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Florida Perinatal Quality Collaborative

AT THE LAWTON AND RHEA CHILES CENTER FOR HEALTHY MOTHERS AND BABIES

FPQC

Partnering to Improve Health Care Quality for Mothers and Babies

GOLDEN HOUR PART I: DELIVERY ROOM MANAGEMENT

The holidays are upon us and so I'm sending out a combined November-December newsletter. We hope you and your loved ones have a wonderful holiday season!

Thank you for attending the October TeamSTEPPS webinar! We had 59 attendees from around the state. Dr. Haubner's webinar provided an overview of team structure, critical aspects of teamwork, and communication strategies with examples of applications to our Golden Hour project. Thank you Dr. Haubner!

The recorded webinar, presentations and training videos are now available on the Golden Hour Part I page of the FPQC website. Please click on the dropdown menu for specific items of interest at http://health.usf.edu/publichealth/chiles/fpqc/golden1.htm.

Some quick updates:

- Baseline reports are available! Maya will be contacting individual sites to discuss these reports via a conference call.
- The FPQC project mini-site is being developed. We are working on obtaining password protection before providing sites with access.
- Please use the listserv (goldenhourprojectpart1@health.usf.edu) to communicate questions, concerns, suggestions, and to share innovative ideas If you would like to be added to the listserv, please contact mbalakri@health.usf.edu.

Inside This Issue:

- **Project & Meeting Updates**
- **October Project Goals**
- **Quality Focus: Process Improvement Methodology**

Please feel free to contact Maya Balakrishnan at mbalakri@health.usf.edu with any questions, concerns, or suggestions. Together we can make a difference in the quality of care our babies receive!

The FPQC Leadership Team

TeamSTEPPS Training Webinar

If you are interested in more intensive on-site TeamSTEPPS simulation training, please contact Dr. Laura Haubner (lhaubner@health.usf.edu). Dr. Haubner shared the following TeamSTEPPS resources:

- http://teamstepps.ahrq.gov/
- http://www.amednews.com/article/20101004/profession/310049933/6/
- Gawunde article in The New Yorker: "Cowboys and Pit Crews"

"Getting good players is easy. Getting them to play together is the hard part."
- Casey Stengel

November-December 2013 Project Goals

Review your site's baseline performance by reviewing your data report with the core team as well as other team members.

Collect your site's prospective data using the prospective data collection sheet.

- Collect data on all babies admitted to your NICU with a gestational age ≤30 6/7 wks ***OR*** anticipated birth weight ≤1500 g. **NOTE:** Data may be collected on infants with weights up to 1800 g **IF** the infant's gestational age is ≤30 6/7 wks, and data may be collected on infants with gestational ages up to 36 0/7 **IF** the infant's birth weight is ≤1500 g.
- The URL for the online prospective data collection tool will go live before end of this week. Once it is live, Maya will email the URL to each participating pilot site.
- Our goal is to have report sheets available to sites within 14 days of data submission.
- Maya will meet individually with sites to discuss their data reports. Data can be submitted monthly by the 15th of the month to receive a report by the 30th of the same month (anticipated 14 day turnaround time).
- *For newly enrolled sites, collect baseline data on infants with a gestational age ≤30 6/7 wks* ***OR*** *birth weight ≤1500 g using the baseline data collection sheet for the 2 consecutive months prior to your enrollment in this project. *See note from first bullet above.*

Share your site's process map, guideline, checklists, or data collection sheets with other pilot hospital sites. Please submit any document you are willing to share on the FPQC project mini-site (email: mbalakri@health.usf.edu). This website (http://health.usf.edu/publichealth/chilescenter/fpqc/golden1.htm) will be password protected, allowing only participating pilot hospital sites access. As your site updates these documents, please email current copies to Maya and she will replace older versions. Maya will email instructions on receiving your site's password later this month when website access is available. Thank you for helping us to learn from each other through collaboration!

Review the project's data collection plan and definitions (see Measurement Grid email attachments) to ensure your site is using the same definitions and to better understand our goals.

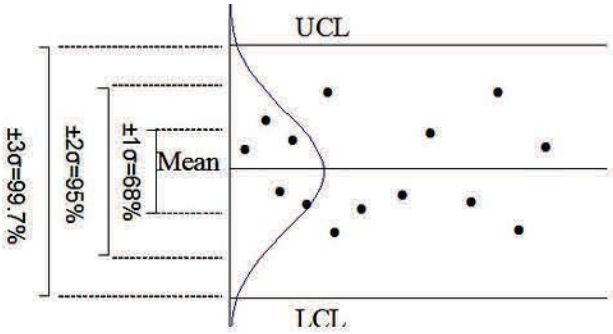
Update your project charter to ensure you have timely goals for each PDSA cycle and align your cycles with the aim statement. By keeping the overall project aims in mind you can keep your efforts within the project's intended scope.

Where we are		***Example of where we are***
Define	Identify 1 problem at a time. Collect baseline data to understand that problem.	*Inadequate thermoregulation on NICU admission. Baseline data shows this occurs most often in <1000 g.*
Measure	Understand the *current* state of the problem (e.g. process map). Record observations of any contributing factors.	*Process map done. Contributing factor includes: radiant warmer not turned on prior to delivery, chemical warming mattress not readily available, polyurethane wrap and hat not placed on infant until >2 minutes of life).*
Analyze	Determine the problem's root cause (e.g. 5 Why's)	*Inadequate preparation and no team briefing prior to anticipated delivery.*
Where we want to be		***Example of where we want to be***
Improve	Know your *ideal* state.	*Ideal state: Infants <1000 g have a NICU admission temperature*
	PLAN: Identify a plan to reach your *ideal* state.	*Pre-brief prior to anticipated delivery; have identified role responsible for DR preparation (i.e. turn on radiant warmer, chemical warming mattress in DR) and role to apply polyurethane wrap/hat.*
	DO: Implement that plan and collect data.	*Educate providers and collected data*
Control	STUDY: Using data analysis, compare your *current state with your ideal state.*	*Data analysis shows improved thermoregulation in infants <1000 g but target improvement not achieved.*
	ACT: Test and monitor your plan's effectiveness. If the new current state is not ideal, begin the process again.	*Current state is not ideal. Address ambient room temperature in the DR.*

Adapted from Lean Six Sigma course materials.

Quality Improvement Focus: Control Charts

WHAT are Control charts?



- Chart evaluating variable (i.e. continuous) data where activity over time rather than one moment in time (i.e. like a camcorder vs. a camera) can be analyzed.
- It is a way to see where successive data points fall on the bell curve over time (IHI).

WHY are Control charts helpful evaluating quality improvement projects?

- It can provide the following information about a process: process performance, spread of data, sources of variation, types of variation (special cause vs. common cause), and provides a method to monitor and control performance over time.

HOW is information from a Control chart used?

- I encourage you to view this excellent IHI lecture on Control charts can be found at https://www.youtube.com/watch?v=957pWemEfMA (warning: while there is decreased audio after the 37- 45 minute mark, the slides share valuable information).
- Document what the run chart tells you and act on this information.

1. Describe the data. Understand the general rules for interpreting Control charts (see below).
2. Identify the sources or probable causes of variation. (i.e. special cause vs. common cause).
3. Recommend corrective action.
   - No problems: no action required, promote new method of working.
   - Identified problems:

   Investigative action (i.e. do a root cause analysis)

   Corrective action (i.e. explain how problem was fixed)

   Preventive action (i.e. explain how future occurrences are prevented)

- The goal at the end of data analysis is to create a micro-problem statement and sub-process map.

WHAT are the general rules to identify special cause variation in Control charts?

1. Extreme: One point is more than 3 standard deviations from the mean.
2. Bias: ≥9 points in a row are on the same side of the mean.
3. Trend: ≥6 points in a row that are continually increasing (or decreasing).
4. Oscillation: ≥14 points in a row alternate in direction (increasing then decreasing; does not need to be above then below the mean).
5. On edge: 2 (or 3) out of 3 points in a row are ≥2 std. deviations from the mean in the same direction.
6. Tendency: 4 (or 5) out of 5 points in a row are ≥1 std. deviation from the mean in the same direction.
7. Blissful ignorance: 15 points in a row are all within 1 std. deviation of the mean on either side of the mean.
8. No middle ground: 8 points in a row exist with none within 1 std. deviation of the mean and the points are in both directions from the mean.

Additional Resources for Control Charts on Next Page

Quality Improvement Focus: Control Charts Resources

WHERE can more information on Control charts be found?

- Sign up for the free IHI webinar in January 2014: http://www.ihi.org/offerings/VirtualPrograms/OnDemand/Run_ControlCharts/Pages/default.aspx
- https://www.youtube.com/watch?v=uPTdz8mkxi8
- Root cause analysis: 5 whys: https://www.youtube.com/watch?v=FXjLeFQFPAQ
- Benneyan JC, Lloyd RC, Plsek PE. Statistical process control as a tool for research and healthcare improvement. Quality and Safety in Health Care, 2003; 12: 458-464.
- Taylor M, McNicholas C, Nicolay C, et al. Systematic review of the application of the plan-do-study-act method to improve quality in healthcare BMJ Quality and Safety, September 11, 2013.
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our practice is our passion.

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