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Disclosures

- I have no personal financial disclosures
- Maryland Chapter of the American Academy of Pediatrics (MDAAP) has received an educational grant from Maryland Department of Health and Mental Hygiene (DHMH) for CME activities (2014-2015)
- MDAAP has received funding from National AAP for district –wide Chapter QI Quality Improvement Project (2017)
- MDAAP will receive funding (for provider stipends) from University of North Carolina Project (funded from CDC) (4/2018)









Learning Objectives

- Discuss the messaging regarding HPV vaccination
- Review national and Maryland-specific data regarding background on HPV (and other adolescent) vaccination rates
- Discuss educational opportunities that MDAAP has to educate members regarding HPV disease and prevention
- Review HPV programs that have been created and supported through AAP and other partners









HPV Messaging is everywhere...



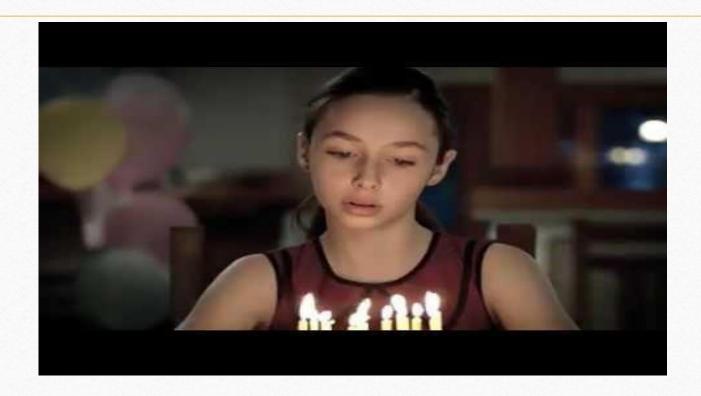








HPV Media Advertisement











The Anti-Vax Message





"This new mandatory STD vaccine shouldn't hurt a bit."









Opportunity to Engage Patients and Families...



Every year in the U.S., 27,000 people get cancer caused by HPV.



That's 1 person → every 20 minutes of every day, all year long.

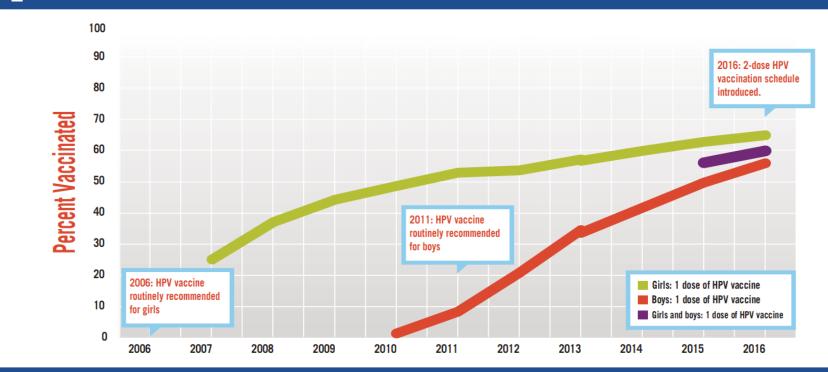












INFECTIONS WITH HPV TYPES THAT CAUSE MOST HPV CANCERS AND GENITAL WARTS HAVE DROPPED 71 PERCENT AMONG TEEN GIRLS

parents are choosing to get the human papillomavirus vaccine for their children

CDC RECOMMENDS THE HPV VACCINE AT AGES 11-12
Talk to your child's doctor about HPV cancer prevention

WWW.Cdc.gov/hpv



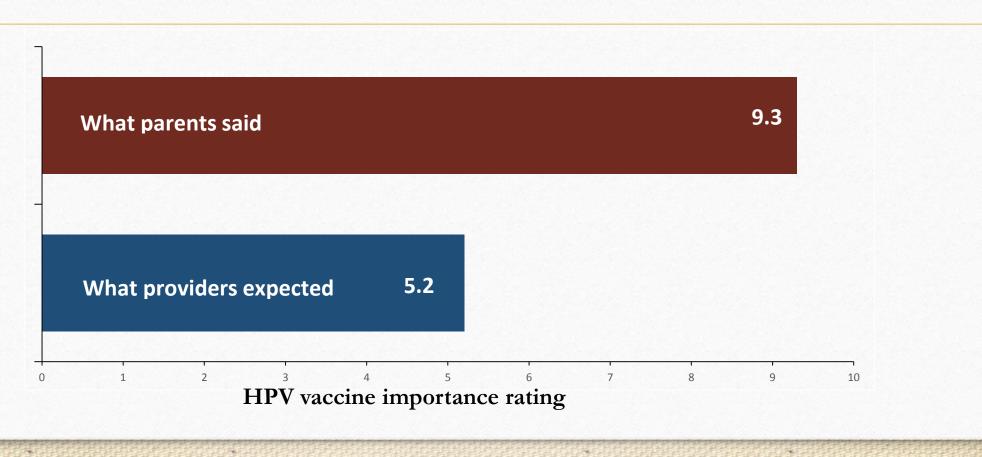








Parents' perceived importance of HPV vaccine



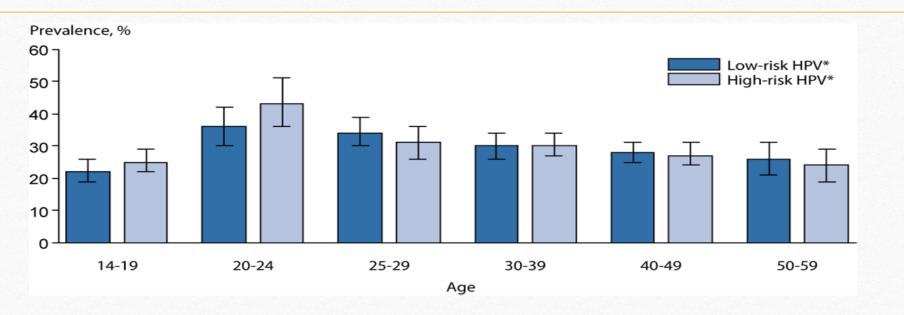








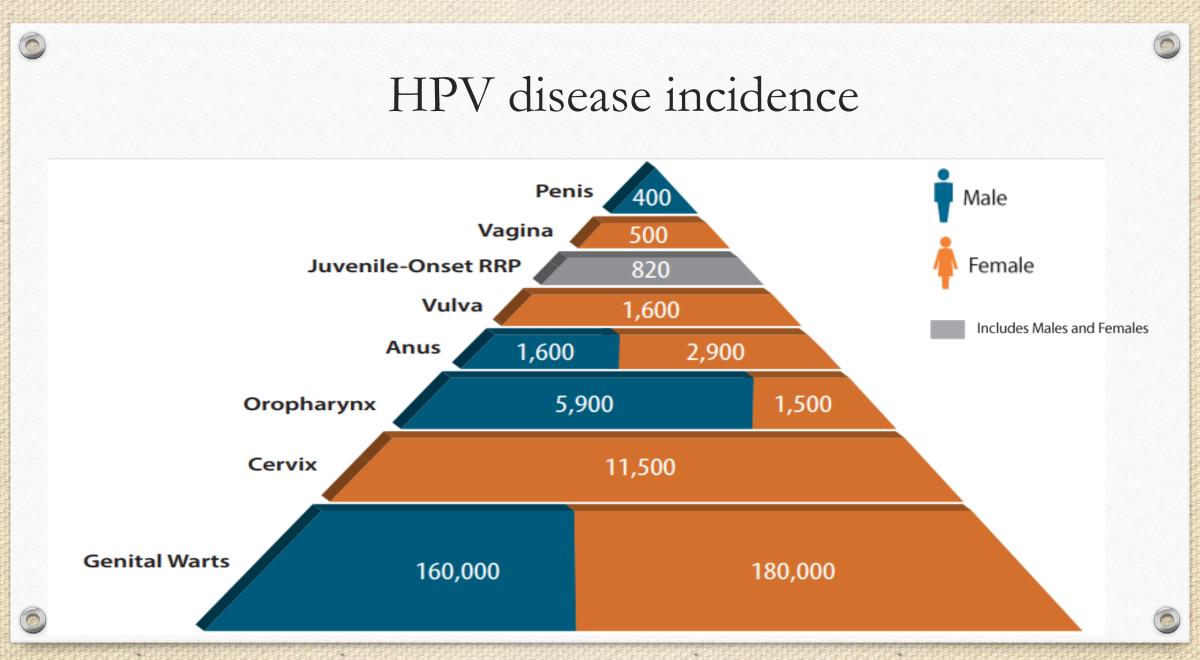
Young people are at high risk of HPV infection



Prevalence of High-risk and Low-risk Types Among Females Aged 14 – 59 Years, National Health and Nutrition Examination Survey, 2003 – 2006



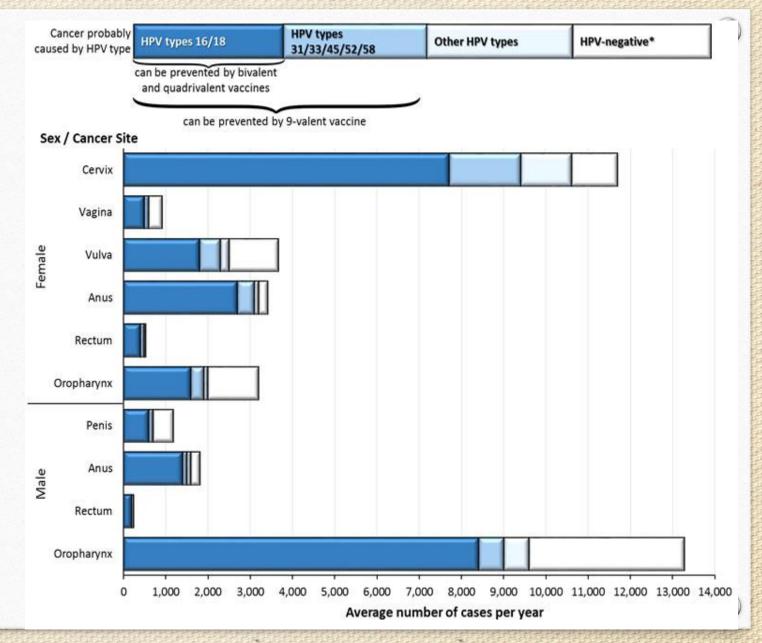




HPV cancers

6 cancers

Rectal cancers are probably misclassified anal cancers







Adolescent Vaccine Recommendations

Many changes over the years

- 2005: Tdap, meningitis vaccines
- 2006: HPV4

FDA licensure

- Females: HPV4 in 2006, HPV2 in 2009
- Males: HPV4 in 2009 and 2011
- Females and Males: HPV 9
- Ages 9-26

ACIP - CDC approval

- Routine ages 11-12
- Catch-up to age 26 for females, MSM, trans, people with compromised immune systems
- Catch-up to age 21 for other males
- 2 doses: ages 9-14, 6m apart
- 3 doses: age 15+, 0m, 2m, 6m
- Not for people with yeast or other relevant allergies, pregnant women, seriously ill (e.g., 101+ fever)



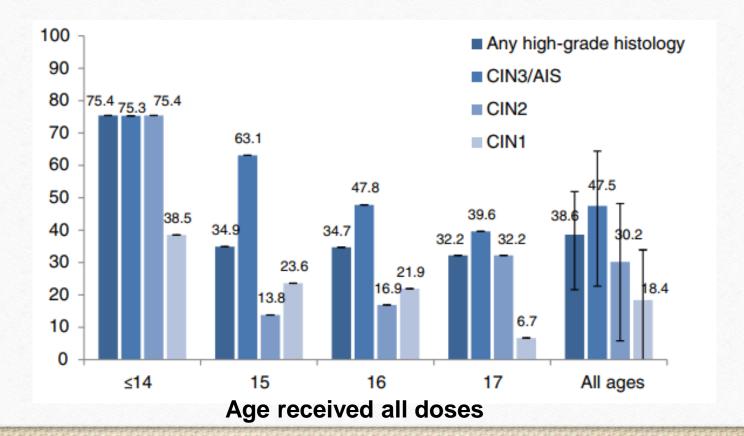






Twice as effective before age 15

HPV vaccine effectiveness



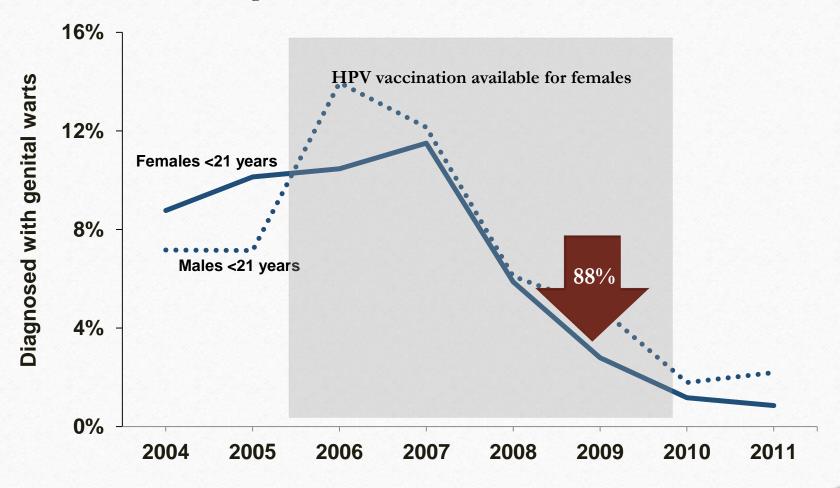








Near-eradication of genital warts in Australia











National Immunization Survey (NIS) Teen

- Graphically displayed national data
- Maryland specific data vs. national data (see HANDOUT)

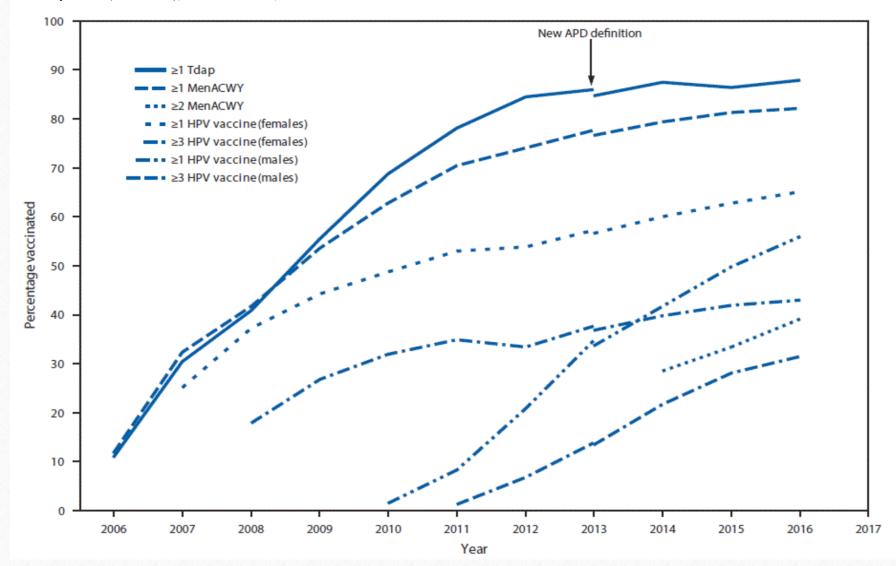






FIGURE 1. Estimated vaccination coverage with selected vaccines and doses* among adolescents aged 13–17 years, by survey year — National Immunization Survey–Teen (NIS-Teen), United States, 2006–2016[†]













Vaccination Coverage Among Adolescents Aged 13-17 Years, United States, 2016

TABLE 1. Estimated vaccination coverage with selected vaccines and doses among adolescents aged 13–17* years, by age at interview — National Immunization Survey–Teen, United States, 2016

HPV ^{SS} vaccine	2016	2017
All adolescents	(N = 20,475)	(N = 21,875)
≥1 dose	60.4 (59.2–61.6)¶	56.1 (54.9–57.4)
≥2 doses	49.2 (47.9–50.4)¶	45.4 (44.2–46.7)
≥3 doses	37.1 (35.9−38.4)¶	34.9 (33.7–36.1)
HPV UTD***	43.4 (42.1–44.7)	NA

§§ HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV), or bivalent (2vHPV). For ≥ 1 , ≥ 2 , and ≥ 3 dose measures, percentages are reported among females and males combined (N = 20,475) and for females only (n = 9,661) and males only (n = 10,814). *** HPV UTD includes those who received ≥ 3 doses, and those who received 2 doses when the first HPV vaccine dose was initiated before age 15 years and the time between the first and second dose was at least 5 months minus 4 days. ¶¶ Statistically significant difference (p<0.05) in estimated vaccination coverage by



age: reference group was adolescents aged 13 years.







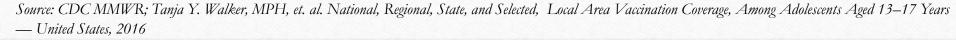
Vaccination Coverage Among Adolescents Aged 13-17 Years, United States 2016

TABLE 2. Estimated vaccination coverage with selected vaccines and doses among adolescents aged 13–17 years,* by poverty level† and metropolitan statistical area (MSA)§ — National Immunization Survey–Teen, United States, 2016.

	Below poverty level	At or above poverty level
All adolescents	(n = 3,461)	(n = 16,290)
≥1 dose	70.2 (67.4 to 72.8)	57.3 (55.9 to 58.7)
≥2 doses	55.9 (52.9 to 58.9)	47.1 (45.7 to 48.6)
≥3 doses	41.9 (38.9 to 44.9)	36.2 (34.8 to 37.6)
HPV UTD†††	50.1 (47.0 to 53.1)	41.7 (40.3 to 43.1)

††† HPV UTD includes those with ≥3 doses, and those with 2 doses when the first HPV vaccine dose was initiated before age 15 years and time between the first and second dose was at least 5 months minus 4 days.











MDAAP HPV Initiatives (2014)

- Providing value to MDAAP Members (~1200 pediatricians, NP's, dentists)
- EDUCATION and CME Opportunities (grant from DHMH)
- MDAAP Weekly Digest (posted on website and emailed to members)
 - 11 articles written by Dr. Theo Wilson (JHH Resident) and reviewed by Drs. Oscar Taube and Anne Bailowitz
- Feedback was very positive. Articles were relevant and informative. Information was in "one spot" for clinicians to use.









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Maryland Chapter

The HPV Series: Introduction to the Human Papillomavirus (HPV)

Issue 1: March 21, 2014

The HPV Series: Human Papillomavirus (HPV) and Other Cancers

Issue 4: April 14th, 2014

The HPV Series: Research Into the Cost Effectiveness of Vaccinating Against HPV

Issue 8: June 9, 2014

The HPV Series: Quick Facts About HPV and the HPV vaccine

Issue 9: June 23, 2014









MDAAP HPV Initiatives (2014-2015)

- EDUCATION/CME Opportunities (supported by National AAP educ grant)
- HPV: The Virus, Associated Diseases, and Strategies for Vaccination Panel discussion with 3 physicians
 - Dr. Anne Bailowitz (Infectious Disease)
 - Dr. Betty Chou (Gynecology)
 - Dr. Diana Fertsch (General Pediatrics)
- Sinai Grand Rounds
 - Dr. Sharon Humiston









MDAAP HPV Initiatives (2016-2017)

- SHIFT from education/CME to QUALITY IMPROVEMENT (QI)
- SHIFT from KNOWING to DOING
- Applied for district-wide QI Project (District 3 NJ, MD, PA, DE, WDC, WVa)
- Awarded funding for MDAAP to enroll Maryland practices into a QI Project to Improve HPV Vaccination Rates









"Hub and Spoke" QI: Improving HPV Vaccination Rates in AAP District 3

- Idea launched at District 3 meeting in Annapolis (June 2016)
- Monthly District 3 calls to discuss organization of QI (Sept Dec 2016)
- Chapter experience with QI methodology varied
- NJ had the past experience, capacity, and infrastructure to serve as the "Hub" and the individual Chapters would be the "Spokes"
 - Aldina Holve (Director of Special Projects, NJAAP) enrolled as Hub
 - Coaching from National AAP regarding data Collection through EQIPP Module







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Immunizations Homepage

Communicating with **Families**

Policy and Advocacy

Practice Management. Improvement and Communication

HPV

State Information

About Us

Immunizations

Hub and Spoke Initiative

What is Hub-and-Spoke?

The AAP used the Hub-and-Spoke Model of Improvement to teach, pediatricians across specialties, within AAP districts, quality improvement (QI) methodology. Pediatricians then applied it to projects in their own practices and institutions to build state/regional capacity for improvement. The goal was to build a critical mass of pediatricians trained in QI with the goal of improving children's health across a region on any given topic area.

The purpose of the AAP 5-year cooperative agreement is to raise immunization rates by creating and executing coordinated and connected action-based programs that aim to measurably increase the proportion of pediatricians who implement best immunization practices (per CDC and TheCommunity Guide). The AAP effort will be devoted to building sustainable peer-to-peer and quality improvement (QI) networks for immunization education and increasing vaccination coverage by disseminating professional education and tools designed to aid pediatricians and their office staff to: (1) consistently make strong HPV vaccine recommendations, (2) effectively address parental questions, and (3) implement HPV vaccination-related quality improvement efforts (eg, decrease missed opportunities, use reminder-recall). To enhance the AAP's national reach to pediatricians, the project team will work to form sustainable external partnerships and increase internal prioritization to improve HPV vaccination rates.

RESOURCES

The Immunization Schedule

New for 2018! Click here for the current schedule recommended by the CDC, AAP, AAFP, and ACOG.

Information for Parents

Visit HealthyChildren.org, the AAP parenting website, for information for families about immunizations.

Tools for Vaccine Conversations

The CDC offers Provider Resources for Vaccine Conversations with Parents, to help you navigate communication with parents.

THE LATEST ON IMMUNIZATIONS

Immunization Initiatives Newsletter

Check out our newsletter for the latest on immunizations.





Logistics of QI Project

- Create Timeline
 - Didactic Sessions
 - Networking Sessions
 - PDSA cycles for QI

- Recruitment Materials
 - Talking points
 - Requirements for practice participation
 - Benefits of project participation
- Enrollment









IMPROVING HPV IMMUNIZATION RATES PREVENTING HPV CANCERS

2017 Webinar Schedule

January 31 @ Noon

Kick-off Webinar

Practice commitment & responsibilities; AAP commitment & responsibilities; MOC requirements; project goals; practice readiness assessment; schedules & timetables;

Q&A; EQIPP

February 22 @ Noon

Changes in ACIP Recommendations (Meg Fischer, MD) &

Networking Session: Coaching, peer-to-peer sharing successes/challenges

March 22 @ 12:30 PM

Networking Session: Coaching, peer-to-peer sharing successes/challenges

April 26 @ 12:30 PM

Topic TBD & Networking Session: Coaching, peer-to-peer sharing

successes/challenges

May 24 @ 12:30 PM

Mid-Point Networking Session/review of aggregate data, coaching, peer-

to-peer sharing successes/challenges

June 28 @ 12:30 PM

Topic TBD & Networking Session: Coaching, peer-to-peer sharing

successes/challenges







MDAAP QI Project Design

- Recruit 4 5 practices across the state from diverse communities (geography and SES)
- Support from MDAPP Executive Director/staff (practice visits, education regarding use of EQIPP module, logistics for webinars, data collection, receipt of MOC/CME credit, etc)
- Host 1 2 HPV CME events in more remote regions of state to spread the work of the QI beyond the practice participants











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Strategies to Improve **Immunization Rates**

Communicating with Families

Ordering, Financing, and **Maintaining Supply**

Vaccine Storage and Handling

Avoiding Vaccine Administration Errors

Quality Improvement

Immunization Information Technology

Immunizations

Quality Improvement

Learn Quality Improvement (QI) basics and AAP QI programs.



EQUPP Module - Immunizations

View a video to learn more about the Education in Quality Improvement for Pediatric Practice (EQIPP) module, which offers MOC credit.

RESOURCES

The Immunization Schedule

New for 2018! Click here for the current schedule recommended by the CDC, AAP, AAFP, and ACOG.

Information for Parents

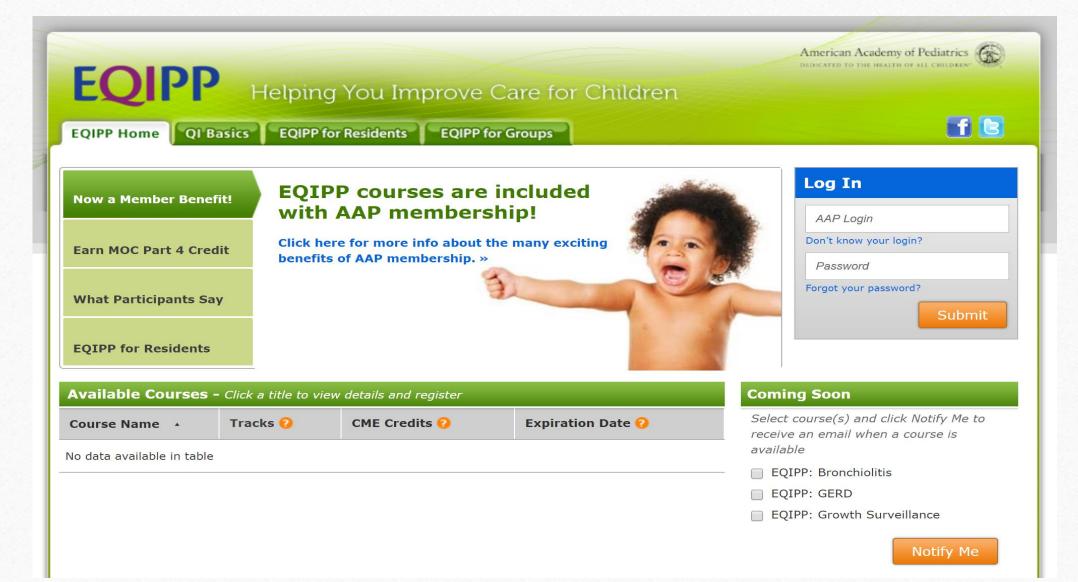
Visit HealthyChildren.org, the AAP parenting website, for information for families about immunizations.









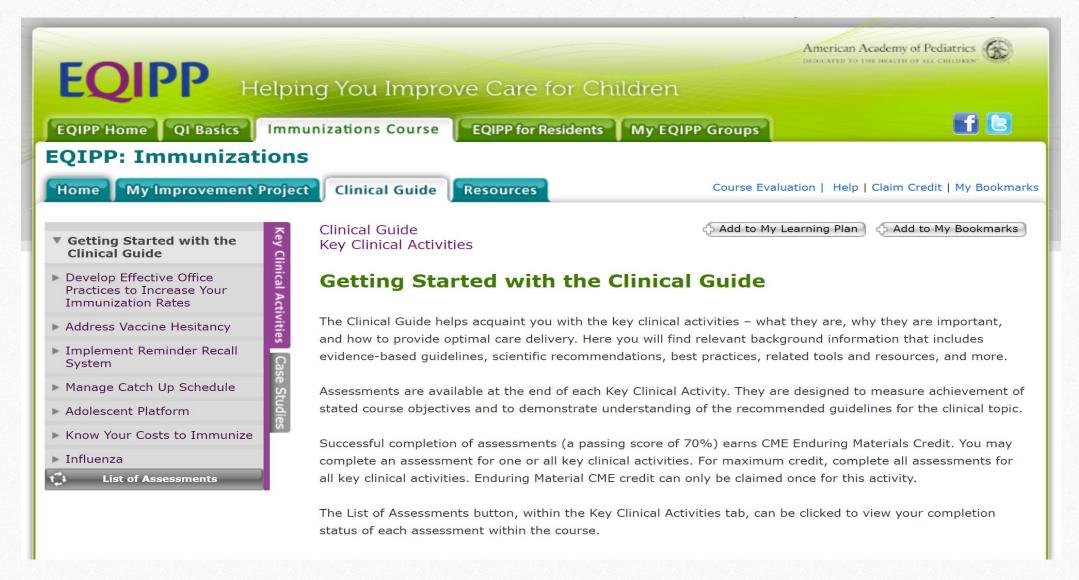








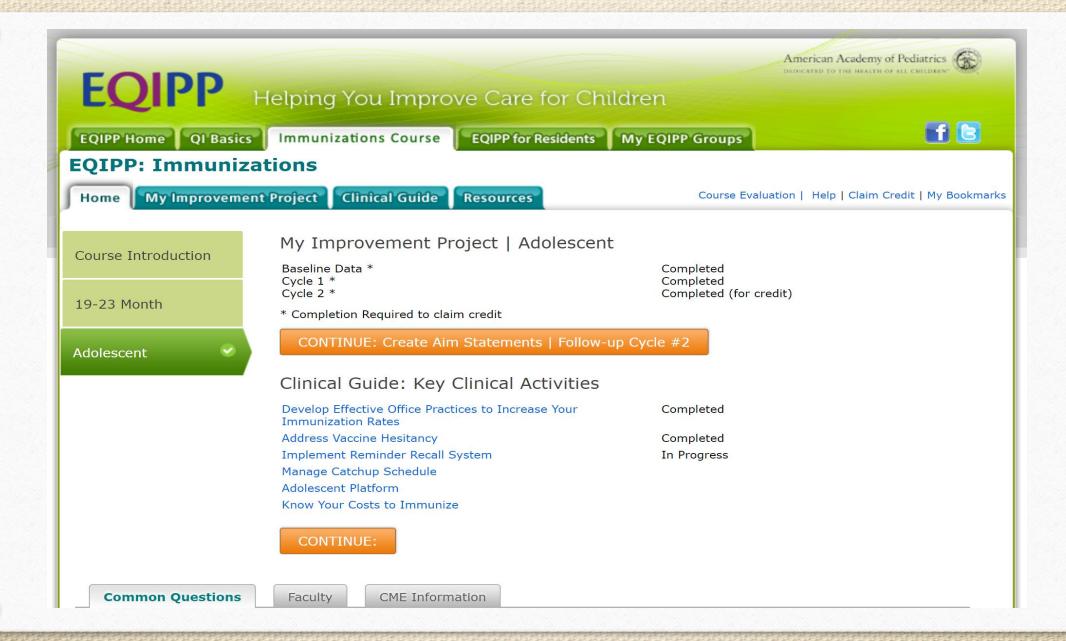


















EQIPP: Immunizations



Home

My Improvement Project

Clinical

Activities

Clinical Guide

Resources

Course Evaluation | Help | Claim Credit | My Bookmarks

- Getting Started with the Clinical Guide
- Develop Effective Office
 Practices to Increase Your
 Immunization Rates
- Address Vaccine Hesitancy
- ► Implement Reminder Recall System

Introduction

 Role of Reminder Recall Systems

Reminders for Parents and Patients

User Recall Logs

Computerized and Non Computerized

Effectiveness of Reminder Recall Systems

Integrating a Reminder/Recall System With Other Effective Practices

Protocol for Catch Up on Multiple Immunizations

Quality Improvement

Summary

Assessment

- ► Manage Catch Up Schedule
- Adolescent Platform
- Know Your Costs to Immunize

Key Clinical Activities Implement Reminder Recall System Add to My Learning Plan

Add to My Bookmarks

Role of Reminder Recall Systems

Reminder/recall systems are most beneficial in increasing immunization rates when used in the following circumstances:

- Upcoming vaccine appointment
- Flu vaccination
- Vaccine missed because of temporary contraindications
- Vaccine catch-up schedule (for new vaccine recommendations)
- Vaccine shortages and delays

Besides techniques that target parents, staff reminders are another means to improve immunization rates through simple, time-efficient techniques.

Does your office use an immunization information system (IIS) (formerly called a vaccine registry or an immunization registry) to enter data on all patients?



Consider This

An IIS can be time-consuming for a practice, unless you have an automatic download from an EMR. Nevertheless, it (or the EMR itself) can offer opportunities to analyze practice data and identify patients who have not completed the recommended series of vaccines. An IIS also can help practices identify patients who may have received a vaccine elsewhere, preventing unnecessary reimmunization.









EQIPP Team and Data Collection

- MDAAP "Spoke"
 - 5 practices recruited (1 dropped out)
 - Total of 19 providers enrolled
- Audit total of 20 charts per provider (10 for 13 yr olds and 10 for 16-17 yr olds)
 - Identify and enroll a team member to audit charts
- Ages of 13-17 yr old were selected to align with NIS data
 - Change from 3 dose HPV series to 2 dose series occurred just before the QI
 - EQIPP module was not updated until the middle of the QI
 - Data was only collected on the 4-valent Meningococcal vaccine and not the Men B vaccine











EQIPP: Immunizations - (Track: Adolescent Platform)

- 1	-		محصا			1790	9	4000	100	
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Directions: Use this tool for the next 20 charts of patients seen in your office.

Ten charts for 13 year olds

Ten charts for 16-17 year olds

The ages of 13 – 17 year olds were chosen to align with National Immunization Survey (NIS) data for benchmarking. This is to help identify areas in practice that could be improved and lead to fewer missed opportunities.

NOTE: EQIPP does not record any patient identifying information. You may enter it here for your own record-keeping purposes. No one sees these results but you. This chart review is not punitive. What you, the user, choose to do with the results is up to you. Critically examine your office's immunization practices and make changes to improve your immunization rates,

Patient Demographics		Circle the appropriate age and gender for this chart		
1.	Age	13 years	16-17 years	
2.	Gender	Male	Female	

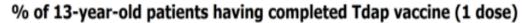
		Yes	No	Unable, due to parent refusal	Unable, due to vaccine shortage or acceptable medical contraindications	Unable, dose not due
3.	Does an easily accessible immunization record exist in the patient's medical record?					
4.	For 13 year olds: Has the patient received the Tdap vaccine (1 dose)?			All (A)		
5.	Has the patient received the following Meningoccocal doses: 5a. 1 dose Meningoccocal	V.				
	For 16-17 year olds: 5b. 2nd dose Meningococcal					
6.	Has the patient received the following HPV vaccine series? 6a. 1 dose HPV					
	If yes to 6a: 6b. 2nd dose HPV					
	If yes to 6b: 6c. 3rd dose HPV					
7.	If yes to 6c: If HPV series completed, was this done by 13 years of age?					
8.	Has the patient received the Influenza Vaccine in the past 12 months?					

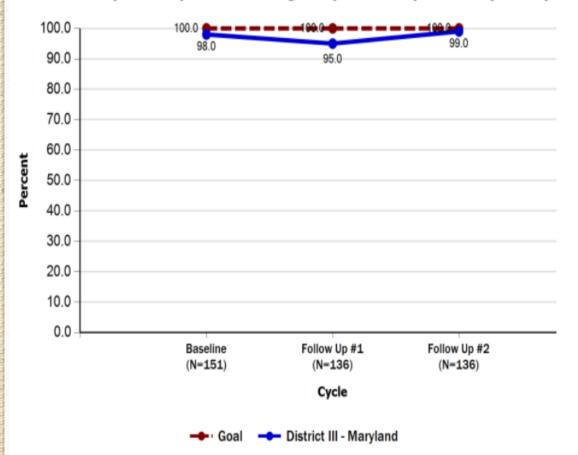




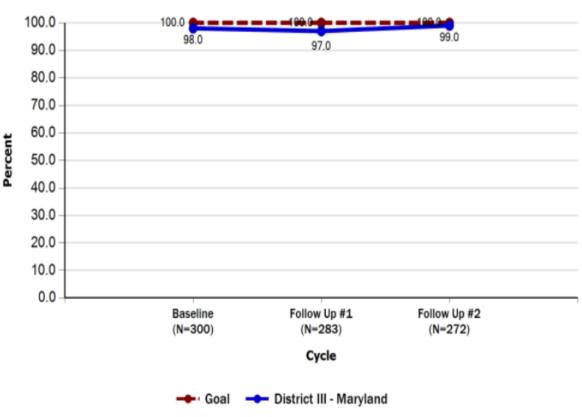








% of patients having initiated the Meningoccocal vaccine series (1st dose)

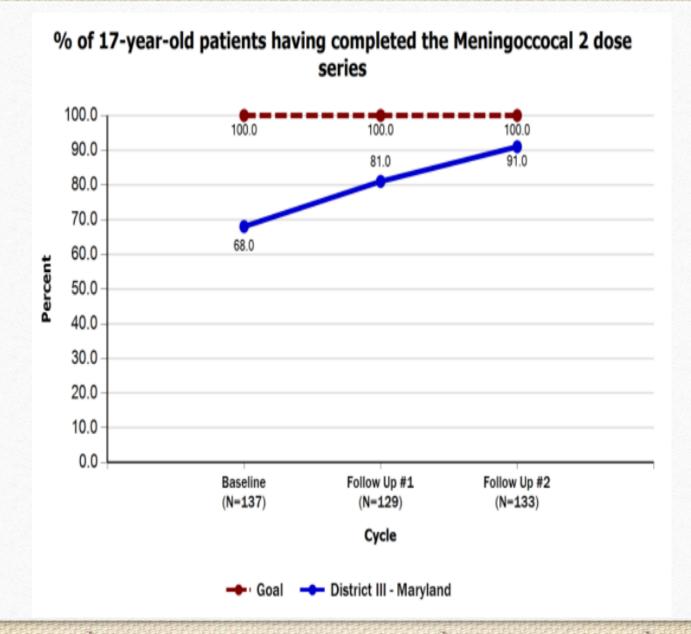












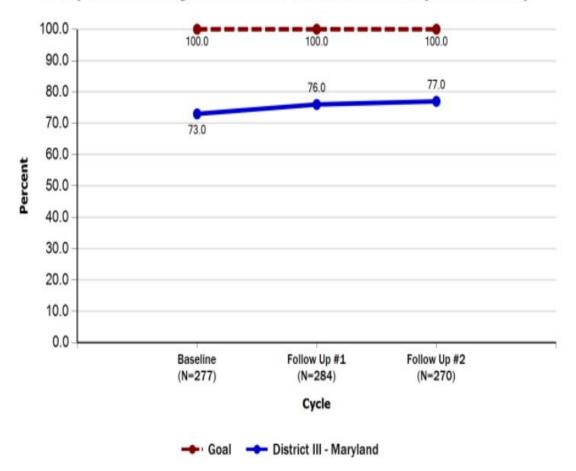


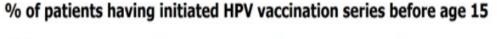


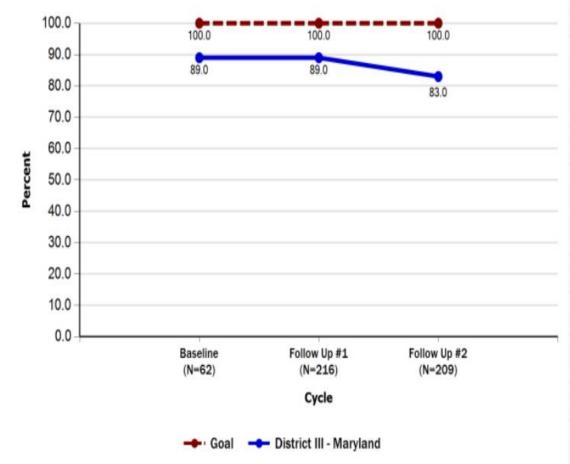










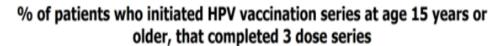


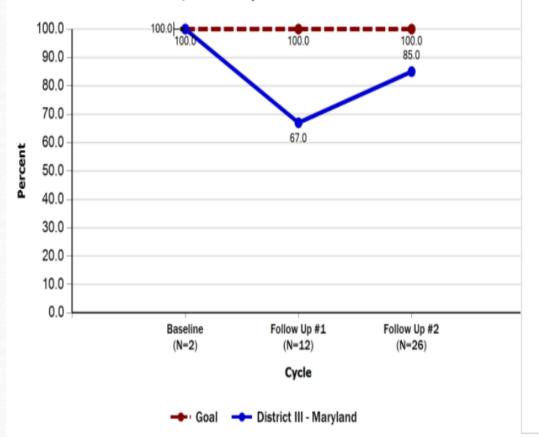




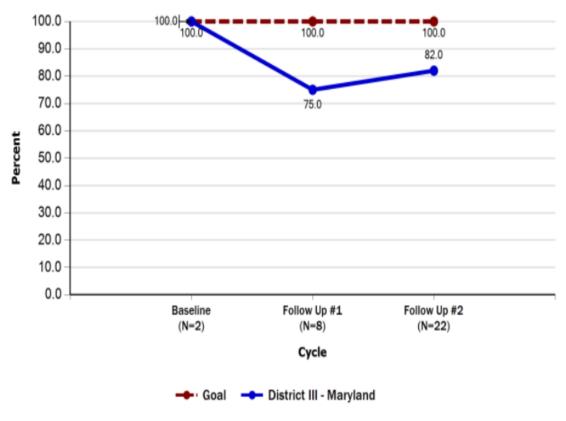








% of patients who initiated HPV vaccination series at age 15 years or older, that completed 3 dose series within recommended timeframe



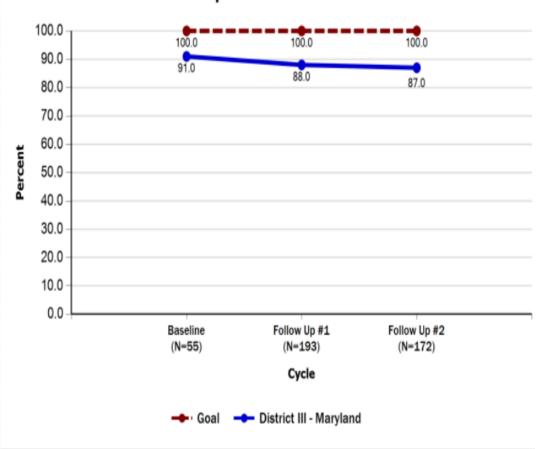




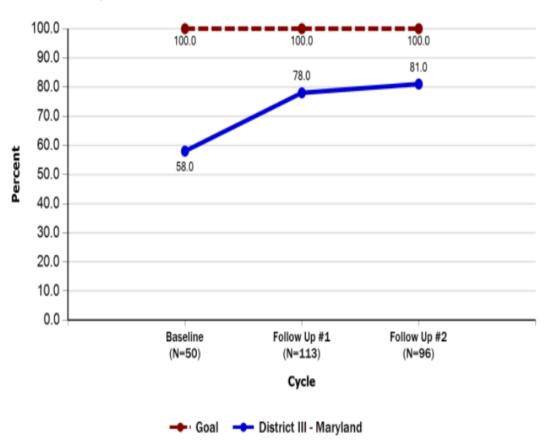




% of patients who initiated HPV vaccination series before age 15, that completed 2 dose series



% of patients who initiated HPV vaccination series before age 15, that completed 2 dose series within recommended timeframe











Lessons Learned: Successes

- Chapters that implemented a district wide or multi-state project, reported feeling supported and found the collaboration to be beneficial, especially for those implementing a QI project for the first time.
- Chapters considered EQIPP as a great opportunity to start their QI journey and provide MOC credit to participants. It was seen as a valuable benefit to the chapters' members.
- Participants found EQIPP to be user friendly.
- Among all EQIPP participants, the percentage of patients who initiated the HPV vaccination series at age 15 years or older who completed the three-dose series saw an increase, and the percentage of patients who initiated HPV vaccination series before age 15, who completed the two-dose series within the recommended timeframe saw an increase.
- It was noted that numerous participants across all QI projects utilized CDC HPV posters in the waiting and/or exam room to get the conversation started with parents and adolescents









Lessons Learned: Challenges

Provider engagement:

- Chapters reported that providers have QI and/or HPV fatigue and had issues recruiting for the project.
- Chapters reported that once providers and/or clinics were recruited there was an issue with keeping the providers engaged in the project.









National AAP Initiatives

- HPV Champion Toolkit
- Project ECHO







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HPV

HPV Champion Toolkit

Hub and Spoke Initiative

Change Template on HPV Vaccine

HPV Vaccine Resources

HPV VACCINE IS CANCER PREVENTION

HPV Champion Toolkit

This toolkit has the best resources available to help you:

- Educate other healthcare professionals
- · Discuss HPV vaccination with parents
- · Make necessary changes in your practice to improve HPV vaccination rates.

By focusing on ways you can make changes that will lead to improved HPV vaccination rates, YOU are an HPV champion.

BCU Webinar for CME/MOC Credit

This webinar discusses the diseases and cancers caused by HPV, the safety and effectiveness of currently available HPV vaccinations, rationale for the two dose schedule and effectiveness of early vaccination, as well as evidence-based recommendations for improving HPV vaccination

View now











Project ECHO®

- Hub and Spoke model
 - Hub: regional center where multidisciplinary team of subject matter experts is located
 - Spoke: community partner site at which individual or team of learners is located
- Designed to create knowledge networks and build capacity; bidirectional learning community
- Does not create a provider-patient relationship
- Each clinic session is comprised of:
 - Didactic lecture presentation
 - De-identified case presentations









AAP HPV ECHO

- Aim is to improve HPV vaccination series initiation and/or completion and reduce missed opportunities rates in practices utilizing the ECHO model.
- Participation:
 - Selected via a 'Call for Proposals', three AAP Chapters (AZ, NJ, OR) were awarded to participate and given the task to recruit between 2 and 4 practices each.
 - QI team members (physicians, nurses, medical assistants, support staff etc.)

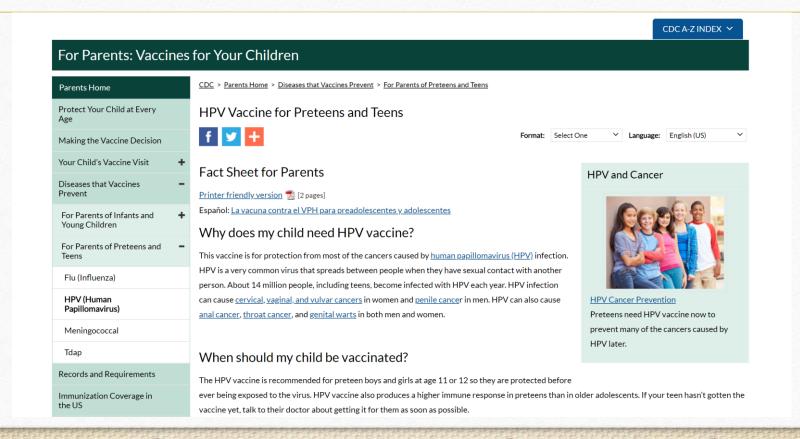








Practice Resources







TeenVaxView

TeenVaxView Home

TeenVaxView Interactive!

Publications and Resources

Data Sources

Objectives, Targets, and Indicators

For Specific Groups



Related Links

ChildVaxView

SchoolVaxView

AdultVaxView

FluVaxView

Association of Immunization

Managers (AIM) ♂









Vaccination is an essential part of keeping preteens and teens healthy and protected from serious diseases. Vaccines are recommended for preteens and teens to protect against diseases like whooping cough, meningococcal disease, and cancers caused by human papillomavirus (HPV). Preteens and teens should also get any vaccines they missed in childhood.

Local, state, and federal health departments use surveys and other data sources such as <u>immunization information systems (IISs)</u> to estimate vaccination coverage (the proportion of teens receiving vaccinations) and identify where additional efforts are needed to increase vaccination coverage. TeenVaxView is designed to help you access survey data collected by CDC and translate data into action.

TEENVAXVIEW INTERACTIVE!

Find national, regional, state, and selected local area data using interactive maps, trend lines, bar charts, tables, and more.

PUBLICATIONS AND RESOURCES

Read *MMWR* articles, reports, and presentations related to teen vaccination coverage.

DATA SOURCES

Learn how CDC estimates adolescent vaccination coverage, including where we get our data.

OBJECTIVES, TARGETS, AND INDICATORS

Learn about the Healthy People 2020 adolescent vaccination objectives and adolescent Healthcare Effectiveness Data and Information Set (HEDIS) measures.











Steps for Increasing HPV Vaccination

in Practice

An Action Guide to Implement Evidence-based Strategies for Clinicians*

*Includes pediatricians, family physicians, general internists, obstetriciangynecologists, nurse practitioners, physician assistants, nurses, medical assistants, and their office managers





Tools for Your Practice

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

http://bit.ly/VACsSteps

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.









NEW Opportunity for Maryland Practices

- UNC Gillings School of Global Public Health looking for primary care clinics that wish to participate in our study to help physicians and other providers effectively communicate recommendations for HPV vaccine
- Looking for 2 practices in Maryland who want to improve HPV rates through effective communication strategies
- Honorarium (\$100 per provider order vaccine) and CME
- Staff and office team invited
- Training will be provided at a location convenient to you (your office or local venue)
- Contact Diana Fertsch at <u>diana.fertsch@gmail.com</u> or Loretta Hoepfner at <u>Loretta@mdaap.org</u>













