The Impact of the Tennessee Initiative for Perinatal Quality Care Simulation Project

PROBLEM

The United States ranks 65th among industrialized nations in term of maternal death. The Joint Commission has responded by establishing guidelines to reduce maternal morbidity and mortality. Accredited facilities are required to conduct simulations, at least annually, to determine system issues as part of ongoing quality improvement efforts. Obstetrical emergencies can be stressful and unpredictable, with two lives at stake. Simulation-based training provides a learner-centered approach, safe acquisition of technical skills training, and development of teamwork in a safe environment with a goal of improving maternal care through standardization, multidisciplinary teamwork, and continuous quality improvement.

These maternal conditions also have serious implications for the newborn. By including the newborn in the developed scenarios, we are also helping the teams apply the cognitive, technical, and teamwork skills they have learned in Neonatal Resuscitation Program (NRP) to the newborn’s care.

ACTION

In June 2021, 49 of Tennessee’s delivering facilities attended a six hour “train the trainer” simulation. During this training, participating hospitals received education on the importance and impact of regular simulation trainings, the new Joint Commission guidelines, and education on how to implement simulation and debriefing in their own facilities. Maternal and infant simulations were performed around maternal hypertension and hemorrhage. Upon completion of the training, centers were provided with a maternal and infant simulator, a supply kit, and a resource notebook to take back to their own facilities to use in simulation training.

Continuing support was offered to each participating hospital following the training. Centers were offered the option to participate in a site visit where a maternal and infant TIPQC provider would offer support with the hospital’s simulation effort, via live or virtual options.

TIPQC also published access to educational resources for facilities to utilize at any time that included simulation lectures, simulator resource information, and examples of utilizing simulators in a real simulation effort.

EXPLANATION OF IMPACT

During Q3 2021, 83% of responding facilities (25/30) reported a moderate to major impact of simulation training on routine clinical practice. A similar percent of responding facilities (79%, 22/28) reported the same level of impact during Q4 2021. During Q4 2021, the responding facilities reported moderate to major impacts from simulation training in the appropriate assessment (96%, 21/22), response/management (91%, 20/22), and teamwork (91%, 21/22) in real-life cases practiced with simulation training.

TIPQC continues to offer support with hospital’s simulation efforts. Simulation will be included as part of the curriculum in the 2022 annual meeting. TIPQC will also be offering another “train the trainer” workshop in the summer of 2022 to further expand upon last year’s training.

WHO WAS RESPONSIBLE

The collaborative and statewide efforts of TIPQC and the participating 54 TN birthing hospitals have all contributed to this improvement.

CONTACT

For more information, please contact Brenda Barker, TIPQC Executive Director, at brenda.barker@tipqc.org, or visit our website at www.tipqc.org.