National Immunization Partnership with the APA (NIPA)

Quality Improvement Learning Collaborative

Improving HPV Immunization Coverage

Cohort Three: January-September 2017

Welcome Packet
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National Immunization Partnership with the APA (NIPA)

Improving HPV Immunization Coverage

NIPA, is a collaboration with the Academic Pediatric Association (APA) and the National Improvement Partnerships Network (NIPN), an organization housed at the Vermont Child Health Improvement Program (VCHIP) at the University of Vermont, College of Medicine.

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Learning Collaborative Overview

Project
The National Immunization Partnership with the APA (NIPA), a collaboration between the National Improvement Partnership Network (NIPN) and the Academic Pediatric Association (APA) and funded by the Centers for Disease Control and Prevention, is a cross-state, comprehensive initiative to improve HPV immunization rates in adolescents. Through implementation of strong provider recommendation and the reduction of missed opportunities, practices will increase immunization coverage and expand the potential of HPV vaccine to prevent HPV-related cancers.

Background
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 41.9% of girls and 28.1% of boys 13-17 years of age receiving the complete HPV series in 2015. 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.”

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 vaccinate against 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 addresses these barriers is vital to improving HPV immunization rates for adolescents in the United States.

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3 http://www.cdc.gov/cancer/hpv/statistics/cases.htm
QI Intervention
Practice-level change is crucial to increasing acceptance of the HPV vaccine and improving coverage rates in adolescents. Therefore, NIPA is implementing a primary care-focused Quality Improvement (QI) intervention to strengthen office systems for delivery of the HPV vaccine and improve provider recommendation. Participants in the project will receive training in QI methodology and implement evidence-based strategies to increase immunization rates and reduce missed opportunities for HPV vaccination administration. Practices will complete surveys and submit baseline, monthly, and post-intervention data to track progress during the intervention phase and work towards achieving improved HPV vaccine coverage rates (See Appendix I for Project Timeline). The NIPA QI team will provide resources and expertise through monthly Learning Collaborative webinars and ongoing support.

QI Project Aim
The overall aim of this QI project is to measurably increase HPV vaccination rates for adolescents within the practices participating in the 6-month intervention.

QI Project Goals

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

Goal 2: To strengthen 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 Plan/Do/Study/Act (PDSA) model of rapid-cycle improvement.

Specific Measurable Objectives

Objective 1: To decrease rates of Missed Opportunities in patients eligible to receive any dose of HPV vaccine by 20% from baseline rate.

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

Objective 3: To increase HPV vaccine series completion rates by 10% over baseline rate.
Requirements for QI Project Participation

- Designate a practice Clinic Champion and QI/Change team that will meet regularly to review your data, then identify and continually implement improvement strategies using PDSA cycles during the intervention phase
- Attend one hour-long orientation call
- Participate in monthly hour-long Learning Collaborative webinars (See Appendix II for list of topics)
- Submit pre-intervention and post-intervention HPV vaccination rates
- Perform monthly chart audits on patients to measure missed opportunities (16 charts/month)
- Submit monthly PDSA log sheets to guide rapid-cycle improvement
- Complete surveys and questionnaires: Office systems inventory (pre/post), staff impact survey (mid/post)

ABP MOC, ABFM MC-FP, and CME Completion Requirements
Participants may earn credit for “meaningful participation” in the project.

- 25 credits toward Maintenance of Certification (MOC), Part 4 from the American Board of Pediatrics (ABP)
- MC-FP credit for 1 Part IV module or 20 Part IV points, from the American Board of Family Medicine (ABFM)
- 20 Performance Improvement Continuing Medical Education (CME) credits

To receive credit, the following criteria must be met. Credit is earned by the individual clinician, but many activities required for credit are completed at the practice level (See Appendix III for the Project Participation Tracking Log).

<table>
<thead>
<tr>
<th>Individual Requirements</th>
<th>Practice Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attend Orientation webinar</td>
<td>1. Surveys</td>
</tr>
<tr>
<td>2. Attend 5 of 6 monthly Learning Collaborative Webinars</td>
<td>• Practice Readiness Assessment (pre)</td>
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<td></td>
<td>• Office Systems Inventory (pre/post)</td>
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<tr>
<td></td>
<td>• Staff Impact Survey (mid/post)</td>
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<tr>
<td></td>
<td>• Monthly PDSA log</td>
</tr>
<tr>
<td></td>
<td>2. Patient Data</td>
</tr>
<tr>
<td></td>
<td>• Pre/Post HPV rates</td>
</tr>
<tr>
<td></td>
<td>• Monthly chart review of 16 patients</td>
</tr>
</tbody>
</table>

Appendix III is a MOC/MC-FP Participant Tracking log. This tool is to assist with tracking project accomplishments related to the ABP MOC, ABFM MC-FP, and CME requirements. Individuals will need this information to attest to “meaningful participation” in the project.
Data Requirements
All project data is submitted electronically through REDCap, an online encrypted data collection system. No protected health information is submitted and all practices are assigned a unique identifier, so that data cannot be attributed to any site.

Data Liaison
Each participating site will designate one person to serve as data liaison. This person will be the primary contact for all project data requests. The data liaison will be the only person at the practice who will receive data links from REDCap and will enter or facilitate entry of all practice data. The data liaison will bring project surveys to the practice team and record the practice’s responses, then enter those responses in REDCap.

*Note: Due to limitations in REDCap and to maintain data integrity, only one person per practice may be designated to receive links for data submission. Other team members will be made aware of data requests and deadlines through the project listserv.

Data Submission
To measure progress on the project aims, practices will submit pre- and post-intervention data on rates of HPV vaccine series initiation and series completion. Practices will also submit baseline and monthly data on missed opportunities to evaluate the impact of their QI work.

HPV Vaccination Rates
- **Series initiation in 11-12 year olds (by gender)**
- **Series completion 13-17 year olds (by gender)**
HPV vaccination rates will be measured twice in the project (pre- and post-intervention).
Practices have the option to choose one of the three below sources for this data.
1. Electronic health record (population-based)
2. Immunization registry (population-based)
3. Manual chart audit: 30 patients (random sample)
Practices must use the same data source for their pre and post HPV vaccination rates. For example, if a practice measures their baseline HPV vaccination rates from their state immunization registry, then they will also obtain their post-project HPV vaccination rates from the immunization registry.

**Note:** Practices that participated in the second cohort and are participating in the third cohort can use their post-project HPV vaccination rates from cohort 2 as their pre-project rates for cohort 3.

Missed Opportunities
Missed opportunities will be measured monthly for nine months: three months of baseline (December 2016-February 2017) and six months of intervention (March-August 2017). Practices will audit 16 patient charts per month (8 from the first half of the month and 8 from the second
half of the month). Missed opportunities will be measured for patients seen in the practice between February and October 2016, who were eligible to receive a dose of HPV vaccine.

Project Participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Cohort One</th>
<th>Cohort Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>Six</td>
<td>Eleven</td>
</tr>
<tr>
<td></td>
<td>AL, ME, NH, NJ, TN, VT</td>
<td>AL, AZ, IA, IN, FL, MA, ME, NH, NJ, TN, VT</td>
</tr>
<tr>
<td>Practices</td>
<td>38</td>
<td>60</td>
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<tr>
<td>Practitioners</td>
<td>97</td>
<td>148</td>
</tr>
</tbody>
</table>

**Estimated number of patients 11-17 years of age seen annually**

<table>
<thead>
<tr>
<th></th>
<th>Cohort One</th>
<th>Cohort Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38,320</td>
<td>114,200</td>
</tr>
</tbody>
</table>

**Cohort One Outcomes**

- NIPN practices **significantly reduced** missed opportunities by **28%** across all visit types.
- NIPN practices had a **13% increase** in the rate of HPV series initiation.
- NIPN practices had an **8% increase** in the rate of HPV series completion.
- The percent of practices that consistently provided a strong recommendation for HPV vaccine increased, as did the percent of practices that adhered to one HPV vaccination schedule.
- Participants reported the changes implemented as part of this project initiative were beneficial and did not increase the administrative burden on clinic staff.

**States Participating in the NIPN Learning Collaborative in Cohort 1 and 2**

- States identified as “priority” states by the CDC.
Benefits of Project Participation

- Earn credit towards professional certifications
  - Earn **25 credits** towards ABP Maintenance of Certification (MOC), Part 4
  - Earn **20 credits** towards ABFM Maintenance of Certification for Family Physicians (MC-FP), Part IV
  - Earn **20 Performance Improvement points** towards Continuing Medical Education (CME)
- Receive QI coaching and support, including project-specific customized tools and materials
- Receive assistance in assessing your system for HPV vaccine delivery, recognizing barriers, and selecting evidence-based strategies to test with PDSA cycles
- Participate in monthly Learning Collaborative webinars on topics such as delivering a strong provider recommendation for HPV vaccine and reducing Missed Opportunities for vaccination
- Track your practice’s progress through monthly data feedback report with practice-specific coaching comments

Project Tools and Resources

**Virtual Toolkit**

http://www.academicpeds.org/NIPA/

The Virtual Toolkit holds the most up-to-date information relating to the project with new information added regularly. This site contains project-specific materials, such as a project overview, data collection tool instructions, webinar recordings, protocols for improving HPV vaccination rates, and project references and relevant research literature. Additionally, tools and resources are available on topics such as HPV vaccines, QI methodology, informational materials for patients, and resources on adolescent and young adult health.

**Listserv**

NIPA_3@list.uvm.edu

The NIPA listserv allows practices to use e-mail to interact with one another outside of the monthly Learning Collaborative Webinars. All members of practices’ project teams are automatically added to the listserv. Project staff uses the listserv to communicate with participants about webinars, important project dates and activities, and other project information.

We *strongly* encourage practices to actively use this as a means to stay connected with other participants and sustain enthusiasm for the project by requesting information from the NIPA team, sharing strategy implementation or quality improvement breakthroughs, discussing any difficulties with implementing strategies, and asking for ideas from other clinic sites.

To use the listserv, send an e-mail addressed to NIPA_3@list.uvm.edu, and a copy of the message will be sent to all the people who currently subscribe to the list.
Appendices

Appendix I: Cohort 3 Learning Collaborative Timeline for NIPN Practices

The third cohort of the NIPA HPV quality improvement project will run from January through October 2017. The baseline or pre-intervention phase is the three-month period during December - February 2017. The intervention phase will run from March through August 2017, where practices will be implementing and testing changes to their HPV vaccine delivery systems. The timeline below outlines the activities associated with the different phases of the project and estimates the time for various activities.

**Enrollment Phase (1 hour)**
- Project Overview
- Practice Teams Established
- Contact Information Form

**Pre-Intervention Phase (8.5 hours over 2 months)**
- Pre-project surveys: Readiness Assessment & Office Systems Inventory (1 hour)
- Baseline Chart Reviews (16/month for 3 months) (3 hours)
- Baseline HPV Vaccination Rate Data (2 hours)
- Project & Data Orientation (2 hours)
- Practice Strategy Selection (0.5 hours)

**Learning Collaborative Implementation Phase (2.5 hours/month)**
- Strategy Implementation
- Monthly Learning Collaborative Webinars (1 hour)
- Monthly PDSA Self Assessments (0.5 hour)
- Monthly Chart Reviews (16/month for 6 months) (1 hour)
- Staff Impact Survey (Midpoint) (5 minutes)

**Wrap Up Phase (2.25 hours)**
- Post HPV Vaccination Rate Data (2 hours)
- Staff Impact Survey (Endpoint) (5 minutes)
- Office Systems Inventory (0.5 hour)
- Project Evaluation (10 minutes)
## Appendix II: Cohort 3 Learning Collaborative Webinar Schedule for NIPN Practices

### Webinar Agenda Format
- Roll Call & Announcements
- Stories from the Field: Reports from Practices
- Topic Presentation (30 min)
- Discussion and Q&A

### Webinar Access
- Enter first and last name
- Select “dial-out” or call 866-814-9555 Conference Code: 9402094385

### Webinar Dates (Times are Eastern) | Webinar Topics (Topic and Speakers are subject to change) | Presenters
---|---|---
1/10/17, 12-1 pm | **Project Orientation**  
*Required for all project participants* | Erica Gibson, MD  
Rachel Wallace-Brodeur MS, MEd

1/17/17, 12-1 pm | **Data Orientation**  
*Required for Data Entry Personnel Only*  
*Not applicable for MOC / MC-FP credit* | Rachel Wallace-Brodeur MS, MEd

2/7/17, 12-1 pm | 1. **Quality Improvement 101: PDSAs & Immunization Systems** | Wendy Davis, MD

3/7/17, 12-1 pm | 2. **Giving a Strong Provider Recommendation for HPV Vaccine** | Sharon Humiston, MD, MPH  
Rebecca Perkins, MD

4/4/17, 12-1 pm | 3. **Reducing Missed Opportunities** | Cynthia Rand MD, MPH  
Paul Darden, MD

5/2/17, 12-1 pm | 4. **HPV Vaccination 101 and Dosing Guidelines** | Bill Raszka, MD; Benjamin Lee, MD  
Elissa Meites MD, MPH

6/6/17, 12-1 pm | 5. **Hot Topics: Adolescent-Friendly Office Policies & Health Literacy** | Erica Gibson MD; Andrea Green, MD

10/3/17, 12-1 pm | 6. **Project Review and Wrap-Up** | Wendy Davis, MD  
Rachel Wallace-Brodeur, MS, MEd

### Attendance
- All project team members are encouraged to attend the webinars (or view the recordings)
- View recordings of missed webinars as soon as possible (within a month) to be able to discuss strategies with the rest of your team and receive MOC/MC-FP credit

**Live webinars are the 1st Tuesday of the month and the subsequent Wednesday**
- Tues: 12 – 1 p.m. ET (11 – 12 CT/10-11 MT/9-10 PT)
- Wed: 1 – 2 p.m. ET (12 – 1 CT/11-12 MT/10-11 PT)

### Credit Available for ABP MOC, ABFM MC-FP & CME
In addition to submitting data and PDSA logs you need to
- Attend the **Project Orientation** webinar
- Attend at least five of the six webinars  
*Note: recordings of webinars must be viewed within a month of the offering to earn credit*
Appendix III: Cohort 3 Project Participation Tracking Log

This tool is to assist with tracking project accomplishments related to the ABP MOC, ABFM MC-FP, and/or Performance Improvement CME requirements. Individuals will need this information to attest to “meaningful participation” in the project.

<table>
<thead>
<tr>
<th>Orientation Webinar</th>
<th>Learning Collaborative webinars (at least 5). Please note topic and date</th>
<th>Project surveys and questionnaires</th>
<th>Patient data</th>
<th>PDSA self-assessment</th>
<th>Reviewed data and feedback reports</th>
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<tbody>
<tr>
<td>January 2017</td>
<td>□ Yes □ No</td>
<td>□ Practice Readiness Assessment</td>
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<tr>
<td>February 2017</td>
<td>Top: <em>Quality Improvement 101</em></td>
<td>□ Office Systems Inventory</td>
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<td>March 2017</td>
<td>Top: <em>Giving a Strong Provider Recommendation for HPV Vaccine</em></td>
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<td>Baseline (pre-intervention) data on HPV rates □ Yes □ No</td>
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<tr>
<td>April 2017</td>
<td>Top: <em>Reducing Missed Opportunities</em></td>
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<td>Monthly data on 16 charts from March □ Yes □ No</td>
<td>For March □ Yes □ No</td>
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<td>May 2017</td>
<td>Top: <em>HPV Vaccination 101 and Dosing Guidelines</em></td>
<td>Staff Impact Survey □ Yes □ No</td>
<td>Monthly data on 16 charts from April □ Yes □ No</td>
<td>For April □ Yes □ No</td>
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<td>Orientation Webinar</td>
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<tr>
<td>June 2017</td>
<td>Topic: <em>Hot Topics: Adolescent-Friendly Office Policies &amp; Health Literacy</em></td>
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<td>Monthly data on 16 charts from May □ Yes □ No</td>
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<td>July 2017</td>
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<td>September 2017</td>
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<td>□ Office Systems Inventory □ Staff Impact Survey</td>
<td>Monthly data on 16 charts from August □ Yes □ No</td>
<td>For August □ Yes □ No</td>
<td>For August □ Yes □ No</td>
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<tr>
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<td></td>
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<td>Post intervention data on HPV rates □ Yes □ No</td>
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<tr>
<td>October 2017</td>
<td>Topic: <em>Project Review and Wrap-Up</em></td>
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