

Abstract

Background: Postpartum hemorrhage affects approximately 2.9% of women who give birth each year. PPH remains a leading cause of preventable maternal mortality and morbidity.

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.

Shore medical Center is a small community hospital in very southern New Jersey, delivering 1,300 deliveries per year.

Results:

Goals reached included, decreasing need for transfusion, updating of PPH policy and creating a MTP, development of standard screening for risk, education of staff and providers, and quantification of all blood loss.

Conclusions: Goals were met for this organization, but ongoing work is needed to perfect use of QBL and develop a standardized order set.

Introduction

- Background: This project was initiated due to known adverse outcomes in local area and desire to improve response for critically ill mothers.

- Baseline data indicated an inconsistent response to PPH emergencies, frequent transfusions and lack of knowledge, policies and standard order sets.

- Deficits were also recognized when week one of project an actual event occurred (with a positive outcome), but recognized deficiencies after debrief.

- Literature:

- 1 in 1,500 deliveries complicated by ICU admission following PPH

- 2nd leading indication for admission after hypertensive disorders

- More than half of the incidents of PPH occur in the first 24 hours

- Occurs without warning

- ✓ Hemorrhage is the **leading cause** of maternal mortality worldwide

- ✓ Results in an estimated **150,000** deaths per year

- ✓ **1 in every 1,000** births in the world complicated by maternal death from hemorrhage

Methods & Materials

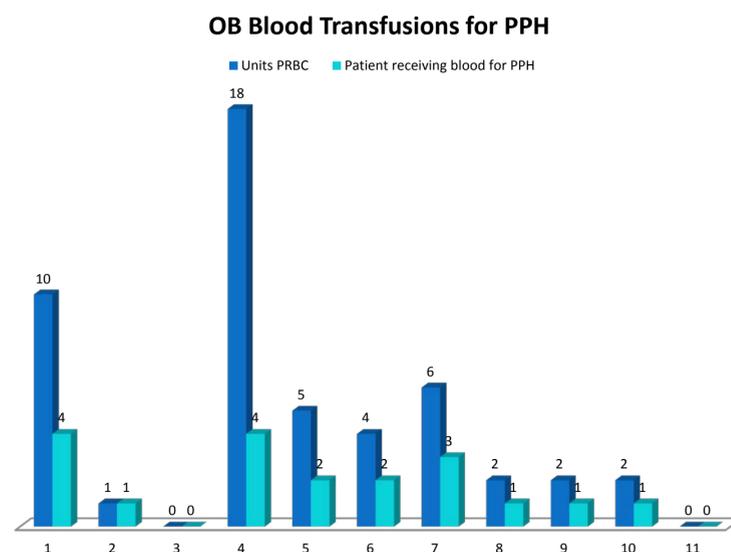
Quality Improvement:

- Project Goals
 - PPH Policy update
 - Mass transfusion policy
 - PPH risk screening
 - PPH cart
 - Bhakri @ balloon training
 - QBL
 - Education of staff and providers

Analysis methods:

- # of women who had blood transfusions
- # of ICU admissions
- # of units of blood transfused
- Data was analyzed based on blood transfusion reporting and chart review on all blood transfusions, ICU admissions were also reviewed during this period of time.

Results



During this period 2 patients were admitted to ICU. Both were screened high risk upon chart review, but screening was not yet in place when events occurred. QBL was performed on both and ICU staff was educated on QBL. Post risk screening, no ICU cases.

QBL done 66% of all patients in November 2015
When compared to EBL (documented)
EBL was 2, 873 mL less then reported QBL

Discussion

Summary of Findings:

- Quality initiatives can create powerful change and improve outcomes.

Facilitators:

- Administrative Director, Karen Sharkey
- Blood Bank Director- Young Chou Wang
- **Manager Jeong Leon (project lead)**
- Clinical Supervisors: Nicole DeCicco, Tricia Brereton-Moore Sheila Brehm and Pam Eiler
- Laborists: Robyn Meadows and Anne Petite

Barriers:

- Providers were key barrier to project and were late adapters to changes in practice.
- Additional scales were purchased for QBL, but specialty drapes were cost prohibitive.

Implications and Insights:

- Nursing is a key driver in many institutions to evidence based change.
- Electronic Medical Record can facilitate evidence based risk screening and be used to support best practices.

References

ACOG (2015) *Safe Motherhood Initiative toolkit*.
 AHRQ (2015) *Management of postpartum hemorrhage: Comparative effectiveness review, 151*. AHRQ Publication No. 15-EHC013-EF
 AWHONN (2015), Quantification of Blood Loss: AWHONN Practice Brief Number 1. Journal of Obstetric, Gynecologic, & Neonatal Nursing, 44: 158–160. doi: 10.1111/1552-6909.12519
 AWHONN (2015), Guidelines for Oxytocin Administration after Birth: AWHONN Practice Brief Number 2. Journal of Obstetric, Gynecologic, & Neonatal Nursing, 44: 161–163. doi: 10.1111/1552-6909.12528
 Wanderer, Leffert, Mhyre, Callaghan, Bateman. *Critical Care Medicine*. 2013; 41(8):1844-52
 Bingham, D. (2012), Eliminating Preventable, Hemorrhage-Related Maternal Mortality and Morbidity. Journal of Obstetric, Gynecologic, & Neonatal Nursing, 41: 529–530. doi: 10.1111/j.1552-6909.2012.01371.x
 Khan et al. *Lancet* 2006; 367: 1066–74

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