

Prevent HPV Cancer Today: an ACHIA HPV Vaccine QI Collaborative Project Overview

The Project: *Prevent HPV Cancer Today: an ACHIA HPV Vaccine QI Collaborative* is a partnership of the Alabama Chapter-AAP, the Alabama Child Health Improvement Alliance (ACHIA) and the Alabama Department of Public Health-Immunization Division (ADPH) aimed at improving HPV Immunization Rates and Decreasing Cancers in Alabama.

The QI Intervention: Practice-level change is crucial to increasing acceptance of HPV vaccine and improving coverage rates in adolescents. To that end, ACHIA and the Alabama Chapter-AAP will implement a primary care-focused QI intervention to strengthen office systems for delivery of HPV vaccine and strengthen provider recommendation. ACHIA will provide resources and expertise through monthly Learning Collaborative webinars, individual practice facilitation, peer-to-peer learning, and ongoing support. QI supports will focus on strong provider recommendations to all practices and a choice of intervention to reduce missed opportunities such as provider prompts, reminder recall, and standing orders.

ADPH will provide Continuous Quality Improvement (CQI) Assurance through pre- and post- visits to participating practices. The results of this assessment will guide the QI intervention offered by the ACHIA faculty to increase vaccination levels. ADPH will utilize the AFIX program, developed by the Centers for Disease Control and Prevention (CDC), which uses the latest computer technology to quickly assess individual practice vaccination levels. An ADPH staff will review all children 13 – 18 years of age in each participating practice using the Clinic Assessment Software Application provided by the CDC. This review will provide an estimation of coverage rates in the practice as well as give the physician and staff feedback about office vaccination policy and procedures and how they affect vaccination completion levels. The AFIX program will also complete a Provider Site Visit Questionnaire.

Timeline: This 6-month MOC project will run from March 1, 2016 to August 31, 2016

Background: According to the CDC 2014 National Immunization Survey- Teen, <http://www.cdc.gov/vaccines/imz-managers/coverage/nis/teen/data/tables-2014.html>, Alabama has the lowest completion rates for boys at 9.0% and lower than the national average for girls at 35.3%. Alabama has both provider and parent hesitancy to ACIP's recommended HPV vaccine. Most hesitancy revolves around reluctance to bring up possible sex behaviors in adolescents 11-12 years of age. Alabama needs to change the conversations away from sex and move towards cancer prevention.

The HPV vaccine, FDA-approved for females since 2006 and males since 2009, is a safe and effective form of cancer prevention. However, current national HPV immunization rates have stagnated, with only 36.7% of girls and 13.9% of boys 13-17 years of age receiving the complete 3-dose series in 2013. These rates fall far short of the Healthy People 2020 goal of 80% coverage. Furthermore, HPV is by far the most common sexually transmitted disease in the U.S. – approximately 14 million new infections arise each year – and is responsible for virtually all cervical cancers, as well as over 50% of vulvar, vaginal, anal and oropharyngeal cancers. The 2012-2013 Annual Report of the President's Cancer Panel labeled the HPV vaccine as a Public Health Priority, calling HPV vaccine underuse "a serious but correctable threat to progress against cancer."¹

¹ http://deainfo.nci.nih.gov/advisory/pcp/annualReports/HPV/PDF/PCP_Annual_Report_2012-2013.pdf

Prevent HPV Cancer Today: an ACHIA HPV Vaccine QI Collaborative

Significant research has been conducted on provider and patient attitudes regarding HPV vaccination. Multiple studies cite a strong provider recommendation as critical to a patient's decision to accept HPV. However, several barriers to strongly recommending the vaccine have also been identified among physicians surveyed, such as the investment of time required during the patient encounter and low perceived ability to change the opinion of the vaccine-hesitant patient and/or parent. In addition, Missed Opportunities (MOs) for HPV vaccination, or office visits during which a patient was eligible but did not receive the vaccine, contribute strongly to low HPV vaccination coverage rates in practices. Therefore, practice-level change that incorporates addressing these barriers is vital to improving HPV vaccine rates for adolescents in the United States.

Human papillomavirus (HPV) is the most common sexually transmitted infection in the United States. Almost every person who is sexually active will acquire HPV at some time in their life without HPV vaccination. Over 85% of men and women with at least one sexual partner will be infected with HPV in their lifetime. Nearly one in four Americans (about 79 million), most in their late teens and early 20s, are infected with HPV with about 14 million people, including teens, becoming infected with HPV each year.

There are more than 40 HPV types that infect human mucosal surfaces (mostly genitals and back of the throat). Although most infections will go away naturally, certain types that don't go away can cause cancers in men and women. When certain HPV infections persist, men and women are at risk for cancer. HPV causes about 27,000 cases of cancer every year—that's a new case every 20 minutes. HPV causes cancers of the throat and anus, as well as cancer of the penis in men, and cancers of the cervix, vagina and vulva in women. Every year, about 17,600 women and 9,300 men are diagnosed with HPV cancers.

Despite increases, coverage estimates for HPV vaccine remained low in 2014 and continue to lag behind rates for the Tdap and quadrivalent meningococcal conjugate vaccines. Four out of ten adolescent girls and six out of ten adolescent boys haven't started the HPV vaccine series, and are vulnerable to cancers caused by HPV infections. Studies consistently show that a strong recommendation from the child's health care provider is the single best predictor of vaccination. Health care providers need to provide a stronger recommendation for the HPV vaccine and effectively answer parent questions. Pediatricians are urged to start the conversation with a strong, bundled recommendation by saying "Today your child is due for three vaccines. They will protect him/her from the cancers caused by HPV, and infections causing meningitis, whooping cough, tetanus & diphtheria."

Completion rates for the three dose series is even lower, with only 39.7% of females and 21.6% of males having completed the series. Because there are large gaps of time between when adolescents are seen in the pediatric practice, it is important to have systems in place to help get adolescents back into the office for doses 2 and 3 (reminder/recall), and that protocols are in place to assess immunization status at sick and acute care visits.

The Advisory Committee on Immunization Practices (ACIP) recommends that preteens (ages 11 or 12) get one dose of quadrivalent meningococcal conjugate vaccine, one dose of HPV vaccine, and one dose of Tdap vaccine during a single visit. A persistent gap in coverage between HPV vaccination and other vaccinations recommended for adolescents is a sign of missed opportunities to protect adolescents from cancers caused by HPV infections.

Prevent HPV Cancer Today: an ACHIA HPV Vaccine QI Collaborative

QI Project Aim:

The overall aim of this project is to measurably increase HPV vaccine initiation (1st dose) and series completion rates (3rd dose) in the participating practices from baseline to the end of the project by 10%

QI Project Goals:

Goal 1: To identify participating practices' implementation of evidence-based strategies to improve their office systems' delivery of HPV vaccine and measurably improve their HPV vaccination rates.

Goal 2: To develop strong provider recommendations for HPV vaccination among the practice team.

Goal 3: To support the practice team in identifying office systems areas for improvement, planning and implementing changes, and studying changes made using the PDSA QI model.

Specific Measurable Objectives:

Objective 1: To decrease rates of Missed Opportunities in patients age 11 – 12 eligible to receive the initial dose of HPV vaccine by 10% from baseline rate

Objective 2: To increase HPV vaccine initiation (1st dose) rates in participating practices by 10% over baseline rate.

Objective 3: To increase HPV vaccine series completion (3rd dose) rates in participating practices by 10% over baseline rate.