Objectives

- Review fundamentals of quality improvement (QI)

- Understand approach to choosing evidence-based strategies to improve HPV vaccine coverage rates in your practice

- Identify next steps – “What do you want to accomplish by next Tuesday?”
Practice Readiness Assessment

Changing Systems

- Every system is perfectly designed to achieve exactly the results it gets.
- If you want to improve, you must change your system!
- Goal: move the system from current to new state of performance.
QI Basic Principles

- Incremental change
- Data-driven
- Environment for shared learning
  - Team Work (the “C” in CoIIN)
  - Communication
- Systems and Processes
  - Individual and population health outcomes
- Sustainability

The Model for Improvement

From The Improvement Guide
Langley, Nolan, Nolan, Norman and Provost
Initial Steps in Undertaking an Improvement Project

• **Develop aim statement**
  • What you are trying to accomplish
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Aim

• What do you want to **ACCOMPLISH**?

• Picture the **END RESULT**
Aims Should be SMART

- S – Specific
- M – Measurable
- A – Achievable
- R – Relevant
- T – Time-Specific

"Some is not a number, soon is not a time!"

- Don Berwick, Institute for Healthcare Improvement (IHI)
  - "Here is what I think we should do.
  - I think we should save 100,000 lives. And I think we should do that by . . .
  - June 14, 2006—18 months from today.
  - ‘Some’ is not a number, and ‘soon’ is not a time."

- Here’s the number: 100,000
- Here’s the time: June 14, 2006—9 a.m.
Aim Statements

Good, Bad, or Ugly?

• A good aim statement will include:
  ✓ What you are trying to improve
  ✓ How much you want to improve by
  ✓ When you want to see the improvement

• Bad aim statements are missing one of those components

• Ugly ones are missing more!
Good, Bad, or Ugly?

<table>
<thead>
<tr>
<th>Good</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>“We want to increase rates of HPV vaccine coverage.”</td>
<td>Measurable, but not time-specific (and is it realistic?)</td>
</tr>
<tr>
<td><strong>Ugly</strong> – Too broad</td>
<td><strong>Bad</strong> – Measurable, but not time-specific (and is it realistic?)</td>
</tr>
</tbody>
</table>

1. “We want to increase rates of HPV vaccine coverage.”
2. **Ugly** – Too broad
3. “We will increase vaccine coverage rates by 50%.”
4. **Bad** – Measurable, but not time-specific (and is it realistic?)
Good, Bad, or Ugly?

• “By April of 2016, we will decrease missed opportunities for administering HPV vaccine to eligible adolescents aged 11 through 17 years of age by 20% over our practice baseline rate.
• Good – specific and time-specific.

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**Project Aim:**

**Goal:**

**Key Drivers Diagram:**

**Strategies/Interventions**

**Key Drivers**

**Example: Key Driver Diagram**

*(Belisle: Maine Quality Counts for Kids)*

**Aim:**
To improve preventive services for Maine's children.

**Aim/Outcome:** Between September 2011 & September 2012, improve immunization rates (2010) by ≥ 4% in practices that serve a high volume of MaineCare.

- Leaders as champions for change
- Team-based and evidence-based system of care with informed, engaged and competent staff
- Access to care
- Immunization information and tracking systems (HIT) that support improving immunizations
- Engage partners in improving immunization rates

**Immunization Rates for:**
- 2-Year Olds
- 6 Year Olds
- 13 Year Olds
Initial Steps in Undertaking an Improvement Project

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Measurement

... is how you will know when you’ve accomplished your aim.
Types of Measures

• Outcome measures
  • **Change** in individual/population health outcomes (intermediate or long-term)

• Process Measures
  • Function: how the system works
  • Structure: equipment, facilities

• Balancing Measures
  • Unintended (adverse) impact elsewhere in the system

Measuring for Improvement

• Different from project/program measurement
  - Short cycles
  - “Just enough” data
  - Learning vs. Judgment/Accountability
  - Failure is good!
  - Quick turnaround
  - Run Charts – view data over time
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Readiness for **Change**
Changes and Process Measures

What changes can we make that will result in improvement?

Understand the Process FIRST

- Identify the team
- Talk to stakeholders
- Understand the underlying system
- Map out the current process
- Identify the problem (gap)
- Identify a change that fits the problem
Convening a Change/Improvement Team

- Team members have a stake in the outcome (proficient in relevant areas)
- The process involved is cross-functional
- No one individual has sufficient knowledge to solve the problem
- An effective improvement team is
  - Flexible: willing to change and respond to the ongoing/unexpected
  - Creative: solution-oriented

Change Team Attributes

- Represents any discipline and ideally works directly with the system targeted for improvement
- Is willing to learn from other team members
- Is willing to maintain open communication with staff, leadership, and consumers
- Is willing to assume individual responsibility that contributes to the team's success
- Commits to the success of the improvement project
Mapping the Process

- Define the process to be diagrammed
- Decide upon the boundaries of your process:
  - Where/when does it start/end?
  - What level of detail to include in the diagram?
- Brainstorm the identified activities:
  - Write each on a card or sticky note (+/- sequence)
  - Arrange activities in proper sequence
- Draw arrows to show the flow of the process.
- Review flowchart with all involved for accuracy

Example: Process Flow Map
(Belisle: Maine Quality Counts for Kids)

<table>
<thead>
<tr>
<th>Patient checks in</th>
<th>Screen completed</th>
<th>Screen scored</th>
<th>Results reviewed w/ Family</th>
<th>Referrals made as necessary</th>
<th>Patient checks out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening given to patient by front clerical staff</td>
<td>Screen completed by parent in wait room</td>
<td>Provider enters encounter, reviews form</td>
<td>Provider reviews screen w/ pt</td>
<td>Follow up visits and/or referrals made at point of care</td>
<td>Patient checks out with plan of care</td>
</tr>
<tr>
<td>• Provider scores w/ pt</td>
<td>Provider scores form enclosed scoring sheet using laminate score instructions posted in room</td>
<td>Provider discusses interventions as needed and signs Screen</td>
<td>Provider documents assessment &amp; clinical impression</td>
<td>• Results shared with other early childhood sectors</td>
<td></td>
</tr>
</tbody>
</table>

Step 3: For each step, ask:
- Can it be eliminated?
- Can it be done in a different order?
- Can it be done by someone else/more appropriate person?
- Are there unnecessary waits?
- Communication breakdowns?
- Is this value added for the patient?
- Is this value added for the staff?
Change/Strategies

- Identify best practices to inform the strategies selected
  - Share seamlessly
  - Steal shamelessly
- Select “do-able” strategies (consider number & scope)
- In work plans that include leads and timelines, include strategy development, implementation plans, and measures

Improving Immunization Delivery:
Strategies

- **Strong Provider Recommendation** (all)

- **Provider Prompts**
  - Paper-based; computer-generated; verbal, visual
  - Staff reviews charts pre-ALL adolescent visits; determines eligibility
  - Prompt placed and documented
  - Health care provider documents status: refused/declined, deferred, given, etc.
**Improving Immunization Delivery: Strategies – Standing Orders**

- Establish office policy/procedure
  - Staff reviews charts pre-ALL adolescent visits; determines eligibility
  - Staff provides VIS to patient/parent & obtains consent
  - Staff administers vaccine and documents in chart
- **Example:** Standing Orders for Administering Human Papillomavirus Vaccine to Children and Teens: [http://www.immunize.org/catg.d/p3090.pdf](http://www.immunize.org/catg.d/p3090.pdf)

**Improving Immunization Delivery: Strategies – Reminder/Recall**

- Decide upon target age group
- Identify communication method(s)
  - Phone, U.S. mail, e-mail, text, combination
  - Create templates
- Run query at regular intervals to identify patients
- Contact family/patient
- Chart review 30 days after message sent
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### PDSA: How Improvement Happens

<table>
<thead>
<tr>
<th>Plan</th>
<th>Do</th>
<th>Study</th>
<th>Act</th>
</tr>
</thead>
</table>
| - Questions & Predictions  
  - Who, what, where, when  
  - Measurement | - Just do it!  
  - Document problems and unexpected observations | - What worked? What didn’t?  
  - Compare data to predictions  
  - Summarize what was learned | - Note what to do differently in the next cycle  
  - Next steps |
Before Implementing Changes

- Test changes on small scale
  - Failure is acceptable on a small scale and provides valuable information
- Re-measure to analyze impact
  - Process measurement vs. project/program measurement
- Pilot results over time
- Implement changes
- Spread changes

PDSA in Action
Successful Quality Improvement

Each PDSA Cycle:

• Test or Observation was **planned**.
• Plan was **attempted**.
• Time was set aside to analyze data and **study** the results.
• **Action** was based on what was learned.

NIPA: Monthly Data Report
Keys to Success

- Stakeholder engagement
- Data for improvement vs. data for research/accountability
- Project management/operations
  - Prioritize strategies; plan next steps
  - Translating goals to actionable level
- Sustainability: cohesive, long-term (strategic) plan vs. individual strategy implementation

QI Resources

- http://www.academicpeds.org/nipa/
  - Tools and Resources: Quality Improvement
- Contact us!
NIPN Resource List

ListServ
Need Advice?
Have Tips To Share?
Correspond with IPs and others working on Child and Maternal Health Improvement.
Send an e-mail to LISTSERV@LIST.UVM.EDU

QI Measures
Technical Assistance
All-Sites Webinars

SharePoint
Contact Information
Engaging Parents
IRB
MOCs
QI Publications
Working with Practices
IP Operations
Measures
EHR Adoption
Adolescent Depression
Past QI Coaching and All-Sites Calls
Previous Operations & National Meetings

Annual Meetings
Nov 9th – 10th 2015

List of IPs and IP Contact Information

NIPN Website
www.nipn.org

A How-to Guide
Establishing a Child Health Improvement Partnership

Objectives

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Thank you!

Please be sure to join us for the next NIPA Learning Collaborative Webinar:
“Reducing Missed Opportunities”
Cynthia Rand, MD and Paul Darden, MD
Monday August 24, 1–2 pm ET/12–1pm CT
Tuesday, August 25, 12-1 pm ET, 11-12 CT

Send us your suggestions for future webinar topics

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