

The *Emergencies in Clinical Obstetrics* (ECO) Course and Competency-Based Assessment Used in Preparing Wake Forest Baptist Medical Center for Readiness for an Expanded Labor and Delivery Service

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PROBLEM/NEEDS ASSESSMENT

- As Wake Forest Baptist Medical Center (Winston Salem), prepared for an expanded labor and delivery service, there was need for onboarding of nurses with varying levels of labor and delivery experience to staff the new Birth Center.
- The Center for Experiential and Applied Learning (CEAL) was approached to provide hands-on training through simulation exercises to prepare for day one readiness of the Birth Center.



PROGRAM OBJECTIVES

- To partner with The American College of Obstetricians and Gynecologists (ACOG) to identify a relevant adoptable curriculum
- To provide Emergencies in Clinical Obstetrics (ECO) course to train nurses management of obstetrical emergencies and TeamSTEPPS™ teamwork tactics

PROGRAM DESCRIPTION

ACOG ECO training, led by trained and certified facilitators including:

- Lectures on shoulder dystocia, breech birth, umbilical cord prolapse, and postpartum hemorrhage
- Review of teamwork and communication strategies as detailed in TeamSTEPPS™
- Simulation exercises, reinforcing skills through referencing checklists and role-play of all scenarios studied
- Pre- and Post-course competency testing

EVALUATION/ASSESSMENT

A paired t-test compared pre-post competency results for the pre go-live and post go-live assessment tools.

- GRAPH 1:** There was a statistically significant ($p < 0.05$) difference between pre-post test results for the original competency-based assessment (PRE=79.1 + 1.1; POST=89.2 + 1.0; n=38)
- GRAPH 2:** There was a statistically significant ($p < 0.05$) difference between pre-post test results for the modified competency-based assessment (PRE=74.25 + 3.7; POST=89.0 + 1.3; n=20).

There was no statistical difference between the post-test results between the two versions of the competency-based assessment (PRIOR TO GO-LIVE =89.2 + 1.0; AFTER GO-LIVE=89.0 + 1.3).



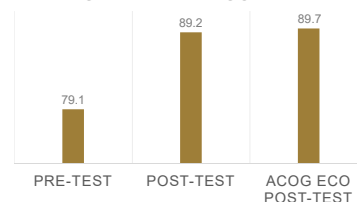
CONCLUSIONS

Day one readiness accomplished!

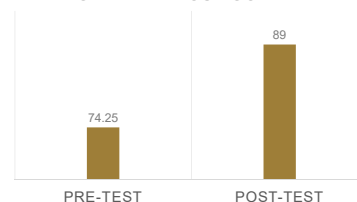
- Nurses increased their obstetrics emergency knowledge as indicated by increased post-test scores
- ALL nurses achieved a post-test score greater than 80%, meeting the competency-based assessment threshold
- ACOG ECO training has been well received and expanded to address a multidisciplinary approach to patient care
- Monthly simulation training occurs in the unit to reinforce best practices during obstetric emergencies
- Annual ACOG ECO course and competency assessment required for all labor and delivery team members, with CME credit given

COMPETENCY-BASED ASSESSMENT

GRAPH 1: PRE GO-LIVE



GRAPH 2: POST GO-LIVE



POST-TEST SCORES INCREASED BY 20% AFTER GO LIVE

Competency Based Post-Test Assessment					
	# of Events	# of Participants	Avg Score Pre-test	Avg Score Post-test	% increase
PRE GO-LIVE	3	42	79.11	89.26	13%
POST GO-LIVE	3	20	74.25	89.00	20%

Note: Post Go-Live, competency-based assessments were refined, adding five (5) questions from the assessment to the required ACOG ECO test to reduce participant testing burden.



For more information go to www.acog.org/eco [acog.org]