Abstract

Background:
Postpartum hemorrhage affects approximately 2.9% of women who give birth each year (Bonnet, Benhamou, Desets-Tharau, & Schmitz, 2010). PPH remains a leading cause of preventable maternal mortality and morbidity in the U.S. (Kramer, Berg, Abenhaim, Dahhou, Rouleau, Mehrabad, & Joseph, 2013).

Methods:
A data-driven multi-hospital quality improvement collaborative initiative based on the Mobilize, Assess, Plan, Implement, Track (MAP-IT) quality improvement methodology. The postpartum hemorrhage project also utilized an on-line data portal to track changes in structures, processes, and outcomes.

Project Impact:
September 2014 thru September 2015
Patients 2,634
Nurses 90
Providers 20
Others 5

Conclusions:
While we may not be able to control the number of women who experience birth-related hemorrhage, our early recognition, risk-related anticipation, and rapid response to hemorrhage can significantly impact maternal outcomes.

Introduction

• New Division Leadership agreed to adopt ACOG/AWHONN hemorrhage definitions for in-house peer review and data reporting (ACOG, 2012; AWHONN Practice Brief, 2014).
• Maternal mortality & morbidity rates in our region reflected a need for change and our facility decided to take steps toward evidence-based practice to improve those rates.
• Initial research and participation in the PPH Collaborative identified the need to quantify rather than estimate blood loss, as well as extend the quantification of blood loss beyond immediate delivery and in to the postpartum phase.
• As a Regional Perinatal Center, our facility believes we should lead by example on important initiatives that will affect not only our region, but the nation as well.
• Recommission of our facility’s baseline data, in light of the AWHONN PPH Collaborative guidelines, validated our facility’s participation in the Collaborative.

Quality Improvement:

Project Goals:
• Identify at-risk women
• Adopt universal terminology & protocols
• Hardware process to quantify blood loss
• Mitigate the need for blood products
• Prevent hemorrhage-related mortality/morbidity

Intervention Highlights:
• Developed mass transfusion protocol
• Amended algorithm to fit facility-specific needs
• Assembled PPH medication kit & cart
• Established QBL process
• Secured provider endorsement for oxytocin protocol

Analysis methods:

Retrospective Data Analysis of Outcomes:
• Number of postpartum hemorrhages
• Blood products transfused
• Number of ICU Days

Education & Compliance:
• RN education (including online modules) & drills
• Quantification of blood loss
• Completion of risk assessments

Methods & Materials

Discussion

Summary of Findings:
• Number of PPH recognized increased
• Number of blood products transfused decreased
• Blood loss is consistently over- or under-estimated
• Maternal ICU stays were minimal
• Staff education adoption of protocols increased awareness and preparedness
• Participation among all stakeholders expedited recognition of and response to hemorrhage events

Facilitators:
• Administrative Leadership
• Risk Management
• Education Department
• Quality Department
• Ancillary Departments (pharmacy, blood bank, anesthesia)

Barriers:
• Multidisciplinary Buy-In
• Budget Constraints
• Reassigning traditionally held roles by shifting responsibility
• Assembling PPH medication kit & cart
• Initial research and participation in the PPH Collaborative identified the need to quantify rather than estimate blood loss, as well as extend the quantification of blood loss beyond immediate delivery and in to the postpartum phase.

Implications and Insights:
• Increased postpartum hemorrhage rates do not indicate failure but rather improved processes
• Accurate QBL, as well as approved algorithms and protocols, are integral to successful intervention
• The value of readily available medications & supplies was realized

References

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