Sustainability - Making Change Last!

GaPQC AIM Webinar – April 2, 2019
Objectives

1. Share the fundamentals of systems thinking as it applies to sustainability and organizational change.

2. Provide resources to help healthcare practitioners understand the key factors that impact the successful spread and sustainability of quality improvement.

3. Understand how to develop your own “Theory of Success” for sustaining organizational change.
FOR IMMEDIATE RELEASE

Premier Inc. Launches Nationwide Bundle of Joy™ Campaign to Scale Advancements in Maternal Healthcare throughout the U.S.

Bundle of Joy™ campaign to raise the bar on the quality, safety and cost of care for mothers and babies; mobilizes Premier’s alliance of 4,000+ hospitals and health systems; 1988 data points, vast array of industry partnerships and history of proven best practices

CHARLOTTE, N.C. (April 2, 2019) — Premier Inc. (NASDAQ: PINC), a leading healthcare improvement company, has launched the Bundle of Joy™ campaign to raise the bar on the quality, safety and cost of care for mothers and babies across the U.S. Premier aims to build and deploy new care delivery models using evidence-based guidelines and best practices from around the nation, ultimately scaling proven advancements across the industry.

"Every new mother and child deserves the best beginning possible, at the most affordable price point," said Susan DeVore, President and CEO of Premier. "Our goal for the Bundle of Joy campaign is to ensure mothers and babies are always at the center of care and supported by the latest evidence, the best doctors and the most successful practices. We're building on our years of work as well as our expertise in synthesizing innovative ideas and data from our powerful footprint of health system, physician and industry partners to measure, monitor and scale industry advancements."

Maternal health is a national priority. Mothers are at higher risk of dying during childbirth in the U.S. than in any other industrialized nation. America is also the only developed nation with an increasing maternal mortality rate. However, more than 60 percent of maternal deaths in the U.S. are preventable. The Bundle of Joy campaign is a multi-year effort to collaboratively assess, build, implement and broadly share the tools and best practices that are needed to ensure every birth is a safe, healthy and joyful journey for mothers and their babies.

The Bundle of Joy campaign focuses efforts to improve maternal and infant health by:

- Evaluating the current state and pinpointing specific improvement opportunities using Premier’s robust database, which houses information on more than 45 percent of all U.S. hospital discharges, 100 billion data points and 1.2 million annual births.
- Connecting providers through data-driven, collaborative, performance improvement work that aligns frontline clinicians to best practices and evidence-based reliability guidelines.
- Engaging brilliant industry minds to find the solutions that work and scale them across Premier’s national alliance of more than 4,000 hospitals and health systems.
- Researching specific therapeutic interventions and tools and assessing their clinical efficacy over time.
- Linking clinical quality and performance from primary care to hospital to post-acute care.
- Designing and implementing a 12-month optimal care model that includes pregnancy, labor and delivery, and post-partum care.
- Transparently sharing the progress being made across the nation and the best practices achieving those results.

$18 billion
Total member savings of nearly $18 billion through our QUEST™ Collaborative alone.

200,000 lives saved
Using insight from our collaboratives and member health systems, thousands of lives are being saved.

4,000
A network of approximately 4,000 member hospitals and health systems.
“Why do we need to change?”
Preventable Deaths In Hospitals

• 1999: We learned that 98,000 people were dying every year from preventable errors in hospitals

• 2013: Estimated that more than 400,000 people per year die from preventable harm in hospitals

• 2013: Preventable medical errors ranks 3rd highest killer in U.S. only to heart disease and cancer

• 2011: “More than a third of the pregnancy-related deaths were determined to have had a good-to-strong chance of being prevented.”

• 2018: Over 60 – 70% of pregnancy-related deaths in the U.S. were preventable.

• 2019: “85% of Tennessee maternal deaths preventable”

• Georgia leads the nation in maternal deaths ~ how many were preventable?

2013 Journal of Patient Safety: A New, Evidence-based Estimate of Patient Harms Associated with Hospital Care
Preventable Deaths

“We are burying a population the size of Miami every year from medical errors that can be prevented” ~ The Leapfrog Group 2013
The Statistics

Maternal death rates are 2X higher and harm 100% higher than the past\(^1\).

60% of all maternal deaths could be prevented\(^2\).

$19.5B in estimated costs of preventable harm\(^3\).

Maternal deaths are 4X more common in African Americans\(^1\) and 64% higher in rural areas\(^4\).

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\(^4\) CDC Severe Maternal Morbidity in the U.S. Retrieved from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html
"60 - 70% of Maternal Deaths Were Found to be Preventable"

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Cardiovascular and Coronary Conditions</th>
<th>Hemorrhage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventable</td>
<td>63.2%</td>
<td>68.2%</td>
<td>70.0%</td>
</tr>
<tr>
<td>Not Preventable</td>
<td>33.5%</td>
<td>27.3%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Unable to Determine</td>
<td>3.2%</td>
<td>4.6%</td>
<td>5.0%</td>
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</tbody>
</table>

Hospitals know how to protect mothers. They just aren’t doing it.

Hospitals blame moms when childbirth goes wrong. Secret data suggest it’s not that simple. A USA TODAY analysis of billing data from 7 million births found about one in eight hospitals have complication rates of at least double the norm.
Federal Action – State and Hospital Focused

H.R.1318 Preventing Maternal Deaths Act and H.R.315 Improving Access to Maternity Care Act became law 12/18

- Process for reviewing pregnancy-related deaths
- Establish and sustain a maternal mortality review committee
- Ensure that the state department has a plan for ongoing provider education to improve the quality of maternal care, disseminate findings, and implement recommendations
- Provide for public disclosure of information

S.3392 - MOMS Act and H.R.5761 - Ending Maternal Mortality Act introduced 2018

- Pregnancy and postpartum safety and monitoring practices and maternal mortality and morbidity prevention
- To collect and analyze data related to process structure and patient outcomes to drive continuous quality improvement in the implementation of the maternal safety bundles
- Address specific issues relating to maternal mortality and SMM such as public awareness, at-risk populations and disparities, and quality of care

Washington, D.C. – What do Afghanistan, Sudan, and the United States all have in common? They are the only countries in the world where the maternal mortality rate is on the rise, according to recent studies by the Alliance for Innovation on Maternal Health (AIMs).

Compared to 30 years ago, AIMs report finds that women giving birth in the U.S. are more at risk of dying than their mothers were. Even more alarming is a considerable racial disparity. African American women are three to four times more likely to experience pregnancy-related deaths than Caucasian women.

In light of this report, House Ways and Means Committee Chairman Kevin Brady (R-TX), Oversight Subcommittee Chairman Lynn Jenkins (R-KS), and Health Subcommittee Chairman Peter Roskam (R-IL) have launched an investigation to determine why maternal mortality and morbidity rates are rising in America and what federal agencies, states, and hospitals are doing and can do to address this issue.

Upon announcement of this investigation, Chairman Brady, Chairman Jenkins, and Chairman Roskam released the following statement: “Bringing a baby into this world should be one of the most exciting and rewarding times in a women’s life. It is absolutely unacceptable that preventable failures are the cause of avoidable, unnecessary, and absolutely tragic deaths. America needs to be the health care leader of the world, and women across the country need to know they will be safe and in good hands while giving birth. With this investigation, we are committed to finding out why these deaths are happening and where Congress can take action to not only prevent these deaths, but also reverse this trend.”

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Variation in care

Obstetric risk is too expensive

National-level data are often nonexistent

Accountability for preventable maternal death and harm

Overburdening or a complete absence of obstetric providers

Disparities, racial, income, age, location - leading indicators

Resource-poor, hospitals, states and patients

Free, uninhibited sharing of information

Necessary knowledge and preparation for safe practice

Evolution, Culture, and the Obstetrical Dilemma
What is the Answer?
Principles of a Highly Reliable Organization’s Mindful Infrastructure

Processes

Preoccupation with Failure

Reluctance to Simplify

Sensitivity to Operations

Commitment to Resilience

Deference to Expertise

Mindfulness

Capability to Discover and Manage Unexpected Events

Reliability

Processes

Preoccupation with Failure

Reluctance to Simplify

Sensitivity to Operations

Commitment to Resilience

Deference to Expertise

Mindfulness

Capability to Discover and Manage Unexpected Events

Reliability
High Reliability

Hospitals?
“How do we implement sustainable change?”
Safety culture is the sum of what an organization **is** and **does** in the pursuit of safety.

The product of **individual** and **group** beliefs, values, attitudes, perceptions, competencies, and patterns of behavior that determine the organization’s **commitment** to quality and patient safety.

“Collective Mindfulness”
Organizational Level

- Guidelines
- Checklists
- Protocols
- Policies
- Orders

Culture Level

90%

10%
## Quality Improvement

<table>
<thead>
<tr>
<th>Quality Assurance</th>
<th>Quality Improvement</th>
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<tbody>
<tr>
<td>Individual focused</td>
<td>Systems focused</td>
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<tr>
<td>Perfection myth</td>
<td>Fallibility recognized</td>
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<tr>
<td>Solo practitioners</td>
<td>Teamwork</td>
</tr>
<tr>
<td>Peer review ignored</td>
<td>Peer review valued</td>
</tr>
<tr>
<td>Errors punished</td>
<td>Errors seen as opportunities to learn</td>
</tr>
</tbody>
</table>

### Quality Improvement’s key principles:
1. QI work as systems and processes
2. Focus on patients
3. Focus on being part of the team
4. Focus on use of the data
QI Methodologies and Tools: Framework for Change

IHI Model for Improvement

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

Lean Principles

1. Identify Customers and Specify Value
2. Identify and Map the Value Stream
3. Create Flow by Eliminating Waste
4. Respond to Customer Pull
5. Pursue Perfection

Six Sigma

Lean and IHI’s Approach to QI 2016
The Team Approach

- Form the Team
- Set Aims
- Establish Measures
- Test Change
- Implement Change
- Spread Change
- Sustain Change
The Importance of Leadership Support
Collective Mindfulness

“Everyone who works in the organization, both individually and together, is acutely aware that even small failures in safety protocols or processes can lead to catastrophic adverse outcomes.”
**Setting the “AIM”: Develop an Action Plan**

**Form the Team**
- Hemorrhage cart with supplies, checklist, and instruction cards for intrauterine balloons and compressors
- Immediate access to hemorrhage medications (kit or equivalent)
- Establish a response team - who to call when help is needed (blood bank, advanced gynecologic surgery, other support and tertiary services)
- Establish a formal and emergency run-time transfusion protocol (type O negative, cross-matched)
- Protocols on protocols, unit-based drills (with post-drill debriefs)

**Set Aims**
- Readiness
  - Obstetric Hemorrhage

**Establish Measures**
- Recognize & Prevention
  - Every patient
    - Assessment of hemorrhage risk (perinatal, on admission, and at other appropriate times)
    - Measurement of cumulative blood loss (formal, as quantitative as possible)
  - Active management of the 3rd stage of labor (department-wide protocol)
- Response
  - Every hemorrhage
    - Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists
    - Support program for patients, families, and staff for all significant hemorrhages
- Reporting/Systems Learning
  - Every unit
    - Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
    - Multidisciplinary review of various hemorrhage for systems issues
    - Monitor outcomes and process metrics in perinatal quality improvement (QI) committee

**Test Change**
- Establish a formal and emergency run-time transfusion protocol (type O negative, cross-matched)
- Protocols on protocols, unit-based drills (with post-drill debriefs)

**Implement Change**
- Spread Change
- Sustain Change

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**Organizational View:**
- **Project Title:** Obstetric Hemorrhage Initiative
- **Start Date:** April 1, 2019
- **End Date:** March 31, 2020

**Table:**

<table>
<thead>
<tr>
<th>Week Breakdown</th>
<th>Activities/Tasks</th>
<th>Start Date</th>
<th>Completion Date</th>
<th>Responsible Leader</th>
<th>Resource Needs</th>
<th>Status</th>
<th>Notes &amp; Assumptions</th>
</tr>
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<tr>
<td>1</td>
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<td>3</td>
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**Footnotes:**
- Obstetric Hemorrhage Initiative (OHI) is a multi-disciplinary approach to improving the care of women with obstetric hemorrhage. It aims to reduce maternal mortality and morbidity associated with obstetric hemorrhage by implementing evidence-based practices, developing local protocols, and enhancing communication and collaboration among healthcare providers. The initiative emphasizes the importance of early recognition, timely intervention, and multidisciplinary teamwork in improving outcomes for women experiencing obstetric hemorrhage.

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Setting the “AIM”: Assessment of Current State

1. Assess all perinatal service areas
2. Interview leadership, physicians, nursing and supportive staff
3. Review of clinical processes, procedures, orders
4. Team Culture of Safety
Setting the “AIM”: SMART Goals

Reducing Obstetrical Hemorrhage

**SPECIFIC**
- Precisely define where you want to end up

**MEASURABLE**
- Must have specific criteria in order to measure progress towards goal

**ATTAINABLE**
- Goals should be challenging but not unrealistic

**RELEVANT**
- In-line with current efforts and needs of the team and the organization

**TIME-BOUND**
- Has clearly defined timeframe, including start date and target end date

SPECIFIC:
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TIME-BOUND:
- Has clearly defined timeframe, including start date and target end date
Defining and Tracking Quality Measures

- Tracking of progress and *re-adjust* the plan
- Analyze data and present results to clinical teams
- Review steps and when necessary, revise implemented tactics to ensure sustainable results
Types of Quality Measures

1. **Structure**: The characteristics of the setting where the care is provided
2. **Process**: What the organization does
3. **Outcome**: The change in the patient’s health status as a result of the care received
4. **Balancing**: Ensures that if changes are made to one part of the health care system, it doesn’t cause problems for another part of the system
Testing Change: PDSA Cycles

Form the Team → Set Aims → Establish Measures → Test Change → Implement Change → Spread Change → Sustain Change

ACT
Implement the Best Solution

PLAN
Identify Your Problems

CHECK
Study Results

DO
Test Potential Solutions
Why Test Change Prior to Implementation?

✓ Involves less time, money, and risk
✓ A powerful tool for learning; from both ideas that work and those that don’t
✓ Less disruptive for patients and staff
✓ Less resistance to change
Implementing Change: Putting Practices into Operation

Form the Team  Set Aims  Establish Measures  Test Change  Implement Change  Spread Change  Sustain Change

MAKE

things Happen
The greatest impact on a major change effort’s outcome comes from ownership of and commitment to change.

% of respondents,\textsuperscript{1} \( n = 2,079 \)

<table>
<thead>
<tr>
<th>Factors most responsible for change outcomes, past 5 years</th>
<th>Successful change efforts</th>
<th>Unsuccessful change efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear, organization-wide ownership of and commitment to change across all levels of organization</td>
<td>67</td>
<td>65</td>
</tr>
<tr>
<td>Ability to focus organization on prioritized set of changes</td>
<td>53</td>
<td>44</td>
</tr>
<tr>
<td>Sufficient resources and capabilities to execute changes</td>
<td>48</td>
<td>46</td>
</tr>
<tr>
<td>Clear accountability for specific actions during implementation</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td>Continuous improvements during implementation and rapid action to devise alternate plans, if needed</td>
<td>39</td>
<td>29</td>
</tr>
<tr>
<td>Planning from day 1 for long-term sustainability of changes</td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>Effective program management and use of standard change processes</td>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>

\textsuperscript{1}Respondents who answered “don’t know” are not shown.

McKinsey&Company
1. **Create a Sense of Urgency** - Identify the ‘why’ for change, and be prepared to speak to it

2. **Build a Guiding Coalition** - Collect representative leadership to guide the change

3. **Develop a strategic vision** and plan initiatives

4. **Enlist a Volunteer Army** - Gather staff who can put the plan into action

5. **Remove Barriers** or Obstacles to Change

6. **Generate Short Term Wins** - Begin change efforts and track progress

7. **Sustain Acceleration** - Ensure change is successful and sustainable

8. **Institute Change** - Regularly to review and monitor successes, identify and address new challenges, and communicate progress transparently
Communication Strategies

A - Awareness
Build awareness around the change

D - Desire
Create desire to engage and participate in the change

K - Knowledge
Develop knowledge about how to change

A - Ability
Realize or implement the change at the required performance level

R - Re-enforcement
Ensure the change sticks
Discussions cannot begin with talk of contracts and compensation but must focus instead on what is at stake for patients

1. **Discover a common purpose.**
2. Adopt an engaging style and talk about rewards
3. Reframe values and beliefs to turn physicians into partners, not customers
4. Segment the engagement plan and provide education.
5. Use “engaging” improvement methods by using evidence and data
6. Provide backup all the way to the board
Shared Knowledge

- Provide initial team communications about changes
- Develop collaborative training programs
- Prepare informational and resource documents
- Assess team readiness before the change
- Analyze impact
- Establish an ongoing training structure
Team Training

- Focus on communication and teamwork skills
- Optimize team safety, efficiency and effectiveness
- Common Labor and Delivery scenarios

In-situ Simulation

- Test of Change
- Common emergency
- Videotaped with constructive debriefings
- Knowledge sharing and analyzing team performance
Challenges and Barriers

- CHALLENGES AHEAD
- LEARNING LEARNING LEARNING
- Best Practice
- Obstacles
- Innovation
- PLAN A B
- Easy Way → Hard Way
- Progress
- Priorities
IHI Spreading Changes

Diffusion Key Attributes

- **Clear** advantage compared to current ways
- **Compatibility** with current systems and values
- **Simplicity** of change and its implementation
- **Ease of testing** before making a full commitment
- **Observability** of the change and its impact
Sustainability: Path to Improvement

1. **Form the Team**
2. **Set Aims**
3. **Establish Measures**
4. **Test Change**
5. **Implement Change**
6. **Spread Change**
7. **Sustain Change**

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- **Assess Current State vs. Continuum of Care Pathways**
- **Identify gaps and facilitate practitioner-led redesign to close gaps**
- **Design and implement scorecards to ensure data-driven decision making**
- **Leverage small test of change (pilots) to validate the effect and feasibility**
- **Spread change to all pertinent areas across the care continuum**
- **Establish an infrastructure to ensure sustainability**

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Using prioritized analytics

Steering council oversight throughout

**REPEAT**
“Without continual growth and progress, such words as improvement, achievement, and success have no meaning.”
Council on Patient Safety Resources

Quality Improvement Toolkit

Implementing Quality Improvement Projects Toolkit

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Questions

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References and Resources

Kotter’s 8 step Model of Change – Management Study Guide
Lean Enterprise Institute
AHRQ High Reliability
AHRQ Toolkit for Improving Perinatal Safety
TJC High-Reliability Health Care: Getting There from Here
IHI uses the Model for Improvement
MindTools: Management Training and Leadership Training, Online
Council on Patient Safety in Women’s Healthcare Quality Improvement Toolkit
IHI Prevent Obstetrical Adverse Events
Applying a Science-Based Method to Improve Perinatal Care: The Institute for Healthcare Improvement Perinatal Improvement Community
Making Sense of Implementation Theories, Models and Frameworks
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National Network of Perinatal Quality Collaboratives: https://www.cdc.gov/reproductivehealth/maternalinfanthealth/nnpqc.htm