'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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CURRICULAR INNOVATIONS

Problem/Needs Assessment: Wake Forest Baptist Medical Center opened at Birth Center in 2019. To staff the new Birth Center, nurses with varying levels of labor and delivery skill were onboarded. The Center for Experiential and Applied Learning (CEAL) delivered hands-on simulation training to supplement nurse onboarding.

Program Objectives: The American College of Obstetricians and Gynecologists (ACOG) *Emergencies in Clinical Obstetrics* (ECO) course was identified as a relevant adoptable curriculum that would teach management of obstetrical emergencies.

Description of Program: The ACOG ECO training included lectures on shoulder dystocia, breech birth, umbilical cord prolapse, and postpartum hemorrhage, followed by a review of teamwork and communication strategies as trained in TeamSTEPPS™. In the simulated practice, participants referenced clinical checklists and role-played simulation scenarios in the CEAL as led by trained facilitators. Prior to Birth Center go-live, a competency-based assessment was administered to nurses prior to and following the course. After the Birth Center go-live, the competency-based assessment was refined adding five (5) questions from that assessment to the required ACOG ECO test to reduce participant testing burden.

Evaluation/Assessment: A paired t-test compared pre-post competency results for the pre go-live and post go-live assessment tools. 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) and the modified competency-based assessment (PRE=74.3 ± 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 and Lessons Learned: The experienced nurses entered the ACOG ECO training with some pre-existing knowledge surrounding obstetrical emergencies. After the training, nurses increased their obstetrical emergency knowledge as indicated by increased post-test scores. All nurses in the cohort received a score greater than 80 reaching the competency-based assessment threshold demonstrating day-one readiness for opening the Birth Center. The ACOG ECO training has been well-received both by nurses and other health care professionals in the organization who have rotated through the training.