%

- ▶ Unable to identify if the doses were received according to the recommended schedule

The Study

- ▶ In 2014 only 22% of 19 year olds and 64% of 13 year olds had received the HPV vaccine.
- ▶ Target Population: Focus on understanding the perspective of parents of children ages 11 through 18.
- ▶ Objectives:
 - ▶ Objective: Identify the main reasons Mary's Center patients do not receive the HPV vaccine.
 - ▶ Objective: Identify the major reasons Mary's Center patients do complete the HPV vaccine.
 - ▶ Objective: Identify the main reasons Mary's Center patients begin but do not complete the HPV vaccine.
- ▶ Specific Aim:
 - ▶ Aim: Utilize validated tools to create and distribute surveys for Mary's Center patients to assess parent perceptions of the HPV vaccine.
- ▶ Mary's Center will use this information to help inform development or expansion of solutions to increase HPV vaccination of children.

Methods

- ▶ A convenience sample of parents/ guardians (n=54) of children 11 to 18 years old were surveyed at the four Mary's Center medical clinics. Surveying was conducted between November and January.
- ▶ The research team approached adults in the waiting area, gave information about HPV and HPV vaccine, described the study, and the chance to win a \$25 gift card for participating. Bilingual team members were available to help Spanish speaking participants; and all materials were available in English and Spanish.
- ▶ The survey asked if the parent had ever heard of the HPV vaccine, if their child had been vaccinated, if they intended to have their child vaccinated, reasons for and against the vaccine, helpful reminders, and convenient locations to receive the vaccine.
- ▶ The methods and tools were approved by GW IRB and the Mary's Center Research Committee.

THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, DC  Mary's Center	We are recruiting parents with children between the ages of 11 and 18. WHO IS ELIGIBLE?: You are eligible if you are a parent or guardian, your child is between the ages of 11 and 18 years old and is a Mary's Center patient. WHAT WILL YOU BE ASKED TO DO?: You will be asked to take a survey about HPV. RAFFLE: You will be entered into a raffle and have the chance to win a \$25 gift card. WHERE: Visit our table in the waiting area to learn more.
Thank you for your time, and please do not hesitate to contact the project team if you have any questions at cbharrin@gwu.edu or call 202-994-4354	

THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, DC  Mary's Center	Estamos reclutando padres que tengan hijos entre la edad de 11 a 18 años. QUIEN ES ELEGIBLE?: Los padres o guardianes / custodios con niños entre 11 y 18 años que sean pacientes de Mary's Center. DE QUE SE TRATA?: Responder unas preguntas acerca de lo que usted sabe sobre VPH (Virus del papiloma) RECOMPENSA: Usted tendrá la oportunidad de participar en la rifa de una tarjeta de \$25.00. DONDE?: Visita nuestra mesa en la sala de espera para aprender más.
Gracias por su tiempo y no dude en contactar al equipo de este Proyecto si tiene alguna duda o pregunta a cbharrin@gwu.edu o llame al teléfono 202-994-4354	

Results

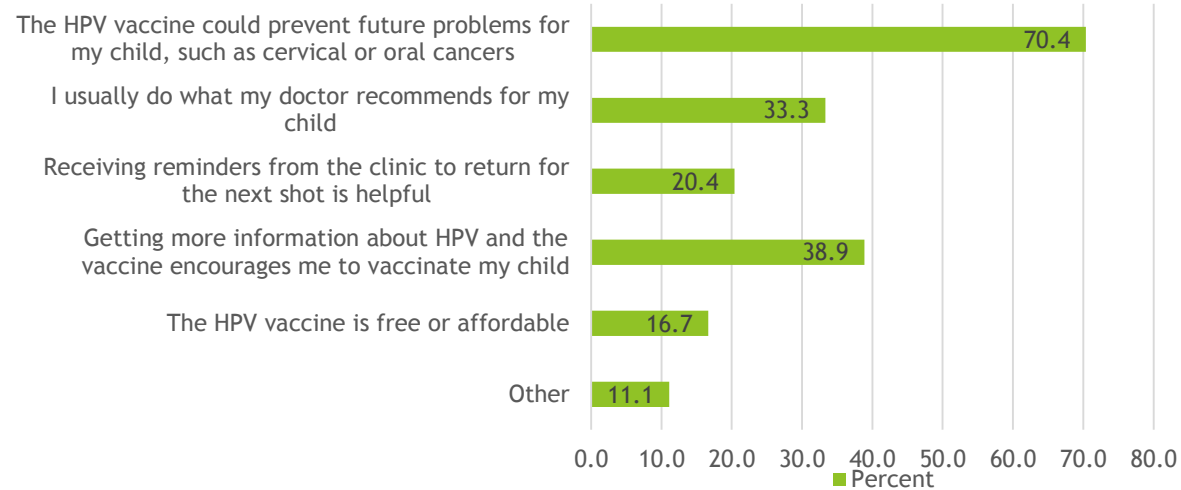
	n	%
<i>Parent race/ ethnicity</i>	52	
Hispanic	44	81.5
African American	5	9.3
White	2	3.7
Other	1	1.9
<i>Parent gender</i>	48	
Male	4	7.4
Female	44	81.5
<i>Parent Age</i>	51	
18-24 years old	2	3.9
25-34 years old	9	17.6
35-44 years old	22	43.1
45-54 years old	17	33.3
55 and over	1	2
<i>Parent Education</i>	53	
Did not attend school	5	9.3
Less than high school	16	29.6
Some high school	11	20.4
High school graduate/ GED	12	22.2
Some college	3	5.6
College graduate or post-graduate	6	11.1

	n	%
<i>Child completed HPV vaccine</i>	50	
Yes all 3 shots	16	32.0
Yes in the process	6	12.0
No	23	46.0
Not sure	5	10.0
<i>Intend to vaccinate</i>	53	
Yes	19	35.8
No	3	5.7
Not sure	14	26.4
Vaccinated/ In process	17	32.1
<i>Ask provider more info on HPV</i>	51	
Yes	35	68.6
No	13	25.5
Not sure	3	5.9

- ▶ 64% of participants stated they had heard of the HPV vaccine before the day of the survey.
- ▶ More than half (56%) of parents said their child was not offered the vaccine at Mary's Center, and only a third (32%) do remember the vaccine being offered.
- ▶ 44% had had their child vaccinated or were in the process.

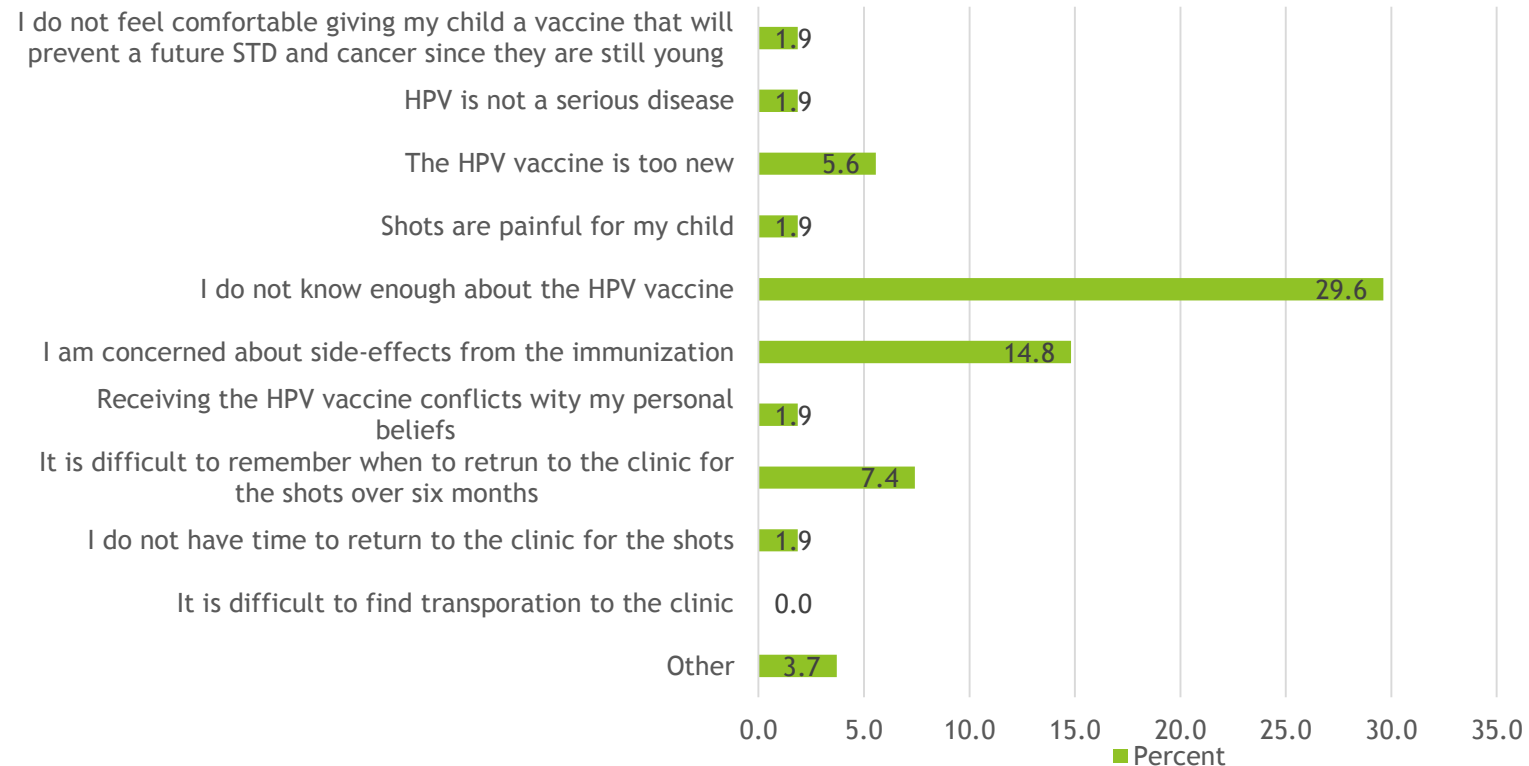
Results

Reasons for Having Children Vaccinated



		The HPV vaccine could prevent future problems for my child, such as cervical or oral cancers		Total
		Agree	Disagree	
Intend to have child vaccinated	Yes	11	3	14
	No	1	2	3
	Not sure	6	8	14
	Vaccinated	19	3	22
Total		37	16	53

Reasons for Not Having Children Vaccinated



		I do not know enough about the HPV vaccine		Total
		Agree	Disagree	
Intend to have child vaccinated	Yes	2	12	14
	No	1	2	3
	Not sure	12	2	14
	Vaccinated	0	22	22
Total		15	38	53

		I am concerned about side-effects from the immunization		Total
		Agree	Disagree	
Intend to have child vaccinated	Yes	0	14	14
	No	1	2	3
	Not sure	5	9	14
	Vaccinated	1	21	22
Total		7	46	53

Results

- ▶ More than half (57.4%) of participants agreed phone calls reminding parents when to visit the clinic for the next dose would be helpful.
- ▶ Half believed text message reminders would be useful.
- ▶ Only approximately 10% agreed email reminders, mailed reminders, appointment cards, or free transportation would help.
- ▶ More than a third (35.2%) of parents believed having the HPV vaccine available at school clinics would be a convenient option for immunization.
- ▶ 28% of participants thought it would be convenient to receive the vaccine at walk-in pharmacies (CVS, Walmart, etc).

Limitations

- ▶ Sample size
- ▶ Self-reported information
- ▶ Language
- ▶ Time period

Summary

- ▶ The major reason parents have their children vaccinated for HPV is because it could prevent future problems, such as cervical or oral cancers.
- ▶ Learning more information about the HPV vaccine and doctor recommendations helped encourage having children vaccinated.
- ▶ The most common reason parents were against having their children vaccinated was due to not knowing enough about HPV or the vaccine.
- ▶ Phone call and text reminders would help parents remember when their child was scheduled for the next HPV vaccine dose.

Recommendations

- ▶ Only one participant reported not completing the HPV vaccine within 6 months. To determine reasons patients begin but do not complete the vaccine, a chart review should be conducted to identify this group and a new study designed to address areas of interest.
- ▶ Short term solutions: Mary's Center should put together a map of walk-in pharmacies in their service area that patients can go to for the HPV vaccine, and inform patients how they can update their records if they receive the vaccine outside of the center.
- ▶ Consider partnering with DC Public Schools for the mandate on HPV vaccination to attend school to help increase coverage.
- ▶ Long term solutions: Mary's Center should assess their current/past HPV vaccine interventions- defining goals and understanding concerns, problems, effective practices, and resources helps determine next steps and focus areas. Research supports the best approaches to increasing vaccination coverage are evidence-based approaches that include staff, clinicians, and parents.

Questions



Acknowledgements

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- ▶ The volunteers, The George Washington University

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