Quality Improvement Work in an Acute Care Setting

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I do not have any financial arrangements or affiliations with a commercial entity.
Intelligence alone is not enough for success; it must be joined with continuous work. Like the tortoise, resolve to persevere.
Objectives

• Describe the Components of a Quality Improvement (QI) Project
• Explain the Process for Initiating a QI Project
• Describe the Purpose of Each QI Tool Reviewed
• Summarize Our Shared Challenges
• Reflect on Clinical Pearls
Components of a QI Project

- Project Title
- Identify Team Members
- What does the literature say about the problem?
- Why should we improve this process in our unit?
- What is the setting? Who is your target population?
- Smart Aim
- Driver Diagram
- PDSA Cycles
  - Tests of change
- Measures
  - Outcome, Process, Balancing
- Data Presentation
  - Data Tables, Run Charts, Control Charts, etc.
- References
First Hurdle

- Build the Team
- Schedule the Kick-Off Meeting
- Name the Initiative
  - BE CLEAR.
    - QI Team: Managing Obstetric Hemorrhage & Mitigating Risk for Obstetric Hemorrhage
    - QI Team: Managing Maternal Hypertension
- Great First Meeting!
QI Project: Obstetric Hemorrhage

TEAM

- CHAMPIONS
  - Perinatal Nurse Educator & Quality Specialist
- CLINICAL LEAD
  - Obstetrician
- SENIOR LEADERSHIP SUPPORT
  - WCS AVP & Division Director
- STAFF NURSES
  - Team Leader and 1 Staff Nurse
- TECHNICAL EXPERTS
  - Data Coordinator
    Someone who works with the EMR & Can Build Reports
  - Quality Nurse Specialist
  - Nurse Manager
  - Division Educator
## QUALITY IMPROVEMENT PROJECT
### TEAM MEMBERS

<table>
<thead>
<tr>
<th>ROLE</th>
<th>TEAM MEMBER NAME</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Champion/Driver</td>
<td>Dana Snow, W&amp;C Services Data Coordinator</td>
<td>X22887 <a href="mailto:jlawson@phoebehealth.com">jlawson@phoebehealth.com</a></td>
</tr>
<tr>
<td>Clinical Leader</td>
<td>Jenny Lawson, W&amp;C Services Quality Nurse Specialist</td>
<td></td>
</tr>
<tr>
<td>CNM/NP/NNP</td>
<td>Margaret Funk, NICU Team Leader &amp; Quality Coordinator</td>
<td></td>
</tr>
<tr>
<td>Staff Nurses/RT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Experts</td>
<td></td>
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<tr>
<td>Unit Manager</td>
<td></td>
<td></td>
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<tr>
<td>Senior Leader</td>
<td></td>
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<tr>
<td>Other Team Members (ad hoc)</td>
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</tbody>
</table>
Second Hurdle

FOCUS

Does a Bundle Already Exist?

YES

- Priority Matrix
- Gap Analysis
- Fishbone Diagram, if needed

NO

- Literature Review
- Priority Matrix of Best Practices
- Gap Analysis
- Fishbone Diagram, if Needed
- Driver Diagram
- SMART Aim
- Baseline Data
<table>
<thead>
<tr>
<th>BEST PRACTICE</th>
<th>BEST PRACTICE STRATEGIES</th>
<th>HOW DOES YOUR PRACTICE DIFFER FROM BEST PRACTICE?</th>
<th>BARRIERS TO BEST PRACTICE IMPLEMENTATION</th>
<th>WILL IMPLEMENT PRACTICE, YES OR NO?</th>
<th>RATIONALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment of hemorrhage risk (prenatal, on admission, and at other appropriate times)</td>
<td>Standardize Documentation</td>
<td>Documentation is not being completed consistently</td>
<td>Partner with Informatics to Further Optimize EMR Nurse Clinical Nurse Specialist Position is Vacant</td>
<td>Yes</td>
<td>Standardization of documentation will result in ability to conduct safety huddles, and will also support data abstraction</td>
</tr>
<tr>
<td>Priority Matrix Score: 19</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Measurement of cumulative blood loss (formal, as quantitative as possible)</td>
<td>Standardize Process</td>
<td>Staff turnover has resulted in fewer nurses understanding how to quantify blood loss</td>
<td>Standardize QBL Dry Weight Resource Provide scales in each delivery area Nurse Clinical Nurse Specialist Position is Vacant Provide QBL process education/training to nursing, certified surgical technicians, and providers</td>
<td>Yes</td>
<td>Nurses and surgical techs cannot be held accountable for a skill they have not been trained to perform.</td>
</tr>
<tr>
<td>Priority Matrix Score: 18</td>
<td></td>
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</tr>
<tr>
<td>Unit education on protocols, unit-based drills (with post-drill debriefs)</td>
<td>Schedule Quarterly Drills</td>
<td>We do not have quarterly drills at this time.</td>
<td>Nurses and CSTs have not been trained on process of blood loss quantification.</td>
<td>Yes</td>
<td>Drills support seamless performance of low incident events. Debriefs are evidence based practices that promote patient safety</td>
</tr>
<tr>
<td>FACTOR or POTENTIALLY BETTER PRACTICE</td>
<td>IMPACT OR IMPORTANCE</td>
<td>WITHIN SPAN OF CONTROL</td>
<td>EASE TO IMPLEMENT</td>
<td>COST EFFECTIVENESS</td>
<td></td>
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<tr>
<td>---------------------------------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Assessment of hemorrhage risk (prenatal, on admission, and at other appropriate times)</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Measurement of cumulative blood loss (formal, as quantitative as possible)</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Unit education on protocols, unit-based drills (with post-drill debriefs)</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Monitor outcomes and process metrics in perinatal quality improvement (QI)</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Multidisciplinary review of serious hemorrhages for systems issues</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Support program for patients, families, and staff for all significant hemorrhages</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
MATERNAL HEMORRHAGE PROJECT DRIVER DIAGRAM:
RISK ASSESSMENT

SMART AIMS

≥ 90% of women will have a hemorrhage risk assessment, with risk level assigned, performed on admission and after delivery.

Team Hemorrhage Risk huddles will take place ≥ 90% of shifts.

PRIMARY DRIVERS

Risk Assessment Bundle

Work with Informatics & WCS Data Coordinator to Build Standardized Documentation into EMR

SECONDARY DRIVERS

Educate 100% of Nurses Regarding Purpose of Risk Assessment, Location of New Documentation in EMR, and Safety Huddles

Admission Hemorrhage Risk Assessment Completed by Nurse

Post-Delivery Hemorrhage Risk Assessment Completed by Nurse

TERTIARY DRIVERS

Share Documentation Compliance with L&D Team at Monthly Strategy Huddles

Work with Informatics Team to Build Admission Risk Assessment Score into EMR Patient List

Develop Standardized Safety Huddle Checklist

Monitor Documentation Compliance Rates and Huddle Compliance Rates via automated reports. Data will be added to Monthly Dashboard

Measure for Risk Assessment Compliance

(Numerator)
Number of women who had a hemorrhage risk assessment with risk level assigned, performed at least once between admission and birth

(Denominator)
Number of women admitted for child birth excluding ectopics & miscarriages

Measure for Hemorrhage Safety Huddle Compliance

(Numerator)
Number of hemorrhage safety huddles completed

(Denominator)
Number of shifts per month

Monitor Huddle Compliance Rate & Share Compliance Rates with Staff
Cause and Effect Diagram: Process-Type

1. Physician orders test
2. Secretary calls dispatcher
3. Dispatcher sends to phlebotomist
4. Long test results time

Conditions:
- Wrong test
- No forms
- Incomplete specimen
- Order in wrong place
- Dispatcher too busy
- Phlebotomist unavailable
- Phlebotomist sent to wrong patient
- Pager malfunction
- Gave wrong info
- Handwriting unreadable
- Phone line busy
Challenges We All Face

• Focus
• Engagement
• Time
• Resources
SMART Aim Fill-In-The-Blank

We will: Improve / Increase / Decrease / Other Indication of Positive Change (be specific)

the: Percentage Rate / Number or Amount / Quality Defined As (be specific)

of: Clinical Problem / Family-Centered Issue / Team Issue / Other Issue (be specific)

in: Patient Population / Family Population / Staff Scenario / Other (be specific)

from: Baseline Percentage Rate / Number or Amount / Quality Defined As (be specific)

to: Target Value Percentage or Rate / Number or Amount / Quality Defined As (be specific)

by: Target dates for achieving overall Project/SMART Aim and milestone interim achievements toward the Project Aim

***To Be Determined (TBD) may be your answer if you have not determined baseline data, target value, or haven’t determined a target date.
## Sustainability Worksheet

### Leadership

<table>
<thead>
<tr>
<th>Question</th>
<th>1 - Never</th>
<th>2 - Sometimes</th>
<th>3 - Often</th>
<th>4 - Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>QI projects are not the “flavor of the month”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>There is clarity on ongoing performance expectations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>There is regular measuring and monitoring</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Written policies are updated to reflect changes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Written procedures are updated to reflect changes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Job descriptions are changed to reflect role changes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Human Factors Considerations

<table>
<thead>
<tr>
<th>Question</th>
<th>1 - Never</th>
<th>2 - Sometimes</th>
<th>3 - Often</th>
<th>4 - Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue and psychological conditions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Environmental conditions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Task design</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Competing demands</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Process Design Considerations

<table>
<thead>
<tr>
<th>Question</th>
<th>1 - Never</th>
<th>2 - Sometimes</th>
<th>3 - Often</th>
<th>4 - Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>The right way to do things is the easy way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Key processes are standardized</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>All staff have the right training to fulfill the tasks in key processes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>There are contingency plans in place to support key processes in case of supply component interruptions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Your Scores for Each Section**

High Scores = High Degree of Likelihood that Change is Sustainable
Quality Improvement Pearls

- It takes two to three years for a project to mature, so celebrate ALL successes.
- You cannot measure a process that does not exist.
- Don’t try to do too much, too fast.
- The Team Champion can make-or-break a project.
- Show up.
Quality Improvement Pearls

- Cancel as few meetings as possible.
- TBD is your best friend in the beginning.
- Enlist staff in data collection. Connect audits to performance, if possible.
- Streamline audits into a Universal Audit tool
- Display your work
Questions?