National Immunization Partnership with the APA (NIPA)

A Quality Improvement Project Specific to HPV Vaccination

CDC Grant #6 NH23IP000950-03-01
Specific Aim of QI Project

To develop and execute a national QI project addressing adolescent immunizations with a focus on improving HPV vaccination

Conducted through 2 practice-based networks:

**CORNET** - Continuity Research Network of the Academic Pediatric Association

**NIPN** - National Improvement Partnership Network of the University of Vermont
NIPA CORNET QI Team

• Project Directors:
  – Peter Szilagyi, MD, MPH
  – Cynthia Rand, MD, MPH

• Monthly Learning Collaborative Call QI Leads:
  – Cynthia Rand, MD, MPH
  – Paul Darden, MD
  – Stanley Schaffer, MD, MS
  – William Stratbucker, MD, MS

• Other Project Faculty
  – Sharon Humiston, MD, MPH
  – Iman Sharif, MD

• Project Manager
  – Christina Albertin, MPH, BSN

• Data Analysts
  – Nick Goldstein

• CORNET Research Coordinator
  – Holly Tyrrell, MSSW
NIPA Collaborators

• National Improvement Partnership Network (NIPN)
  – Network of >20 states that have developed Improvement Partnerships to advance quality and transform healthcare for children and families
  – An IP is a durable state or regional collaboration of public and private partners that uses the science of QI and a systems approach to change healthcare practice

• NIPN Project Leads
  – Faculty Experts:
    • Wendy Davis, MD
    • Judy Shaw, EdD, MPH, RN, FAAP
    • Erica Gibson, MD
  – Analyst:
    • Rachel Wallace-Brodeur
  – Project Coordinator:
    • Chealsea Hunter
• Teaching QI skills and approaches can improve adolescent immunization delivery.

• There are approximately 200 pediatric residency training programs in the United States.

• Pediatric faculty need to be trained in order to provide effective training to residents.

• Studies show that what residents learn during training informs how they later practice.

• The best training occurs in the context in which care is delivered – immunization delivery in clinic.
QI Practice Change Strategies

• All sites incorporate **Strong Provider Recommendations & QI Education Modules**

• **Practices can select 1 or more QI strategies to use:**
  – **Prompts** to providers to give vaccine at the time of visit; specifically prompts by nurse/staff at ALL visits (including acute visits)
  – **Standing Order** protocols at ALL visits that empower office personnel to vaccinate, if a patient is due, without direct doctor involvement at the time of patient care
  – **Reminder-Recall** systems to notify members of the target population that vaccinations are due/overdue

• **Feedback from monthly chart reviews to assess process measures**
Benefits to Participating

• MOC Part IV—25 points for pediatricians, 20 points for family medicine providers, after meeting all requirements; residents can bank points
• Participate in a national, scholarly, QI project
• Enhanced education in QI principles
• Receive site-specific data
• CORNET sites receives an honorarium of $2,000 for completing the project
Helpful Tools & Resources

• Project Timeline

• Listserv addresses
  – NIPA_QI@listserv1.academicpeds.org
  – NIPAWave2_QI@listserv1.academicpeds.org
  – NIPAWave3_QI@listserv1.academicpeds.org

• NIPA Virtual Toolkit
  – www.academicpeds.org/NIPA

• REDCap for data entry
  – Use secure links to enter site-specific data

• Monthly Data Reports
  – Provided to each participating site prior to monthly call
Wave 1

• Participation
  – CORNET: 14 clinics
  – NIPN: 6 states (39 clinics)
Wave 2

- **Participation**
  - CORNET: 15 clinics
  - NIPN: 11 states (60 clinics)
Wave 3

- Participation
  - CORNET: 13 clinics
  - NIPN: 12 states (70 clinics)
Wave 1: Project Timeline

May 2015
- **Enrollment Phase**
  - Program Selection Notification
  - Contact Information Form

June 2015
- **Orientation Phase**
  - Orientation Call #1 - Project Overview
  - Office Systems Inventory
  - IRB QI proposal submissions

July 2015
- **Training Phase**
  - Orientation Call #2 - Data collection
  - Begin Baseline Chart Reviews (50)
  - QI Module Training
  - Strong Provider Recommendation Training

August 2015 - April 2016
- **Learning Collaborative Implementation Phase**
  - Monthly Learning Collaborative Calls
  - Monthly PDSA Self Assessments
  - Monthly Chart Reviews (10/month)
  - NIPA Staff Impact Survey (Midpoint)

May 2016
- **Wrap Up Phase**
  - Begin Post LC Chart Reviews (50)
  - NIPA Staff Impact Survey (Endpoint)
  - Office Systems Inventory (Endpoint)
Wave 1 Results: Office Systems

- Post common schedule: Pre: 40%, Post: 80%, p<0.01
- Provide patient education: Pre: 60%, Post: 80%, p=0.11
- Educate staff on valid doses: Pre: 50%, Post: 80%, p<0.01
- Office policy to vaccinate at all visits: Pre: 50%, Post: 80%, p<0.01
- Schedule shot-only visits: Pre: 50%, Post: 70%, p=0.05
- Designate clinic champion: Pre: 20%, Post: 60%, p<0.01
Wave 1: Post-Staff Impact Survey

Our practice staff is satisfied with the changes we are implementing to improve our office systems delivery of HPV vaccine.

Our office staff has experienced an increased administrative burden due to the effort required to implement the strategies that we have chosen for our quality improvement (QI) intervention.

Communication between our staff around delivery of HPV vaccine is more effective as a result of this QI intervention.

The changes made by our practice as part of this QI intervention have resulted in a more efficient delivery system of HPV vaccine.
Wave 1: Missed Opportunities

Well (n=2271)
Acute/Chronic (n=1832)
Nurse (n=488)

Intervention
9 month baseline
Month

Percent Missed Opportunities

* p<0.05
Results - Wave 2

NIPN:
• Missed opportunities dropped from 66% to an average of 52% in the last months of the intervention

CORNET:
• Missed opportunities dropped from 55% to an average of approximately 40% in the last months of the intervention
Conclusions

• A learning collaborative model in residency clinics and community practices can:
  – Reduce missed opportunities for HPV vaccination

Keys to success include:
  – Having a QI implementation champion in the office
  – Communication with entire office staff
  – Single vaccination schedule, including offering vaccine at acute visits

Primary Challenge includes:
  – Vaccinating at all acute visits
Any Questions?