

PURPOSE

• To improve outcomes and decrease adverse events in our Labor & Delivery Unit, including:



brachial plexus injury, ischemic cephalic encephalopathy, low Apgar scores, morbidity related to obstetrical hemorrhage, preeclampsia, anesthetic emergencies, and sepsis.

- Improve communication among the Nursing Staff and between Nurses and Doctors
- To expose the staff to low-frequency, high-risk events that require immediate action.

BACKGROUND

Our not-for profit hospital delivers between 7000-8000 babies each year. We saw a great opportunity to make an impact. We have a large number of staff in the L&D

Department:

- 120 Labor Nurses
- 115 Post Partum Nurses
- 31 OBGY Providers
- 18 Anesthesiologists



We saw multi-disciplinary training as the best approach since there is a major emphasis on communication and teamwork.

LABORING TO IMPROVE OUTCOMES: It Takes a Village!

METHODS

We adopted the Practical Obstetric Multi-Professional Training course and made it mandatory for all our Labor Nurses and Obstetricians.

It is an evidence-based program that originated in the U.K.

Each session is 8 hours in duration and consists of:

- **8** RNs
- **2** Obstetricians
- 1 Anesthesiologist

Didactic and in-situ simulation training are used in conjunction.

Participants engage in **10** scenarios including:

- Maternal arrest
- Sepsis
- High Spinal
- Shoulder dystocia
- Magnesium toxicity
- Eclampsia
- **Postpartum Hemorrhage**
- Uterine Inversion

The program is facilitated by our Maternal Fetal Director (Dr. M. Hellen Rodriguez), and 2 RNs.

INNOVATIVE INTERVENTION

- We alternate between a high-fidelity mannequin and a standardized patient
- Utilization of a "force-monitoring" newborn mannequin measures the amount of force applied during a shoulder dystocia delivery
- All participants rotate to the role of patient's family to appreciate that perspective
- All scenarios are video recorded
- Debriefing occurs immediately after and incorporates video playback
- Participants reflect on actions that were effective and areas that can be improved.
- As the class progresses, learners incorporate what they have learned and apply it in subsequent scenarios

RESULTS

- Data was collected prior to launching this program
- We will compare these findings with data collected at 1 year post initiation and 2 years post
- We expect to see a decrease in:
- 1) Brachial plexus injuries and Erb's Palsy
- Delays in transfer to the O.R in post-partum 2) hemorrhage (when appropriate)



DISCUSSION

- Based on post-simulation evaluations and debriefing sessions, staff feel more confident in dealing with maternal emergencies
- Because the simulations are in-situ we are able to continually assess our systems and environment.
- Our crash carts and delivery carts have been modified as a direct result.
- The hemorrhage cart was developed subsequent to the simulation training

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• We have collaborated with the Pharmacy department to streamline the process for accessing multiple medications during maternal emergencies.





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CONCLUSIONS

Feedback has been very positive.

We look forward to comparing the pre/post data.

Teamwork and communication remain our primary focus.

The assessment of the working environment has been an added bonus.

IN THEIR OWN WORDS

- en directly from the evaluation forms:
- Enjoyed hearing anesthesia perspective during debrief"
- 'Ultrafabulous!"
- Excellent!"
- 'Hands-on experience was great!"
- 'Rewarding!"
- 'We are a team, not a pyramid"
- Fantastic!"
- Communication is key"
- 'Brilliant! Learned so much. Great learning environment"

REFERENCES

- Winter, C., et al., 2015, PROMPT Trainer's Manual, Cambridge University Press
- Rodriguez, M.H., M.D., Dutton, J., R.N., MacKenzie, J., BSN., R.N.

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