HPV Vaccination Quality Improvement: Physician Perspective

Discussion of efforts to raise HPV vaccine coverage using quality improvement from a physician’s perspective

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Disclosures

Speaker and consultant: Merck
Educational Goals

Participants in this conversation will:

• Understand the relevant principles behind an effective QI project in medical practice.
• Recognize relevant barriers to QI in primary care pediatrics.
• Become familiar with methods applied to a successful QI project to increase HPV vaccination rates in a large, multi-office pediatric group in Central Florida.
• Develop strategies to apply within their own primary care pediatric practices in their QI efforts to increase HPV vaccination rates.
What is Quality?
Transition in Health Care

HEDIS
MEANINGFUL USE
MACRA
ACO METRICS
CORE MEASURES
What is Quality?
The TRIPLE AIM

Definition

System designs that simultaneously improve three dimensions:

- Improving the health of the populations;
- Improving the patient experience of care (including quality and satisfaction); and
- Reducing the per capita cost of health care.
…The QUADRUPLE AIM

The Missing Aim

- Better Outcomes
- Improved Clinician Experience
- Lower Costs
- Improved Patient Experience
Improving Medical Care Requires System Redesign

"The definition of Insanity is doing the same thing over and over and expecting to get a different result"

- Mohandas Gandhi

"Every system is perfectly designed to achieve the results that it gets."
- Paul Batalden

"All improvement will require change, but not all change will result in improvement!"
- T. Nolan

www.ihi.org
The Science of Improvement

A Model for Learning and Change

- Implemented (adopt)
- Dropped (abandon)
- Modified (adapt)
- Increased in scope (expand)
- Tested under other conditions

On the basis of what is learned from any PDSA cycle, a change might be:
Question 1: What are We Trying to Accomplish?

What are we trying to accomplish?

The project AIM is:

- Not just a vague desire to do better
- A commitment to achieve measured improvement in a specific *system*
- with a definite *timeline*
- with numeric *goals*
Question 2: How Do We Know that a Change is an Improvement?

“When you can measure what you are speaking about and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind.”

-Lord Kelvin, May 3, 1883

“In God we trust. All others bring data.”

W. E. Deming
Critical Components of a Vaccination Improvement Project

• Set specific goals. (AIM)
• Know your rates. (MEASURE)
• Identify areas of weakness and/or opportunity and what to do about them. (INTERVENTION)
• Implement effective and sustainable process improvement. (TEST)
  • Keep it simple with an eye to workload.
  • Scalability
  • Sustainability
Description of the Practice*

• **Orlando Health Physician Associates:**
  • Large multi-specialty healthcare group
  • 22 pediatricians, 2 pediatric ARNPs, 80 pediatric staff, 11 offices.
  • Over 57,000 active pediatric patients
  • Over 23,000 patients aged >=11 years.
  • NCQA level three Patient Centered Medical Home (PCMH).

* At outset of the project, second half 2013
The Approach: Vaccination Rates Revealed

• Departmental HPV vaccination rates reviewed September 2013
• Individual physician rates shared privately at first (September 2013).
• Individual physician rates subsequently shared with the department.
• Rates published monthly at first, now quarterly.
The Approach: Goal-Setting

How much? By when?

- 2013: Show Improvement
- 2015: Meet highest NIS Teen national immunization rates*.
- 2017: Meet Healthy People 2020 goals (80%)* **

* for all patients 11-18  **current metrics c/w HEDIS
The Approach: Interventions

- Data verification and “clean-up”
- Physician education
- Staff education
- Physician incentives
- Pre visit planning
- Electronic follow up orders for doses 2 and 3
- Schedule doses 2 and 3 at the time of first dose
- Reminder Calls
- Manufacturer Tools
- Clinical Summaries
- Other
Physician and Staff Education

Key Points:

• Multiple competing priorities.
• Unawareness of HPV disease impact and of ACIP recommendation for routine 11-12 year vaccination.
• Discomfort.
• The need for “scripting.”

• UNTAPPED RESOURCE AND ENERGY IN STAFF: IMPLICATIONS OF EMPOWERMENT
Tools: Distributed at Offices
Placed on Pediatrics Desktop
## Daily Pre-visit Planning

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<th>Details</th>
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<td>PEDC 324</td>
<td>HAV w1flu med w 18 MONTH CHECK** NKWAT we'll handout</td>
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<tr>
<td>01:10p</td>
<td>PEDC 324</td>
<td>men(2) smoking wellness defer PHQ smoking wellness</td>
</tr>
</tbody>
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08/10/2015 ILNP 02/08/2014 27949575 18 MONTH CHECK** NKWAT
08/10/2015 ILNP 04/8/2000 27949578 15 YR WCC**
08/10/2015 ILNP 12/08/2000 27949580 14 YR WCC**
08/10/2015 ILNP 07/07/2003 12 YEAR CHECK** HAU(1) VOR(2) Tdap(1)
08/10/2015 ILNP 10/1997 27949599 17 YEAR CHECK** defer PHQ smoking wellness
Electronic Order Sets*

N.B. We, sadly, do NOT have clinical decision support in our EMR

*Now updated with Gardasil 9 and two dose series follow-up orders.
Subsequent Doses Scheduled

- Second (and third) doses were scheduled the day dose one was administered.
- These appointments:
  - Print on patients’ clinical summaries
  - Generate reminder phone calls
  - Can be tracked if “no show” or cancelled
  - Can be reminded using manufacturer tools
- All practices committed to keeping schedules open at least six months ahead
Physician Incentives

- Competition
- Wine
- Quality Bonus Structure
Phase Two

• **Sustainability meetings**
  • Annual lunch meetings at each office.
  • Review rates and progress toward goals.
  • Review vaccine safety and efficacy with an eye toward personalizing disease prevention efforts.
  • Practice responding to patient and parent questions and concerns.
  • Re-supply of resources.

• **Focused quality improvement efforts**
  • Resident QI Projects
  • Targeted at offices with lower rates
  • Application of evidence-based best practices
Lessons Learned

• Practices are very busy:
  • Multiple competing priorities require that HPV vaccination earn its place in the ranking
  • Need for scalable, sustainable interventions that fit or even simplify current work flows

• Highest rated interventions:
  • Physician and staff education programs
  • Scheduling subsequent doses real time
  • Manufacturer-supplied tools, especially magnets and cling posters

• Reveals:
  • Transparency, Competition, Reward: THE WHY?
  • Staff involvement: a critical resource
Thank You