

Implementation of Postpartum Hemorrhage Checklist at UNC Chapel Hill

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Postpartum Hemorrhage



HEMORRHAGE, POSTPARTUM

PRESENTATION: QBL >1000 mL

START:

- Call OB FAST

LEADER

designates

Checklist reader

Time Keeper + Scribe

STAGE 0:

QBL 500-1000 cc with ongoing bleeding

- Fundal massage
- Determine etiology and treat
- Discuss bleeding with patient and family
- Check that there is both a T&S and ABO confirmatory at UNC blood bank
- Ensure two large bore IV for access
- Draw STAT labs
- Start 1 liter Lactated Ringers bolus

Medications:

- Ensure oxytocin is infusing
- Give uterotonic medications

STAGE 1:

QBL >1000 mL with normal vital signs and lab values

- Critical pause with each stage
- OB FAST must be called
- Transfer to L&D if on different floor
- Fundal massage
- Determine etiology and treat
- Insert indwelling urinary catheter
- Prepare OR, if clinically indicated

Medications:

- Ensure oxytocin is infusing
- Give uterotonic medications
- Give TXA

Blood Bank:

- Type and crossmatch 2 units RBCs

STAGE 2:

QBL less than 1500ml AND HR >110, BP <85/45, O2 Sat < 95%

- Critical pause with each stage
- Report QBL every 5-10 minutes
- Place 2nd large bore IV (if not already done)
- Prepare OR for possible interventions
- Provide updates to patient and family

Medications:

- Continue stage 1 uterotonics
- Repeat TXA 30 minutes after first dose

Blood Bank:

- 2 units RBCs, transfuse per signs and symptoms
- Thaw 2 units FFP

POSSIBLE INTERVENTIONS:

- Consult OB (if applicable)
- Laceration repair
- Packing of hematoma
- Bakri balloon
- Exploratory laparotomy
- Compression suture/B-Lynch suture
- Uterine artery ligation
- Hysterectomy
- Notify Interventional Radiology Vocera: VIR (974-0420)

DIFFERENTIAL DIAGNOSIS

- Tone (i.e., atony)
- Trauma (i.e., laceration, rupture)
- Tissue (i.e., retained products)
- Thrombin (i.e., coagulopathy)

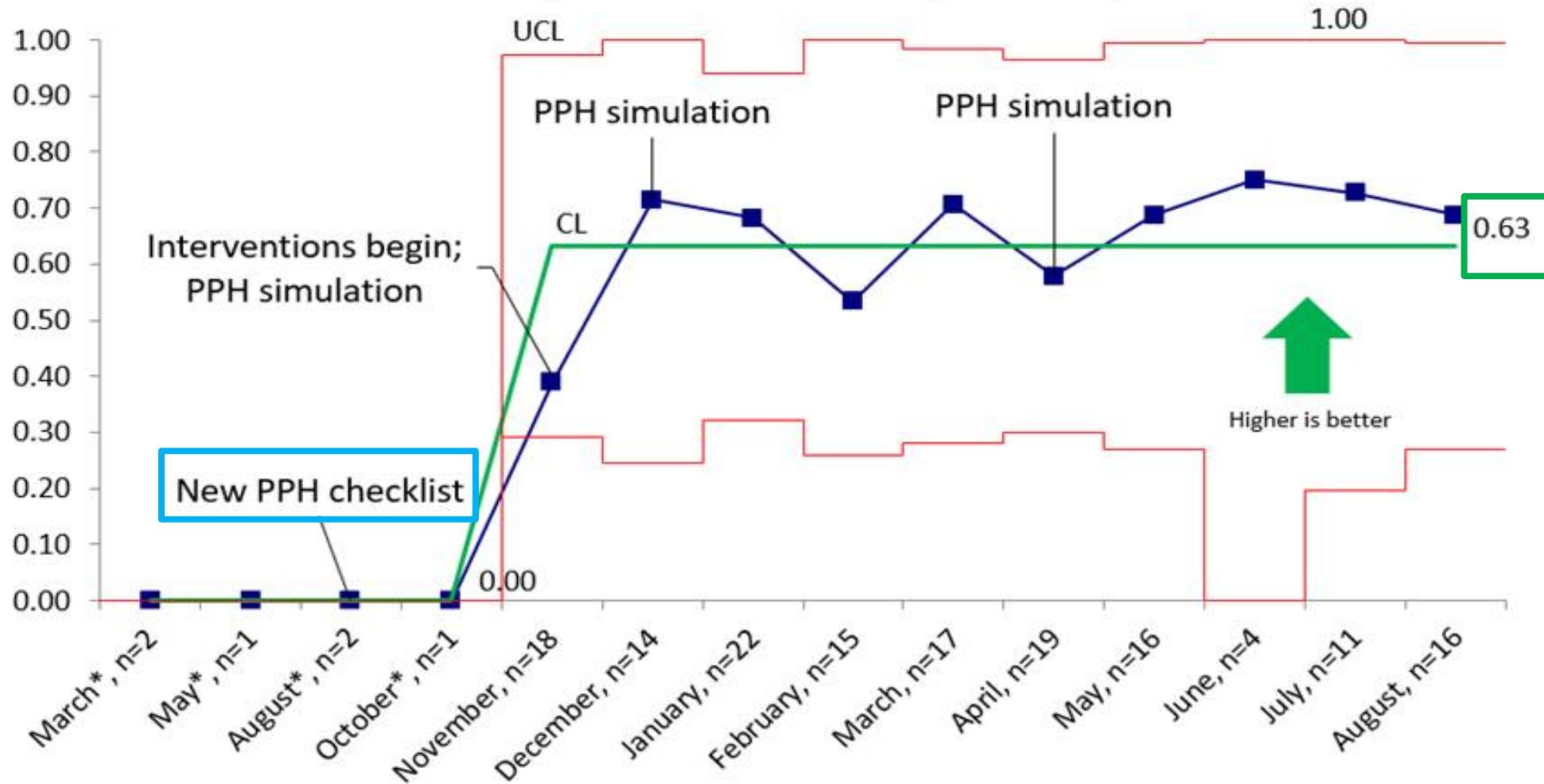
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Aim Statement

Global: Improve care and reduce morbidity for birthing people by implementing a compendium of checklists for perinatal emergencies by August 31, 2023.

Smart aim: Increase use of the postpartum hemorrhage checklist from 0% to 75% for birthing people experiencing postpartum hemorrhage events during vaginal birth by August 31, 2022.

Percent of Postpartum Hemorrhage Checklist Use at Vaginal Deliveries (p chart)



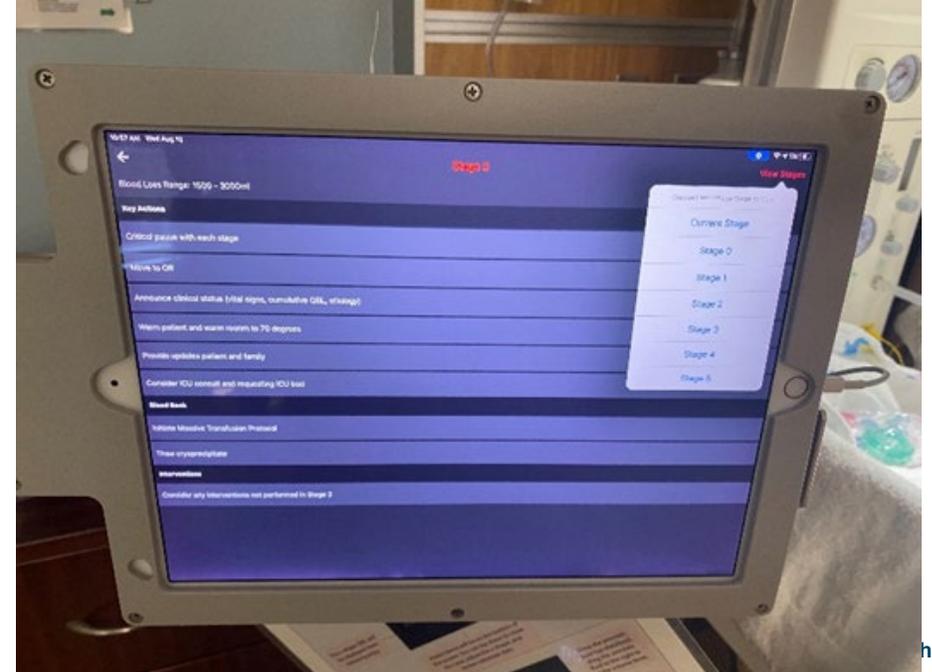
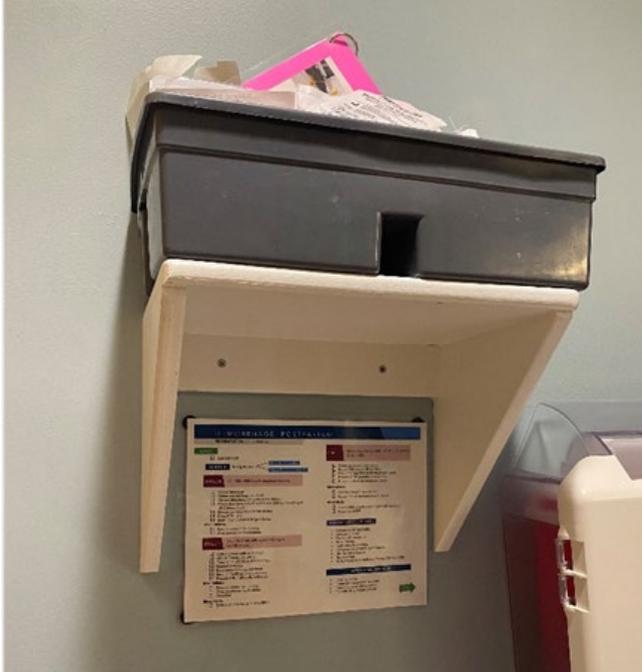
March 2021 - August 2022

n = count of PPH events

* = baseline data obtained through maternal morbidity and mortality case review

Successful Interventions

- Checklist locations:
 - Patient charts, L&D rooms, OR, on machines that measure blood loss, through EPIC
 - Included in Clinical Support Tech workflow for stocking rooms.



Equity Data

PPH Checklist Use		n = 136 Patients
		n (%)
Overall PPH Checklist Use		96 (63%)
Use by Race/Ethnicity *		
Non-Hispanic Black		11 (61%)
Non-Hispanic White		36 (58%)
Hispanic†		42 (75%)
Additional or Not Reported‡		7 (43%)
Use of PPH Checklist by Shift		
Daytime		41 (58%)
Nighttime		55 (68%)

Previously:

43%
61%

*Race and ethnicity were self-reported

† Those selecting Hispanic ethnicity selected the following race categories:

 Other (n=31), White, Black, Asian

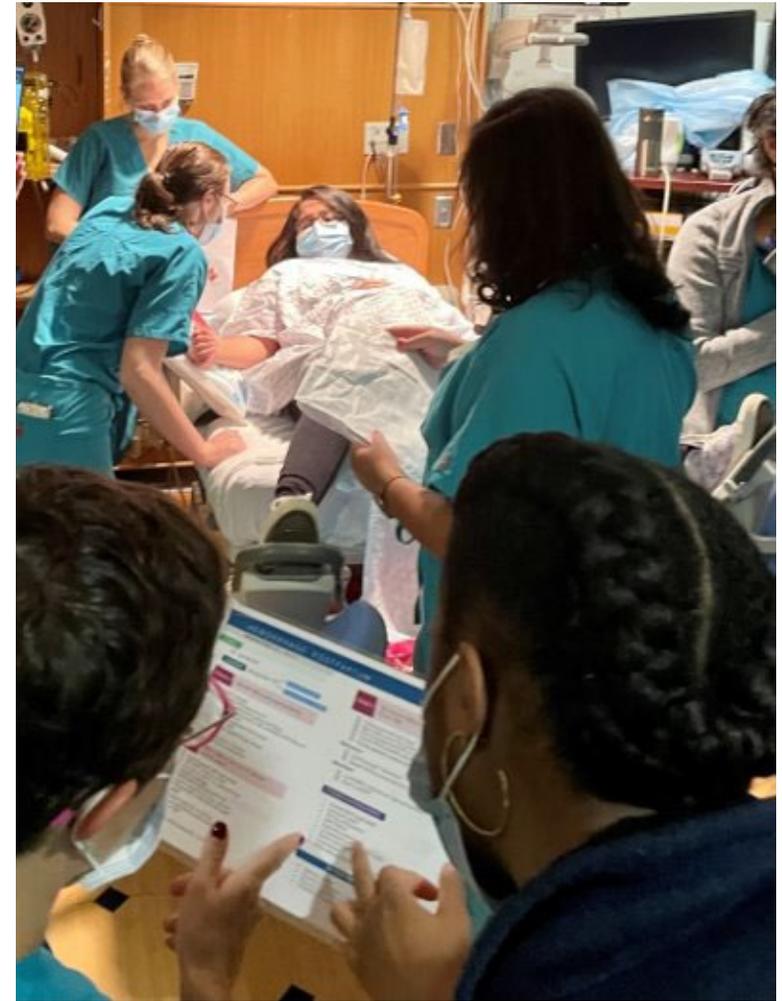
‡ Additional races included non-Hispanic Asian, non-Hispanic Other, and missing/not reported

Survey Results

Reasons Checklist was Used:

- 54% - Helped our team organize and work together efficiently
- 24% - Reminded of additional interventions

What a Team!



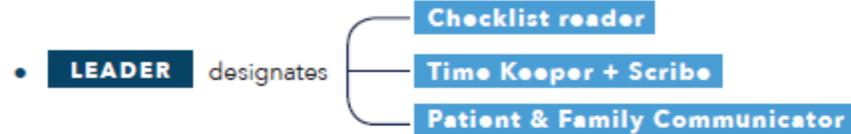
Next Steps

- Expansion of tracking PPH checklist use during cesarean birth
- Inclusion of all OB attendings during simulations
- Further review checklists with patients for feedback
- Role out emergency checklists compendium

OBSTETRIC EMERGENCIES

START/INITIAL STEPS FOR EMERGENCIES:

- **Call OB FAST**



1 ALTERED MENTAL STATUS

2 AMNIOTIC FLUID EMBOLISM

3 ANAPHYLAXIS

4 ARRHYTHMIA

5 CARDIAC ARREST/ACLS

6 DIABETIC KETOACIDOSIS

7 DIFFICULT AIRWAY

8 ECLAMPSIA

9 HEMORRHAGE

10 HIGH SPINAL

IMPORTANT CONTACTS

Use VOCERA or *33 from a desk phone

- Code blue: "Call Emergency"
- RRT: "Call Emergency"
- Blood bank: "Call Blood Bank"

Interventional Radiology: (pager) 919-216-8477

11 HYPERTENSIVE EMERGENCY

12 LOCAL ANESTHETIC SYSTEMIC TOXICITY

13 MAGNESIUM TOXICITY

14 RESPIRATORY DISTRESS

15 SEPSIS

16 SHOULDER DYSTOCIA

17 TRANSFUSION REACTION

18 UTERINE INVERSION

Thank you

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