Quality Improvement Strategies and Tools for: Improving Breastfeeding Supports in Primary Care Settings

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Objectives

- Review basic quality improvement principles & practices
- Describe the Model for Improvement and discuss how to use it for a quality improvement project focused on improving breastfeeding supports in primary care settings
- Discuss PDSA cycles and how to use them to develop, test, and implement change using evidence-based strategies
What is QI?

- **Quality improvement** may be defined as “systematic, data-guided activities designed to bring about immediate improvement in health care delivery in particular settings”

- Definition from the Agency of Healthcare Research and Quality
What is QI?

- The 6 Aims for Improvement:
  1. Safe
  2. Effective
  3. Patient-centered
  4. Efficient
  5. Timely
  6. Equitable
Quality Improvement Principles

- Driven by Data
- Patient-centered
- Team Work
- Communication
- Systems and Processes
- Sustainability

- From HEALTHQUAL International
Change!

Time for a change

Is it that noticeable?
Model for Improvement

- Aim (Goal)
- Measures
- Change Ideas

Developed by
Associates in Process Improvement
The PDSA Cycle: Plan

“Plan” Steps

1. Identify area for improvement
2. Assemble the team
3. Develop aim statement
4. Describe the current process: identify root causes
5. Identify potential solutions (change ideas!!) and pick the best

1. Develop an improvement theory
2. Identify measures
Aim Statement

What do **you** want to accomplish?

Picture the end result:
Aims Should be SMART

- S – Specific
- M – Measureable
- A – Achievable
- R – Relevant
- T – Time-bound
Global Aim: A Great Place to Start

Example:
We aim to improve: exclusive breastfeeding rates birth to 6 months infant age.

The process begins with: the newborn well-child visit
The process ends with: the 6-month well-child visit.

Benefits: 1) better health outcomes and 2) a more breastfeeding-friendly office environment.
Specific Aim – a great place to go

We will:

1. ___________ (improve/increase/decrease)
2. By _________ (quality/number/percentage)
3. By _________ (Date).
A SMART Aim Statement

● Guides and keeps the improvement effort focused.
● Is clear, numerical and measurable.
  ▪ Using data will help make sure the aim is focused in the right direction
● Defines the specific population of patients who will be affected.
The PDSA Cycle: Plan

Tools for “Plan”

1. Evidence-based knowledge, practices (OSI)
2. Brainstorming
3. Flowcharts
4. Run Charts
5. Check Sheets
6. Affinity Diagrams
7. And many more ……
Describe the Current Process: Breastfeeding Education

Pre-natal visit

Provider asks mother if she wants to breastfeed?

Provider offers encouragement, lists benefits, identifies and encourages resources

Provider asks: Do you need more information?

Yes

Provides additional information

Mother delivers with intention to breastfeed

Continued support with intention to breastfeed by hospital staff

Mother is breastfeeding infant at discharge

No

Mother decides to breastfeed

Delivers without intention to breastfeed

Mother given opportunity to make choice regarding breastfeeding

Resources Education

Mother does not wish to breastfeed

Mother is not breastfeeding upon discharge

Mother expresses interest in learning more about breastfeeding

Provider gives more information; resources

Resources Education

Mother decides to breastfeed

Mother states she does not wish to breastfeed

Provider gives information/education regarding breastfeeding

Resources Education
Measurement plays an important role!

- To assess progress towards goal
- To assess whether the changes are an improvement
- To focus improvement and refine changes
Establish Measures

- Measures must be the desired outcome and directly related to the aim.
- Measure for improvement, not judgment. Failure = learning!
- Quick turnaround
- “Just enough” data; use sampling.
- Integrate into the daily routine.
Data Collection

Need to Know

- What data is needed
- Who will provide the data
- How the data will be transferred into information
- How the information will be used and for what purpose
- How information will be communicated to key stakeholders

Involve the people doing the work
Measures

Outcome Measure (voice of the patient):
How is the system performing? What is the result?
**Example:** % of infants exclusively breastfeeding at 6 months of age.

Process measure (voice of the workings of the system):
Are the parts/steps in the process working as planned?
**Example:** % of women called by physician’s office within 48 hours of discharge.
Strategies for Improving Breastfeeding Supports in Primary Care Settings

<Practice Name>  <Date>

The following are strategies you can use to improve breastfeeding supports in your practice. Please fill this survey out as a practice (as opposed to having an individual practitioner complete it.)

Read each idea and check the response as it applies to your practice:

- **Y**- Yes, we already practice this
- **N**- No, we don't practice this, but would like to incorporate it in our office systems
- **P**- Partially, we do some of this (or do it sometimes), but would like to do it routinely
- **N/A**- Not applicable; this would not be appropriate for our office

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Response</th>
<th>Dates/Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>We evaluate every breastfeeding mother/baby pair at every visit, using a standardized breastfeeding assessment tool.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We reach out by telephone to new mothers in the first 24-48 hours post-discharge, to evaluate breastfeeding, assess problems and provide education.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We have a breastfeeding-friendly, written policy or guideline relating to care for breastfeeding mothers, inclusive of clinical guidelines; our staff have been trained on the policy or guideline.</td>
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<td></td>
</tr>
<tr>
<td>We have a policy or written guideline relating to lactation support in our workplace (e.g., space and break-time are provided for mothers to pump and store milk); our staff is familiar with this policy or guideline.</td>
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<td></td>
</tr>
<tr>
<td>Our health professionals and office staff are trained to encourage exclusive breastfeeding to six months postpartum (unless medically necessary.)</td>
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<td></td>
</tr>
<tr>
<td>We only provide formula if medically indicated.</td>
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<td></td>
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<tr>
<td>We discourage formula marketing: formula and advertisements of formula are not displayed.</td>
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<td></td>
</tr>
<tr>
<td>We offer prenatal visits where we encourage breastfeeding and provide anticipatory guidance regarding breastfeeding.</td>
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</table>
Strategies for Improving Breastfeeding Supports in Primary Care Setting

- Evidence-based
  - ABM Clinical Protocol #14: Breastfeeding-Friendly Physician’s Office

- Office systems inventory

- Source for office systems improvements that are evidence-based
Sample Specific Aim
from the Office Systems Inventory

By March 2015, we will increase the number of mothers who are called post-discharge, within 48 hours, by 80% (from 20% to 100%).

* Is 100% a realistic goal?
Sample Measure

Aim Statement:
By March 2015, we will increase the number of mothers who are called post-discharge, within 48 hours, by 80% (from 20% to 100%).

Measure Plan

**What data is needed:**
Number of mothers discharged, number of mothers called within 48 hours of discharge

**Who will provide the data:**
Scheduler, Staff nurse/CLC

**How the data will be transferred into information:**
Run charts

**How the information will be used and for what purpose:**
Determine if process is working – helps to identify gaps in process

**How information will be communicated to others:**
Use at weekly meeting
Your Team’s Work

PLAN

- Identify area for improvement – Review and select from OSI completed by the practice
- Assemble your Team
- Develop your Aim Statement
- Describe the current process on which you will focus
- Identify potential solutions (change ideas!!) and choose the best to start with
- Develop an improvement theory (predictions)
- Identify measures
  1. What will you measure?
  2. What data is needed?
  3. Who will get the data?
  4. How will you share the data?
The PDSA Cycle: Do

Do

1. Carry out the test on a small scale
   - Document problems; include unexpected observations
2. Gather data over time
   - Multiple cycles
   - Variety of conditions
3. Begin analysis of the data
### Monthly Quality Improvement PDSA Activity Log

**Practice Name**

**Data submission month (please circle):**
- December
- January
- February
- March
- April
- May

Please complete the chart below. Email or fax to VCHIP **by the 7th of each month.**

**Email:** Kara.Bissonnette@uvm.edu  
**Fax:** Kara 802-656-8368

<table>
<thead>
<tr>
<th>What area are you working on?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>What are you trying to accomplish?</td>
<td></td>
</tr>
<tr>
<td>What change(s) did you make?</td>
<td></td>
</tr>
<tr>
<td>Did the changes result in improvement(s)?</td>
<td></td>
</tr>
<tr>
<td>What are the next steps?</td>
<td></td>
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The PDSA cycle gives us a way to quickly test changes on a small scale in real work settings, observe what happens, tweak the changes as necessary, and then test again—before implementing anything on a broad scale. Instead of spending weeks or months planning out a comprehensive change, then putting it into practice only to find that it’s fundamentally flawed, the PDSA cycle enables rapid testing and learning.

The PDSA Cycle is used to develop, test and implement changes you work on throughout the month; ask,

"What question(s) do we want to answer, on this PDSA cycle?"
Collect data and document

- Week 1: 70% of mothers were called within 48 hours of discharge

<table>
<thead>
<tr>
<th>Day of discharge</th>
<th># discharged</th>
<th># called within 48 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Tuesday</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>Wednesday</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Thursday</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Friday</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Saturday</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Sunday</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20</td>
<td>14</td>
</tr>
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The PDSA Cycle: Study

Study

1. Analyze the data
2. Ask: What worked? What did not?
3. Compare data to predictions
4. Summarize and reflect on what was learned
● Thursdays and Fridays are problematic!
● (No calls on weekends)
The PDSA Cycle: Act

Act:
Adapt, Adopt…
1. Refine the change: determine what modifications should be made, and note what to do differently for a next cycle
2. Prepare for next test of change
3. Outline next steps

...or Abandon
## Monthly Quality Improvement PDSA Activity Log

**Practice Name**

Data submission month (please circle): December January February March April May

Please complete the chart below. Email or fax to VCHIP by the 7th of each month.

Email: Project Coordinator Name Fax: Project Coordinator fax# 

<table>
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<tr>
<th>What area are you working on?</th>
<th>Early telephone follow-up after hospital discharge</th>
</tr>
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<tbody>
<tr>
<td>What are you trying to accomplish?</td>
<td>By March 2015, increase the number of women who are called post-discharge by 48 hours from 20% to 100%.</td>
</tr>
</tbody>
</table>
| What change(s) did you make? | 1. Developed a process identifying who needed to be called and for making calls  
   a. Person A develops list of people discharged from hospital and gives to person B  
   b. Person B calls all mothers 24-48 hours after discharge (prior to first office visit)  
      i. Time between 2:00-3:00 is protected each day for calls |
| Did the changes result in improvement(s)? | Yes, rates of follow-up calls increased from 20% to 70%. Noticed no follow-up calls on the weekend. |
| What are the next steps? | Develop a process for follow-up calls to occur on the weekend. |

The PDSA cycle gives us a way to quickly test changes on a small scale in real work settings, observe what happens, tweak the changes as necessary, and then test again—before implementing anything on a broad scale. Instead of spending weeks or months planning out a comprehensive change, then putting it into practice only to find that it’s fundamentally flawed, the PDSA cycle enables rapid testing and learning.
Before Implementing Changes

- Test changes on small scale
  - Failure is acceptable: provides valuable information*

- Re-measure to analyze impact
  - Process measurement vs. project/program measurement

- Pilot results over time: collect data (run charts, control charts, pareto charts)

- Implement changes

* Caveat: Failure that compromises patient safety is *never* acceptable!
PDSA in Action
Small tweaks lead to big improvements
Rapid Cycle Improvement: Challenge your assumptions about time

- Years
- Months
- Days
- Hours
- Minutes

Cycle 1
Cycle 2
Cycle 3
Successful Quality Improvement

In each PDSA Cycle:

- A test or observation was **planned**.
- A plan was **attempted**.
- Time was set aside to analyze data and **study the results**.
- **Action** taken was based on what was learned.

Communication is key!
Every system is perfectly designed to achieve exactly the results it gets.

- Paul Batalden, MD

If you want to improve, you must change your system!
Thank you for listening!