Toward a culture of safety: Optimizing and standardizing intrapartum fetal assessment, interpretation and management through an interprofessional approach

Background
- Minimum fetal heart rate (FHR) threshold alerting the obstetrical team to evaluate fetal wellbeing
- Standardization of intrapartum fetal heart rate (FHR) monitoring and nomenclature have been published and endorsed
- Wide variances exist in intrapartum monitoring and interpretation of FHR tracings
- Babies delivered with fetal acidosis over 6,000 births have adverse outcomes that could have been prevented, worst of those during labor
- Specific, unstructured communication, content, assessment of that information and management of those findings are frequently cited as sources of error
- Lack of interprofessional education specific to FHR assessment,

Specifically, suboptimal communication, variances in assessment of fetal status and management of these tracings are frequently cited as sources of error

Wide variances exist in both intraprofessional and extraprofessional standardization of intrapartum fetal heart rate (FHR) nomenclature and interpretation.

Intrapartum fetal heart rate monitoring is the most common procedure related to the National Institute of Child Health and Human Development Workshop Report on Electronic Fetal Monitoring (NICHD)

Project Aims
1. Develop healthcare professionals’ perceptions of their knowledge related to the National Institute of Child Health and Human Development Workshop Report on Electronic Fetal Monitoring (NICHD) definitions
2. Evaluate the impact of interprofessional educational interventions on knowledge and skill levels
3. Evaluate impact of interventions on unexpected NICU admits
4. Integrate pre- and post-intervention employee engagement survey as an tool to patient safety

Project Activities
1. Established stakeholder teams
2. Pre- and post-testing design for the intervention to measure professional group, RNs and anesthesia engagement
3. Developed a comprehensive learning tool used to ascertain knowledge of NICHD definitions
4. Planned interprofessional educational interventions
5. Completed 6 week interprofessional sessions
6. Single initiative for interprofessional education
7. Project领导 deployment - March 2016
8. IIR-concept project
9. Leadership involvement on project journey

Project Outcomes
- Per test impact category: Perinatal clinical outcomes 25%
- Project completion rate: 100%

Purpose
The purpose of this project is to evaluate the impact of an interprofessional educational intervention on perceptions of knowledge and skills, and safety outcomes specific to intrapartum fetal assessment.

Project Activities
1.的对象
- "Components" = NICHD definition of the specific components of what needs to be included in an initial and ongoing fetal assessment
- "Definitions" = NICHD fetal monitoring definitions
- "Algorithm" = NICHD definition of the specific factors related to the National Institute of Child Health and Human Development Workshop Report on Electronic Fetal Monitoring (NICHD)

Background
- The presence of FHR tracings and "definitions" components are frequently cited as sources of error
- Residents were significantly impacted in the "definitions, factors" domains
- RNs demonstrated a significant impact in all domains
- Intervention significantly impacted all domains (p is ≥ 0.05)

Statistical analysis
- "Definitions" significantly impacted all domains (p is < 0.05)
- "Factors" demonstrated a significant impact in all domains
- "Algorithm" demonstrated significant pre/post impact in the "definitions" and "components" domains
- Residents were significantly impacted in the "definitions," "components," and "algorithm" domains

Aim 2. Knowledge scores pre/post
- Meets the threshold of knowledge domain that indicates the level of knowledge and understanding of the specific topic.

Analytic tools: scale 

Aim 3. Unexpected NICU admits
- Pre-intervention understanding of NICHD fetal monitoring definitions

Analytic tools: scale

Aim 4. Having employee engagement score
- I get the training I need to do my job
- I get the tools and resources to do my job
- Patient safety is a priority
- It is safe for me to practice as I was trained
- I can speak up when I see something wrong

Analytic tools: scale

Conclusions
The interprofessional intervention demonstrated a statistically significant impact on knowledge scores, evidence and opinions in an interprofessional team assessment, dramatically evaluated.

Next Steps
- "Next Steps" at 2016
- "Last call with Indiana Perinatal Quality Improvement Collaboration to implement interprofessional FHR education.

Leadership journey
- "Need for change detected by the leader"
- "Understanding and commitment by the leader"
- "Strategy and plan for intervention"