Obstetrical Hemorrhage Simulations and their Impact on Use of an Obstetrical Hemorrhage Risk Assessment Tool

Madeline Huey, BA and Caroline Hedges, MD

Background

• Since 2003-2004, rates of maternal mortality in the United States increased by almost 27%.1
• Hemorrhage has been identified as the cause for death in 11.4% of cases of maternal mortality.2
• California has seen decreases in maternal mortality due to efforts to identify preventable contributors to maternal death.1
• UCHHealth Memorial North and UCHHealth Memorial Central have recorded increased cases of mortality and severe morbidity related to maternal hemorrhage.
• The Obstetrical Hemorrhage Risk Assessment Checklist, which assists in identifying high risk patients, has been available to L&D providers and staff since 2017 but has seen inconsistent, and inaccurate, use.

Aim Statement

Aim 1: Through the use of the OB Hemorrhage Simulation Workshops, we aim to increase 90% of providers’ and staff comfort utilizing the Obstetrical Hemorrhage Risk Assessment Checklist to ‘very comfortable’.

Aim 2: Increase the accurate use of the risk assessment tool following the simulation workshops as reflected by chart review.

Methods

1. Implement OB Hemorrhage Simulation workshops from August 16th – October 23rd, 2019 and collect pre-/post- surveys assessing provider confidence.
2. Conduct chart review of patients with >1000 mL of blood loss to audit of implementation and use of Obstetrical Hemorrhage Risk Assessment Checklist pre-/post- workshop intervention.

Results

A. Participant Demographics

B. What is your level of comfort with using the obstetrical hemorrhage risk assessment?

C. All Pre-Simulation

D. Patient OB Hemorrhage Risk Assessment

Discussion

• Workshop participants were mostly registered nurses taking care of pregnant women, but the overall participation was diverse.
• Participant identified comfort with the OB Hemorrhage Risk Assessment Tool increased following the workshops to a level of ‘comfortable’ or ‘very comfortable’
• Birth Center RN’s, who are the responsible group for assigning risk, did not have a significant change in comfort using OB Hemorrhage Risk Assessment Tool.

While the chart review shows improved accuracy of the risk assessment tool at UCHHealth Memorial Central following the workshops, limitations to the study include:

1. Alterations and edits were made to the risk assessment tool during the time period of chart review.
2. Risk may change throughout a patient’s admission and this study limited it to risk at admission.
3. There was only a single reviewer.

Future Directions

• Develop and implement Workshop B to provide further training and practice in skills related to OB hemorrhage.
• Develop plan for recertification workshops.
• Develop consistency in documentation of OB Hemorrhage Risk Assessment as well as labor and delivery blood loss in the health record.
• Repeat the chart review after the next workshop given that the risk assessment tool has been finalized.

Acknowledgements

This project would not have been possible without significant support from Alisa Morse and Brenily Goodrich. Thank you!

References