

FINAL WORK PLAN – Western Michigan University School of Medicine

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| Overall Goal for NI III/Elevator Speech | Our team's goal was to establish QI curriculum for GME. We also desired to formulate a plan for informing patients of lab results using our new EMR, with the PDSA cycle. |
| Needs Statement | This goal was important because we have had no formal QI curriculum. |
| Vision Statement | In March of 2013, we will see the outcomes of our success by developing a mechanism to notify patients of normal Pap results and initiate changes in QI curriculum by adding required IHI Open School modules to our GME. |
| Measures | We determined the success of meeting our goal by measuring the use of the automated system of patient notification. Our pre- and postintervention measures were the number of results sent via the new automated system. |
| Success Factors | The most successful component of our work was the initiation of our initial lab reporting mechanism. We were inspired by inadequacies within our EMR system. |
| Barriers | The largest barrier we encountered was an overreliance upon a small number of participants in our NI team. This barrier led to our lack of realization of our primary goal. |
| Lessons Learned What is the single most important piece of advice for another team embarking on a similar initiative? | Have multiple team members coordinating your efforts. |

York Hospital / WellSpan Health, York, PA Improving Obstetrical Rapid Response Teams (Code Neon): Multidisciplinary Simulation Training Using the Plan-Do-Study-Act Cycle

**Karen Smith, BSN, RNC-OB; Jennifer Leash, BSN, RNC-OB; Tracy Cadawas, BSN, RNC-MNN;
Jennifer Aguilar, MSN, RNC-NIC; Eileen Garavente, MD; Duane Patterson, PhD;
Meredith McMullen, MD; Denita Boschulte, MD**

Background: Citing a rise in maternal mortality and morbidity, the American College of Obstetricians and Gynecologists (ACOG) and The Joint Commission (TJC) called for creation of obstetrical rapid response teams (RRT). Our objective was to create a multidisciplinary RRT via implementation of a mass page alert system; improve access to medication, equipment, and supplies; improve teamwork and communication during emergencies; improve staff satisfaction with emergency response; and identify the most common errors in OB emergencies.

Methods: The RRT commits to 4 half-day simulations annually. Each multidisciplinary training session includes a performance-improvement lecture for nurses and residents, a lecture in 1 emergency, small-group discussion using PDSA to consider trial changes for simulation, and group trial of PDSA changes during simulation. The in situ simulation is witnessed by the full team, videotaped, and added to the PDSA library. The team debriefs and creates an action plan; the PDSA changes are trialed clinically during real calls. Successful changes are implemented and reviewed at the next simulation.

Results: The team reduced the number of emergency response calls from 10 individual calls to one hospitalwide Code Neon Alert and reduced access to emergency medications from 12 steps to 2. A preintervention survey found that up to 30% of obstetrical providers perceived a deficit in teamwork and communication, and 40% perceived a deficit in access to equipment and supplies during emergencies. In a 2012 postsimulation survey, 98% of participants responded positively to a statement regarding the speed of staff emergency response, 75% responded positively regarding clear emergency communication, and 84% responded positively regarding the availability of emergency supplies and medications.

Conclusions: Multidisciplinary PDSA cycle training and simulation helped the RRT identify process and system barriers and encouraged team building and problem solving. PDSA simulation training empowers staff to implement clinical changes and improves patient care. Lack of obstetric EHRs impedes data collection needed for pre and post comparison.

FINAL WORK PLAN – York Hospital / WellSpan Health

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| Overall Goal for NI III/Elevator Speech | Our team’s goal was to use multidisciplinary simulation and live family modes to improve RRT teamwork and communication with the patient and family and to teach PI methods to residents and ancillary staff during simulations. |
| Needs Statement | This goal was important because teamwork and communication failures contribute to 70% of adverse obstetrical events, TJC and ACOG called for creating obstetrical RRTs, and staff has little formal training on how to function as a team and support patients/families during emergencies. |
| Vision Statement | In March 2013, we will see the outcomes of our success by incorporating quarterly multidisciplinary simulations as mandatory training for all nurses, residents, and ancillary staff that led to implementing the hospitalwide Code Neon Alert; providing CME and Act 13 safety credits for attending physicians who attend multidisciplinary simulations; and creating action plans based on PI analysis of simulation outcomes. |
| Measures | We determined the success of meeting our goal by measuring the improved rapid response time from 20 minutes to an average of 5 minutes; reducing access to emergency medications from 12 steps to 2; and creating a mass hospitalwide alert where previously none existed. In postsimulation surveys, 84% responded positively to “During OB emergencies, supplies and medications are readily available” compared to a 70% positive response rate presimulation. Our pre- and postintervention measures were number of phone calls made to receive help during an OB emergency; number of OB rapid response calls; number of steps to access emergency meds; time to respond to OB emergency; and employee satisfaction score pre- and postsimulations. |
| Success Factors | The most successful component of our work was improved access to emergency supplies and medications and improved camaraderie between physicians and nursing staff. We were inspired by the perspective of our patient and family actors of what it is like to live through a medical emergency and the number of steps our nurses go through to obtain meds and supplies during emergencies. |
| Barriers | The largest barrier we encountered was lack of attending involvement due to time restraints. We worked to overcome this by receiving approval for CME and Act 13 safety credit for participation by attendings. |
| Lessons Learned What is the single most important piece of advice for another team embarking on a similar initiative? | Create a multidisciplinary team for planning and provide incentives for attending involvement. |