

# **“Ready, Set, Huddle”: Implementation of Perioperative Huddles on Labor and Delivery**

L. Blake, MD; L. Squires, MD; N. Perlman, MD; D. Arce, MD, MPH; K. Fedoruk, MD, FRCPC; J. Xie, MD; G. Gutierrez MSN  
Department of Anesthesiology, Perioperative, and Pain Medicine; Stanford University

## **BACKGROUND**

- Multidisciplinary team communication is vital in the labor and delivery (L&D) environment
- Communication failures represent the leading cause of perinatal sentinel events
- The Joint Commission's root cause analysis of perinatal sentinel events found cultural barriers and failure to function as a team as contributing factors to communication breakdown

## **AIM/GOAL**

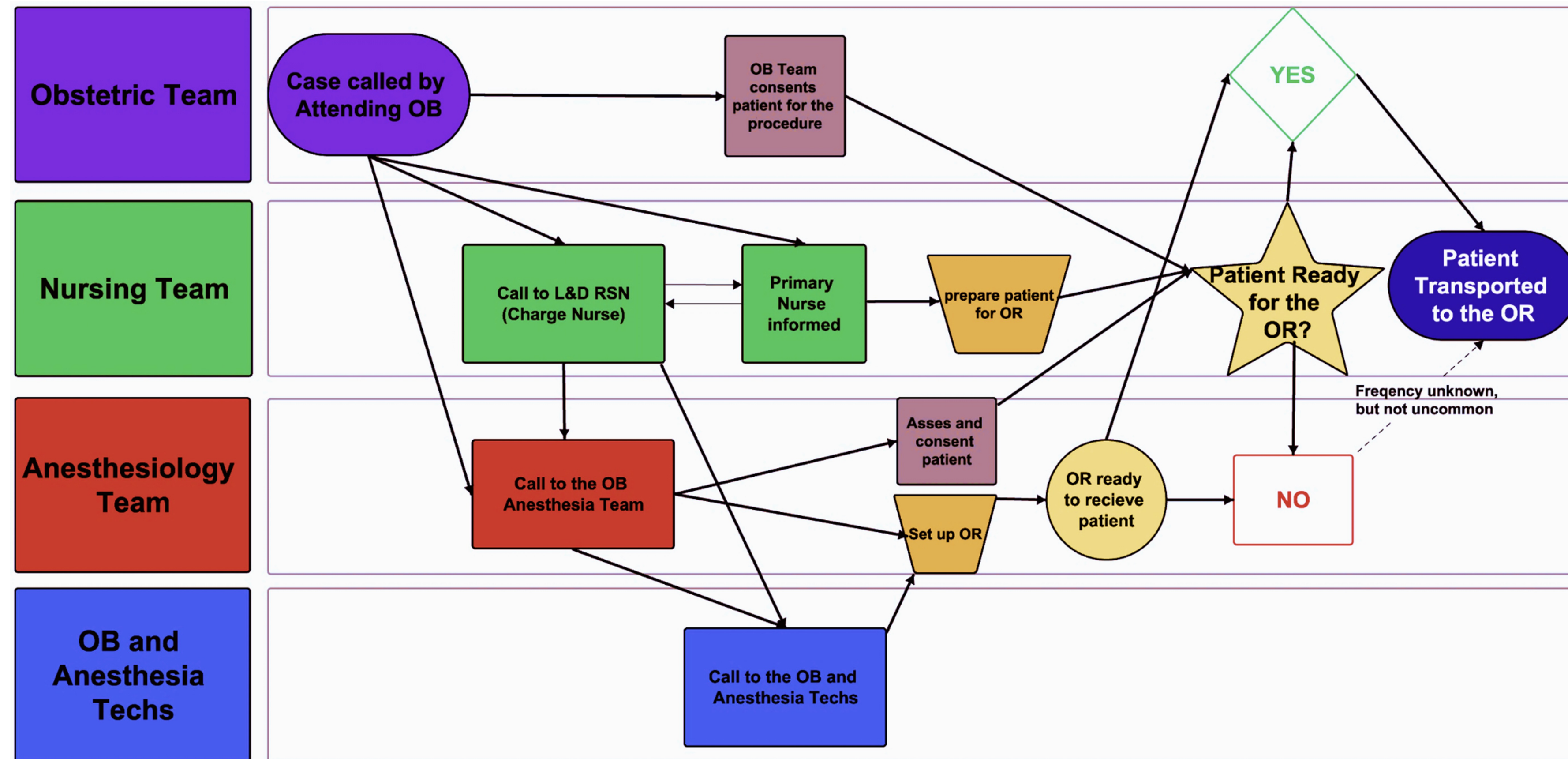
- Define, Measure, Analyze, Design and Verify (DMADV) methodology was utilized to develop a new, standardized communication tool for the perioperative team on L&D
- Goal: To complete a standardized preoperative huddle checklist in >90% of non-emergent operating room procedures



# “Ready, Set, Huddle”: Implementation of Perioperative Huddles on Labor and Delivery

L. Blake, MD; L. Squires, MD; N. Perlman, MD; D. Arce, MD, MPH; K. Fedoruk, MD, FRCPC; J. Xie, MD; G. Gutierrez MSN

## PROCESS MAPPING



## KEY DRIVERS

Primary nurse must call all teams to huddle

Responsible provider from each team must attend and participate in the huddle

Huddle complete immediately prior to patient going to OR

Checklist must be completed

Checklist must be submitted / returned

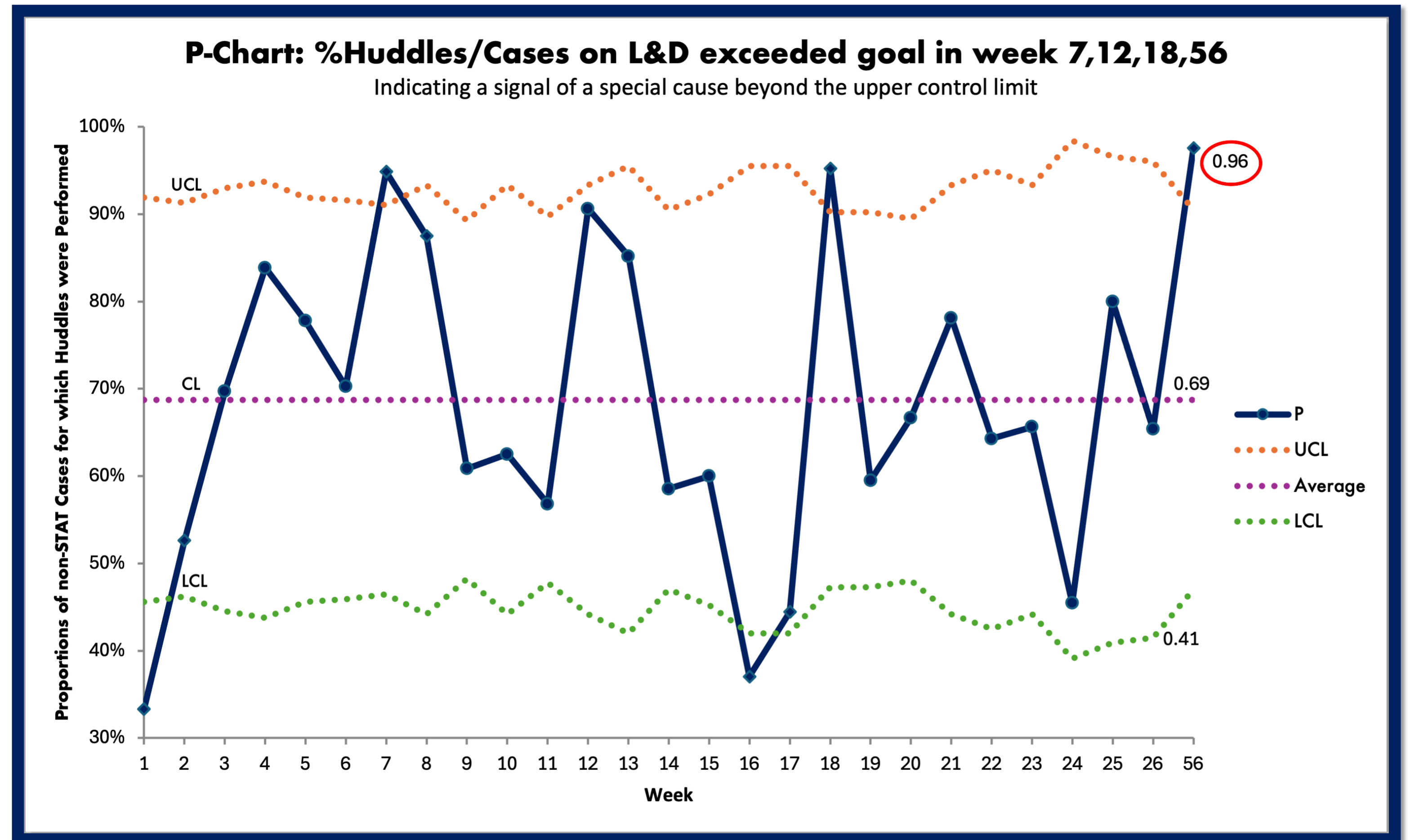


# “Ready, Set, Huddle”: Implementation of Perioperative Huddles on Labor and Delivery

L. Blake, MD; L. Squires, MD; N. Perlman, MD; D. Arce, MD, MPH; K. Fedoruk, MD, FRCPC; J. Xie, MD; G. Gutierrez MSN

## METHODS & RESULTS

- Adherence tracked over 56-weeks
- Range: 33% (wk 1) to 96% (wk 56)
- Cycles 1-2: introduction & education
- Cycles 3-4: standardization & efficiency
- Cycles 5-7: huddle sustainability



Stanford  
MEDICINE

School of Medicine

Division of Obstetric Anesthesiology  
and Maternal Health

# “Ready, Set, Huddle”: Implementation of Perioperative Huddles on Labor and Delivery

L. Blake, MD; L. Squires, MD; N. Perlman, MD; D. Arce, MD, MPH; K. Fedoruk, MD, FRCPC; J. Xie, MD; G. Gutierrez MSN

## CONCLUSION

- The DMADV methodology is a useful tool to guide implementation of a new healthcare improvement process
- This methodology supports multiple cycles of feedback and re-design within each phase
- End results have led to the development of a sustainable, systematic perioperative huddle and standardized checklist
- Currently in the verification phase with integration into the electronic medical record

RETURN TO ANESTHESIA / NOT PATIENT CHART

Labor & Delivery Preoperative Huddle

Patient Information (Filled out by OR nurse)

Procedure(s): (All cases going to the OR) DATE:

Allergies:

Hematocrit: Platelet Count: Hemorrhage risk score: OBCMI: (see score calculation on back)

Primary Spoken Language Interpreter called: Yes / No / N/A

Huddle Information

Time Procedure Called: OR Scheduled

1) Time huddle called:

2) Time all team members present:

3) Time huddle completed:

4) Delay reasons:

Procedure Checklist (check boxes as topics discussed)

Nursing

Nursing team, OB Tech and Anesthesia Tech ready?

Consent signed?

Drips / Infusions: Insulin / Magnesium / Other? Continue to OR?

Hemorrhage Preparation:

Type and screen ordered? If yes, is it resulted?

Contraindications to uterotonics present?

Is a PPH kit required?

Is blood required and available in the OR?

OB:

Indication?

Fetal Concerns (NICU level)?

Position other than LUD?

Antibiotics other than Ancef?

Other Obstetric Concerns or Additional equipment required for OB?

Anesthesia:

Planned procedure?

Concerns related to anesthesia or Additional equipment required for anesthesia?

Patient Label

Steps to Huddle

RN initiates the pre-op huddle once providers and patient are ready for the OR

Call all staff to meet in the hallway in front of the OR doors near PACU, including:

RN, OB Attending, Anesthesia Attending, OB Tech, Anesthesia Tech

Document times. (procedure called, huddle called & huddle started).

Guide the team through the huddle checklist

Document time huddle is complete.

Move to the OR immediately after huddle unless reasons for delay are identified.

Document time patient arrives in the OR.

Obstetric Comorbidity Index Score (OBCMI)

Maternal Condition	Points
Preeclampsia with Severe Features* or Eclampsia	5
Preeclampsia / Gestational / Chronic Hypertension	2
Congestive Heart Failure	5
Pulmonary Hypertension	4
Ischemic Heart Disease / Cardiac Arrhythmia	3
Congenital Heart and/or Valvular Disease	4
Multiple Gestation	2
Intrauterine Fetal Demise	2
Placenta Previa / Suspected Accreta / Abruptio	4
Previous Cesarean Delivery / Myomectomy	1
Autoimmune Disease / Lupus	2
HIV/AIDS	2
Sickle Cell Disease / Bleeding Disorder / Coagulopathy / Anticoagulation	3
Epilepsy / Cerebrovascular Accident / Neuromuscular Disorder	2
Chronic Renal Disease	1
Asthma	1
Diabetes on Insulin	1
Maternal Age > 44	3
Maternal Age 40-44	2
Maternal Age 35-39	1
Substance Use Disorder	2
Alcohol Abuse	1
BMI > 50	3
BMI > 40	2
Total:	

\*Severe Features: Systolic BP ≥ 160, diastolic BP ≥ 110, creatinine > 1.1, oliguria (<30 cc/hr), elevated AST or ALT, platelets < 100,000, persistent epigastric pain, headache, or scotomata, placental abruption.

Hemorrhage Risk Score	
Maternal Condition	Points
Prior Cesarean Birth or Uterine Surgery	1
Multiple Gestation	1
More than 4 Previous Vaginal Births	1
History of PPH	1
Large Uterine Fibroids	1
Preeclampsia	1
BMI ≥ 40	1
Chorioamnionitis	1
Low Lying Placenta or Previa	2
Suspected Placental Accreta or Percreta	2
Hematocrit <30 AND Other Risk Factors	2
Trial of Labour After Cesarean (TOLAC)	2
Platelets < 100,000	2
Active Bleeding (Greater than Show) on Admit	2
Known Coagulopathy	2
Antibody Screen Positive in Pregnancy or on Admit	2
TOTAL	

1. Trejo FE, Igel CM, Chuang M, Bajaj K, Bernstein PS. Checklists, Huddles, and Debriefs: Critical Tools to Improve Team Performance in Obstetrics. Clin Obstet Gynecol. 2019 Sep;62(3):518-527.

2. McQuaid-Hanson E, Pian-Smith MC. Huddles and Debriefings: Improving Communication on Labor and Delivery. Anesthesiol Clin. 2017 Mar;35(1):59-67.

3. <https://www.sixsigmadaily.com/what-is-dmadv/#>