GaPQC

GEORGIA PERINATAL QUALITY COLLABORATIVE

WELCOME TO THE MONTHLY LEARNING WEBINAR

The presentation will begin shortly

General Housekeeping

- Use the chat box to register your name, facility represented and all participating team members.
- To prevent distractions, please mute all phones:
  - Please DO NOT put phones on hold to avoid playing background music we are unable to control.
- Use the chat box for questions during the presentation but please hold comments until the end of the session.
- All collaborative members want to learn from your wins and challenges so please share!

AIM Bundles

COUNCIL ON PATIENT SAFETY IN WOMEN'S HEALTH CARE
safe health care for every woman

PATIENT SAFETY BUNDLE

Obstetric Hemorrhage

READINESS

Every unit

- Hemorrhage cart with supplies, checklist, and instruction cards for intrauterine balloons and compressions stitches
- Immediate access to hemorrhage medications (kit or equivalent)
- Establish a response team - who to call when help is needed (blood bank, advanced gynecologic surgery, other support and tertiary services)
- Establish massive and emergency release transfusion protocols (type-O negative/uncrossmatched)
- Unit education on protocols, unit-based drills (with post-drill debriefs)

RECOGNITION & PREVENTION

Every patient

- Assessment of hemorrhage risk (prenatal, on admission, and at other appropriate times)
- Measurement of cumulative blood loss (formal, as quantitative as possible)
- Active management of the 3rd stage of labor (department-wide protocol)

RESPONSE

Every hemorrhage

- Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists
- Support program for patients, families, and staff for all significant hemorrhages

REPORTING/SYSTEMS LEARNING

Every unit

- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
- Multidisciplinary review of serious hemorrhages for systems issues
- Monitor outcomes and process metrics in perinatal quality improvement (QI) committee

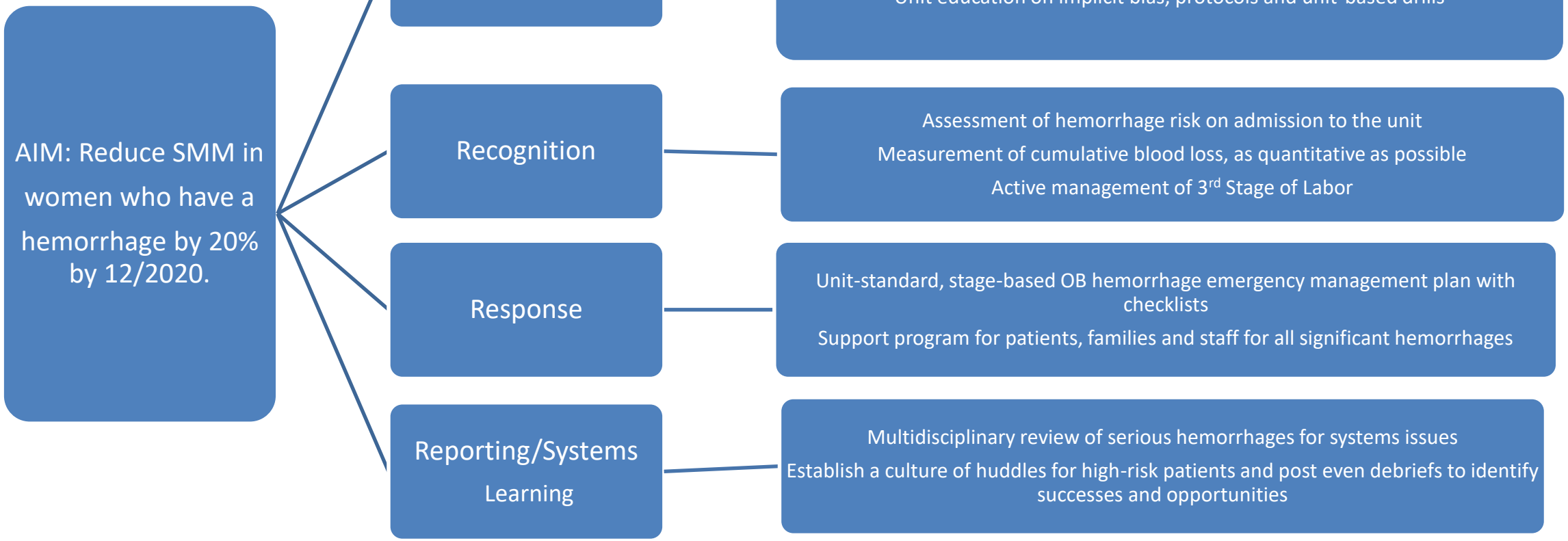
READINESS

RECOGNITION AND PREVENTION

RESPONSE

REPORTING/SYSTEMS LEARNING

Hemorrhage Driver Diagram



GaPQC Hemorrhage Goals by 12/2020

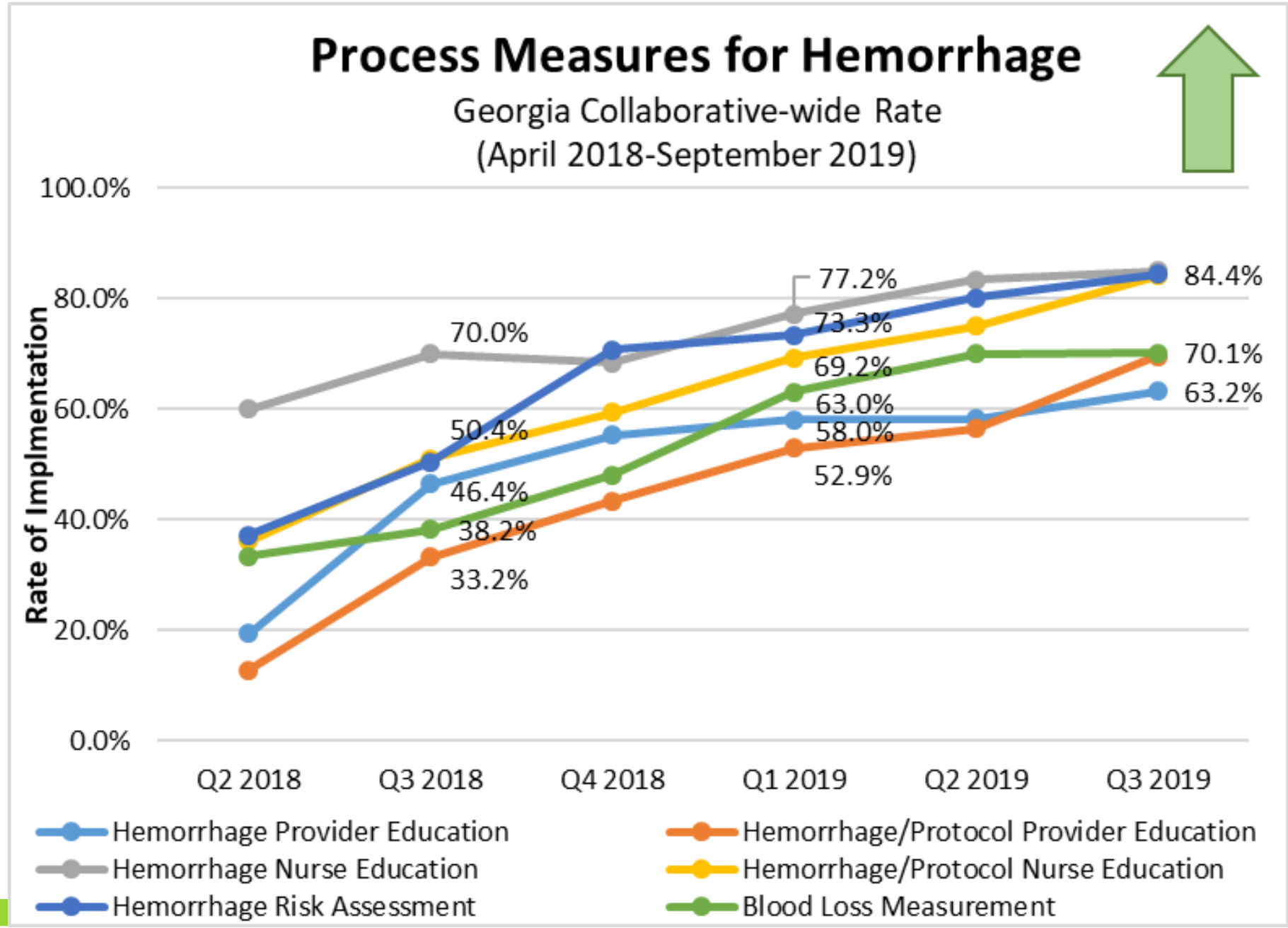
Measure	Type	Goal
Severe Maternal Morbidity No. of women with severe maternal morbidities (e.g. Acute renal failure, ARDS, Pulmonary Edema, Puerperal CNS Disorder such as Seizure, DIC, Ventilation, Abruption) / No. pregnant & postpartum women with postpartum hemorrhage diagnosis	Outcome	20% reduction
Risk Assessment No. of women had a hemorrhage risk assessment with risk level assigned, performed at least once between admission and birth and shared among the team/ no. of women	Process	100%
Debriefs on all cases requiring ≥4 units RBCs or admission to the ICU	Process	100%
Quantified blood loss No. of women who had measurement of blood loss from birth through recovery period using quantitative and cumulative techniques/no. of women	Process	100%

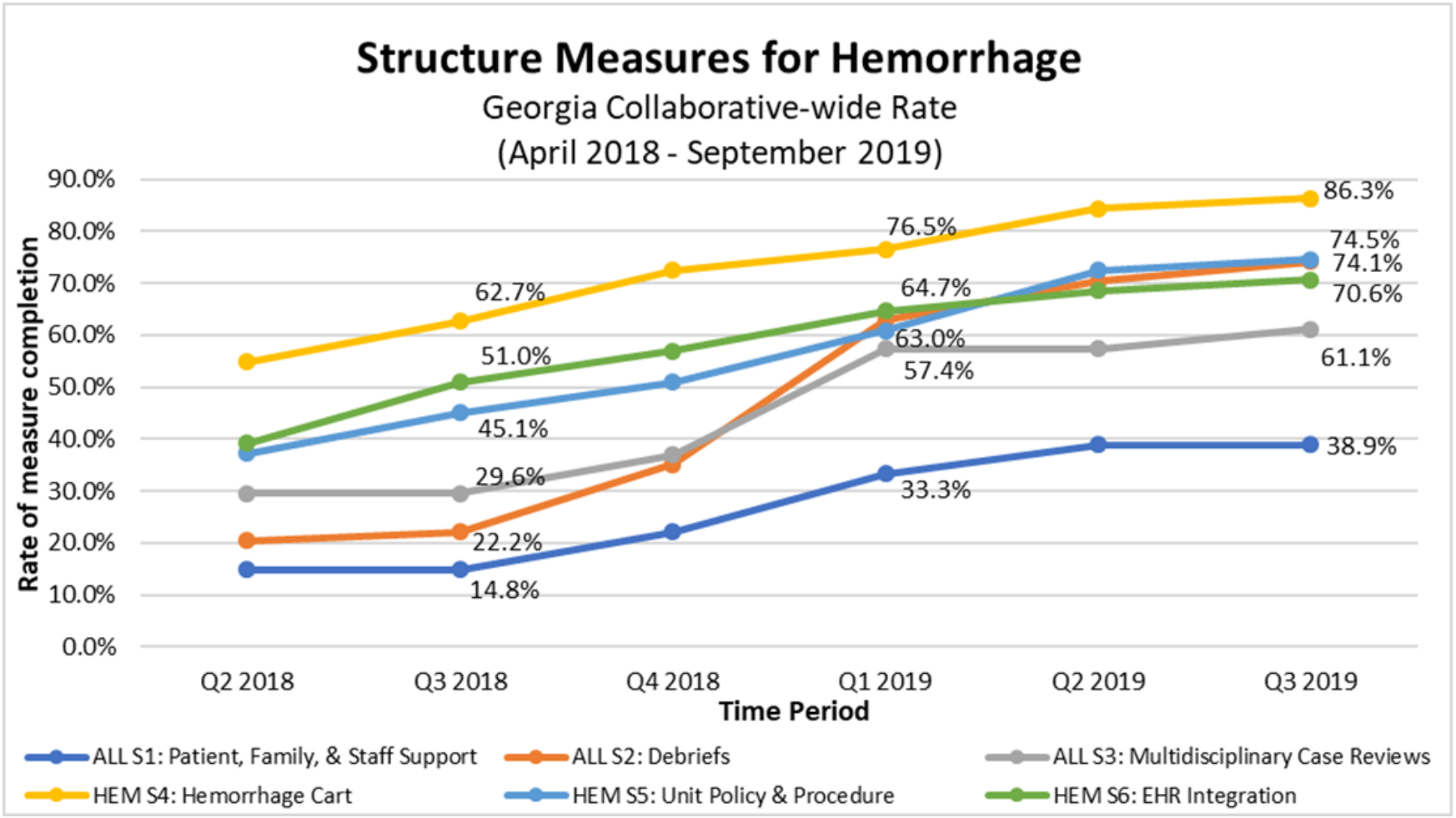
AIM Hemorrhage Structure Measures

S1: Patient, Family & Staff Support	**Report Completion Date** **Has your hospital developed OB specific resources and protocols to support patients, family and staff through major OB complications?**
S2: Debriefs	**Report Start Date** **Has your hospital established a system in your hospital to perform regular formal debriefs after cases with major complications?**
S3: Multidisciplinary Case Reviews	Report Start Date Has your hospital established a process to perform multidisciplinary systems-level reviews on all cases of severe maternal morbidity (including women admitted to the ICU, receiving ≥4 units RBC transfusions, or diagnosed with a VTE)?
S4: Hemorrhage Cart	Does your hospital have OB hemorrhage supplies readily available, typically in a cart or mobile box?
S5: Unit Policy and Procedure	**Report Completion Date** **Does your hospital have an OB hemorrhage policy and procedure (reviewed and updated in the last 2-3 years) that provides a stage based management plan with checklists?**
S6: EHR Integration	Report Completion Date Were some of the recommended OB Hemorrhage bundle processes (i.e. order sets, tracking tools) integrated into your hospital's Electronic Health Record system?

AIM Hemorrhage Process Measures

P1: Unit Drills	Unit Drills Has your hospital developed OB specific resources and protocols to support patients, family and staff through major OB complications?
P2: Provider Education	Provider Education The number of OB providers and CNMs that completed an educational program on OB hemorrhage? The number of OB providers and CNMs that completed an training on implicit bias?
P3: Nursing Education	Nursing Education The number of OB nurses that completed an education program on the OB Hemorrhage bundle elements and unit standard protocol? The number of OB nurses that completed training on implicit bias?
P4: Risk Assessment	**Risk Assessment** **The number of mothers had a hemorrhage risk assessment with risk level assigned, performed at least once between admission and birth and shared among the team?**
P5: Quantified Blood Loss	**Measurement of Blood Loss** **The number of mothers that had measurement of blood loss from birth through the recovery period using quantitative and cumulative techniques?**


Process Measures for Hemorrhage
Georgia Collaborative-wide Rate
(April 2018-September 2019)
Rate of Implmentation
100.0%
80.0%
60.0%
40.0%
20.0%
0.0%
Q2 2018
Q3 2018
Q4 2018
Q1 2019
Q2 2019
Q3 2019
70.0%
77.2%
84.4%
73.3%
69.2%
70.1%
63.0%
63.2%
50.4%
58.0%
52.9%
46.4%
38.2%
33.2%
Hemorrhage Provider Education
Hemorrhage/Protocol Provider Education
Hemorrhage Nurse Education
Hemorrhage/Protocol Nurse Education
Hemorrhage Risk Assessment
Blood Loss Measurement


Structure Measures for Hemorrhage
Georgia Collaborative-wide Rate
(April 2018 - September 2019)
Rate of measure completion
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
Q2 2018
Q3 2018
Q4 2018
Q1 2019
Q2 2019
Q3 2019
Time Period
62.7%
76.5%
86.3%
51.0%
64.7%
70.6%
45.1%
63.0%
74.5%
29.6%
57.4%
61.1%
22.2%
74.1%
14.8%
33.3%
38.9%
ALL S1: Patient, Family, & Staff Support
ALL S2: Debriefs
ALL S3: Multidisciplinary Case Reviews
HEM S4: Hemorrhage Cart
HEM S5: Unit Policy & Procedure
HEM S6: EHR Integration

Implicit Bias Training Resources

- https://implicit.harvard.edu/implicit/takeatest.html
- https://www.traliant.com/implicit-bias-training-unconscious-bias-training

Future training opportunities:

- Train the trainer
- Online Training
- Annual GaPQC meeting

Implementation of an OB Hemorrhage Risk Tool to Improve the Care of High Risk OB Patients Experiencing a Post-Partum Hemorrhage

CARLOTTA GABRIELE, MSN-ED., RN
GRACE SOBERS, MSN, RN, WHNP-BC

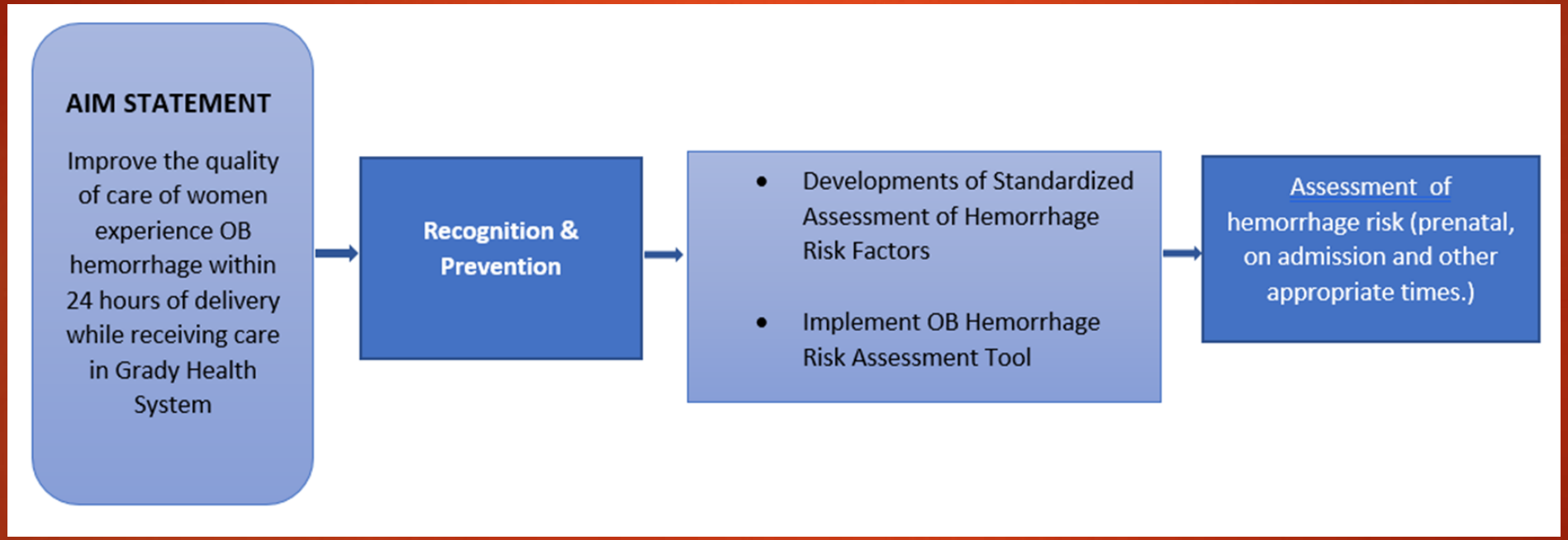
Grady Background

- 970 Bed Public Academic Hospital
- Regional Perinatal Center
- 2500 deliveries per year
- 11% Complicated by PPH

Journey to Excellence

- Emory University
- Morehouse School of Medicine
- Anesthesia
- Nursing Staff
- Nursing Education
- Pharmacy
- HIMT
- Quality Department

Key Drivers


AIM STATEMENT
Improve the quality of care of women experience OB hemorrhage within 24 hours of delivery while receiving care in Grady Health System
Recognition & Prevention
Developments of Standardized Assessment of Hemorrhage Risk Factors
Implement OB Hemorrhage Risk Assessment Tool
Assessment of hemorrhage risk (prenatal, on admission and other appropriate times.)

Risk Assessment Tool

AWHONN

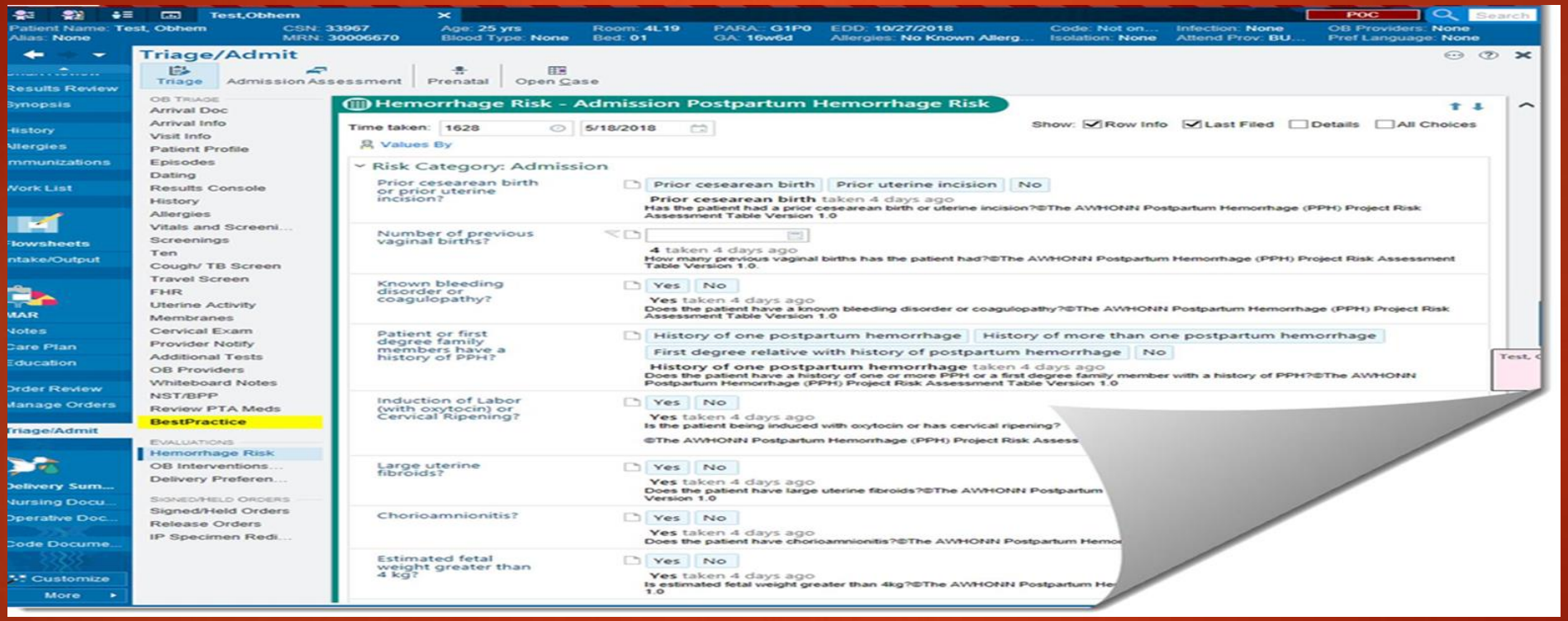
POSTPARTUM HEMORRHAGE (PPH) RISK ASSESSMENT TABLE • 1.1

CLINICIAN GUIDELINES:

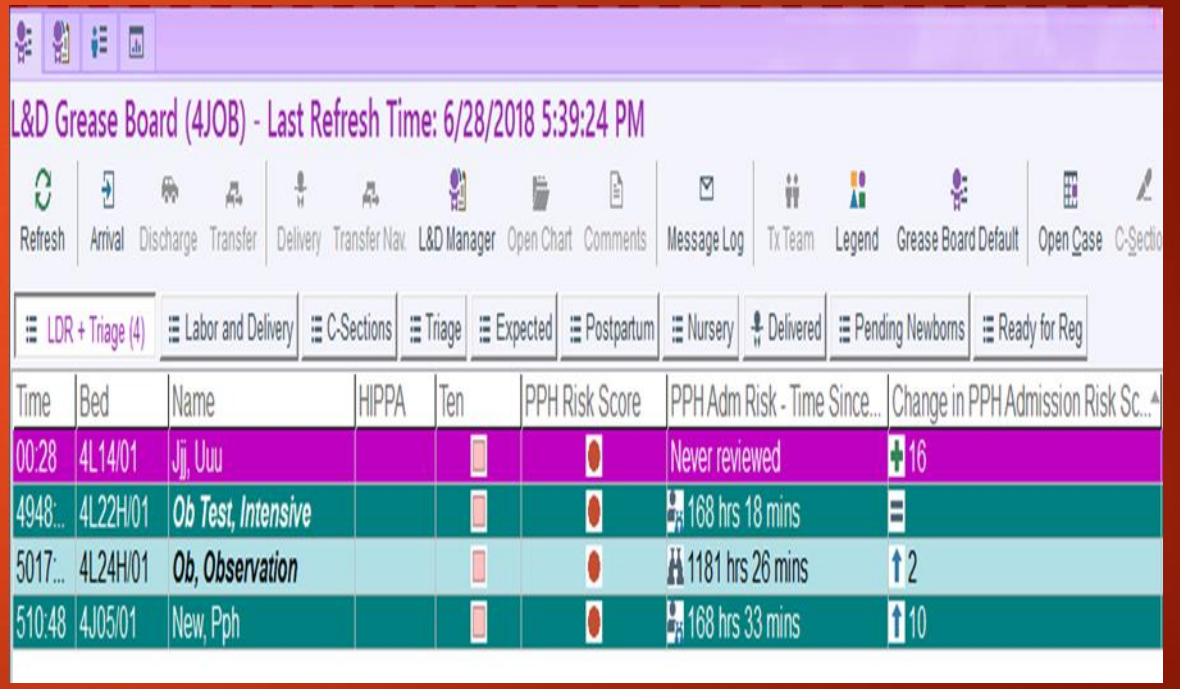
- Each box ❑ represents ONE risk factor. Treat patients with 2 or more medium risk factors as high risk.
- Prenatal risk assessment is beyond the scope of this document, however performing a prenatal hemorrhage risk assessment and planning is highly recommended. Early identification and management preparation for patients with special considerations such as placental previa/accreta, bleeding disorder, or those who decline blood products will assist in better outcomes.
- Adjust blood bank orders based on the patient's most recent risk category. When a patient is identified to be at high risk for hemorrhage verify that the blood can be available on the unit within 30 minutes of a medical order.
- Plan appropriately for patient and facility factors that may affect how quickly the blood is delivered to the patient. For example,
  - Patient issues: Pre-existing red cell antibody
  - Facility issues: Any problems at your facility related to the blood supply and obtaining blood

RISK CATEGORY: ADMISSION			
	Low Risk	**Medium Risk** (2 or More Medium Risk Factors Advance Patient to High Risk Status)	**High Risk**
	❑ No previous uterine incision	❑ Induction of labor (with oxytocin) or Cervical ripening	❑ Has 2 or More Medium Risk Factors
	❑ Singleton pregnancy	❑ Multiple gestation	❑ Active bleeding more than "bloody show"
	❑ ≤4 Previous vaginal births	❑ >4 Previous vaginal births	❑ Suspected placenta accreta or percreta
		❑ Prior cesarean birth or prior uterine incision	❑ Placenta previa, low lying placenta
	❑ No known bleeding disorder	❑ Large uterine fibroids	❑ Known coagulopathy
	❑ No history of PPH	❑ History of one previous PPH	❑ History of more than one previous PPH
		❑ Family history in first degree relatives who experienced PPH (known or unknown etiology with possible coagulopathy)	❑ Hematocrit <30 AND other risk factors
		❑ Chorioamnionitis	❑ Platelets <100,000/mm3
		❑ Fetal demise	
		❑ Polyhydramnios	
Anticipatory Interventions Monitor patient for any change in risk factors at admission and implement anticipatory interventions as indicated.			
❑ **Blood Bank Order:** Change blood bank orders as needed if risk category changes	❑ **Clot Only (Type and Hold)**	❑ **Obtain Type and Screen**	❑ **Obtain Type and Cross (See Clinical Guidelines)**
		❑ Notify appropriate personnel such as the Provider (OB MD/CNM), Anesthesia, Blood Bank, Charge Nurse, Clinical Nurse Specialist	❑ Notify appropriate personnel such as the Provider (OB MD/CNM), Anesthesia, Blood Bank, Charge Nurse, Clinical Nurse Specialist
			❑ Consider delivering at a facility with the appropriate level of care capable of managing a high risk mother

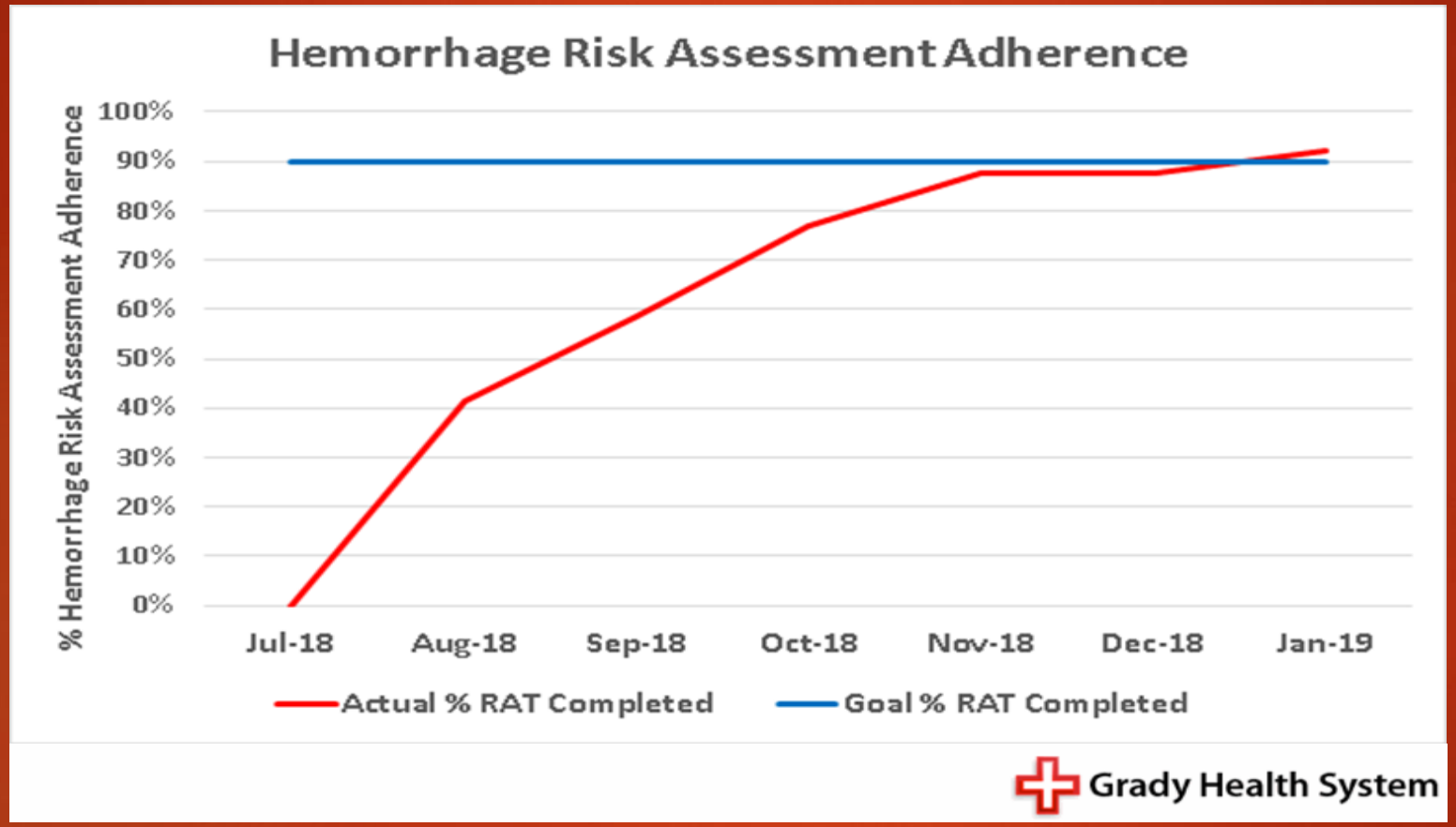
Risk Assessment Tool



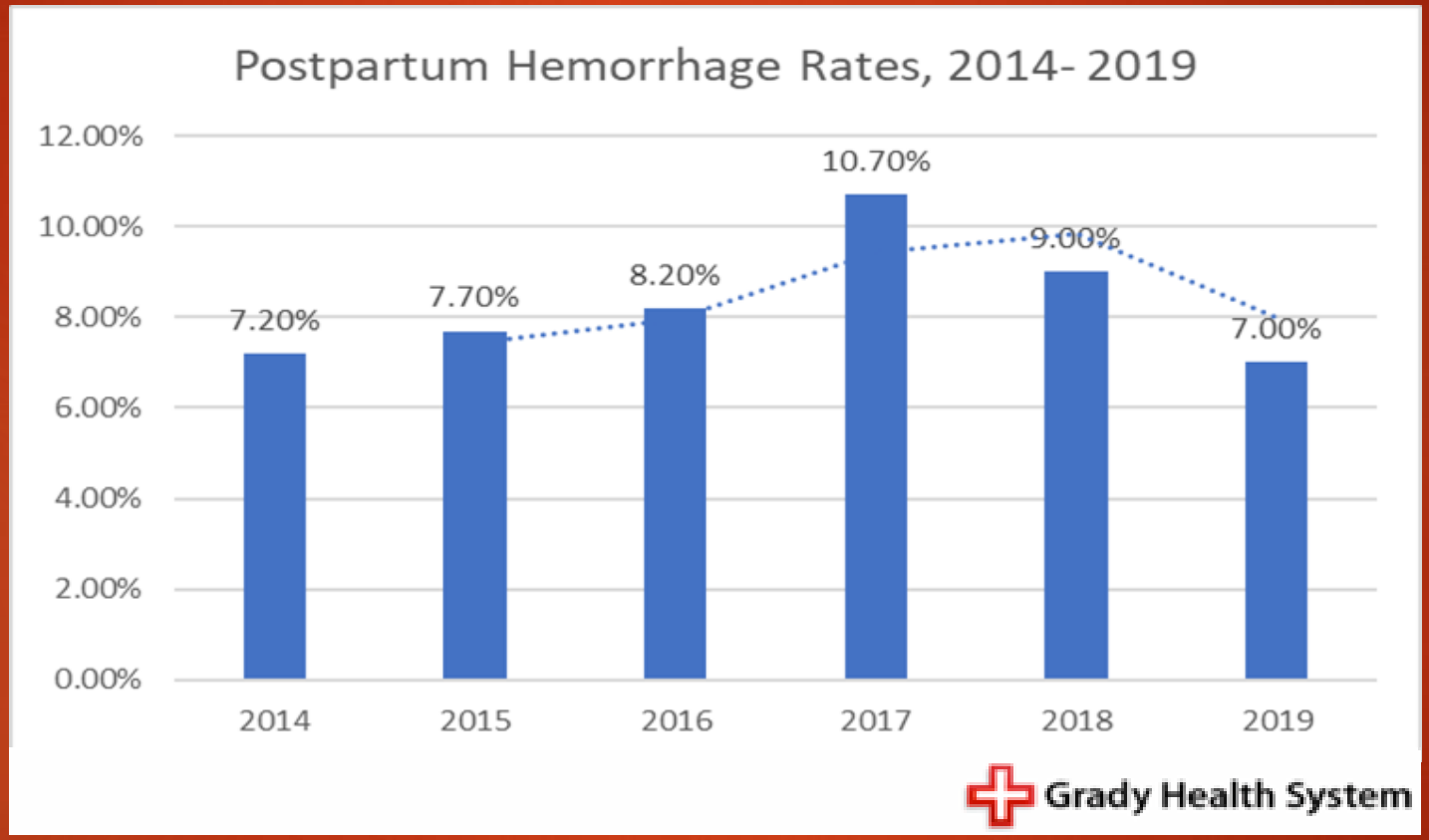
Implementation



Results


Hemorrhage Risk Assessment Adherence
% Hemorrhage Risk Assessment Adherence
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Jul-18
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Jan-19
Actual % RAT Completed
Goal % RAT Completed
Grady Health System

Results


Postpartum Hemorrhage Rates, 2014- 2019
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
7.20%
7.70%
8.20%
10.70%
9.00%
7.00%
2014
2015
2016
2017
2018
2019
Grady Health System

Conclusion

OB Hemorrhage QI Team

Michael K. Lindsay, MD MPH

Kathlyn Hutchins, RN

Terri Farrington, RN

Carlotta Gabriele, MSN

Naima T. Joseph, MD MPH

Luanne Lewis

Nikkia H. Worrell, MD

Melanie Schmidt, PharmD

E. Britton Chahine, MD

Victoria L. Green, MD

Penny Castellano, MD

Janice Collins, CNM

Christine Faya, MD

Rosiland Harris, DNP

Department of Nursing Education Practice and Research

Grady Memorial Hospital Executive Leadership

References

Berg, C. J., Harper, M. A., Atkinson, S. M., Bell, E. A., Brown, H. L., Hage, M. L., ... Callaghan W.M. (2005). Preventability of pregnancy-related deaths: Results of a statewide review.

California Department of Public Health. (2011). The California Pregnancy-Associated Mortality Review. Report from 2002 and 2003 maternal death reviews. Sacramento, CA: Author. Retrieved from http://www.cdph.ca.gov/data/statistics/Documents/MO-CAPAMR-Maternal Death Review-2002-03.pdf

Creanga AA, Syverson C, Seed K, Callaghan WM. Pregnancy-related mortality in the United States, 2011–2013. *Obstet Gynecol.* 2017;130:366–373.

Dahlke, J. et al. (2015). Prevention and management of postpartum hemorrhage: a comparison of 4 national guidelines. Am J Obstet Gynecol, 2015;213:76.el10.

Della Torre, M., Kilpatrick, S. J., Hibbard, J. U., Simonson, L., Scott, S., Koch, A., ... Geller, S. E. (2011). Assessing preventability for obstetric hemorrhage. American Journal of Perinatology, 28(10), 753–760. doi:10.1055/s-0031-1280856

Obstetrics & Gynecology, 106, 1228–1234. doi:10.1097/ 01.AOG.0000187894.71913.e8 Bingham, D. (2012). Eliminating preventable hemorrhage-related maternal mortality and morbidity. JOGNN, 41, 529-530. DOI: 10.1111/j.1552-6909.2012.0137.x

The Centers for Disease Control and Prevention. Pregnancy Mortality Surveillance System. Retrieved on September 21, 2018 from: https://www.cdc.gov/reproductivehealth/maternalinfanthealth/ pregnancy-mortality-surveillance-system.htm

Augusta University Medical Center: OB Emergency Department

Carla Allen, MSN, RNC-OB

12/3/2019

Objectives

- How & why we formalized triage into an OB Emergency Department (OBED)
- The screening tools we use for OBED
- Impacts on maternal care by addressing the care of the postpartum patient

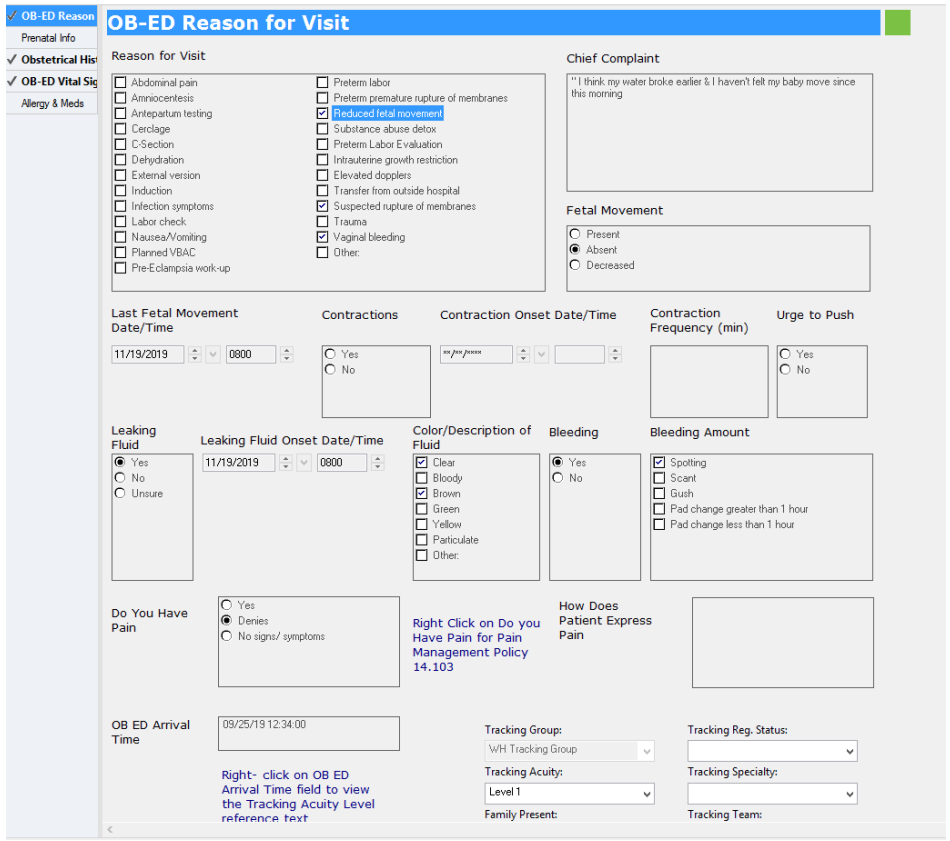
Background

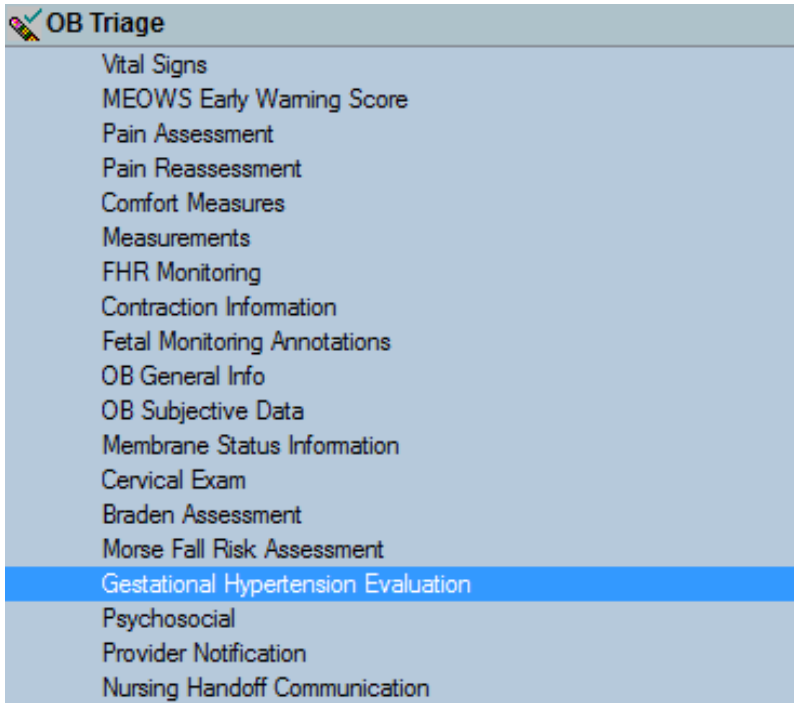
- Augusta University Medical Center (AU Health)is the regional Perinatal Center for the East Central region of Georgia
- We are an academic medical center with approximately 1400 deliveries annually
- New service line: Obstetrics Emergency Department Est. July 2018
  - The first 24/7 Obstetrics Emergency Department (OB ED) in Augusta, Georgia dedicated to treating unexpected pregnancy and post delivery issues
  - Georgia has one of the highest maternal morbidity & mortality rates in the nation so along with pregnant women over 20 weeks we also see postpartum women up to 6 weeks out from delivery

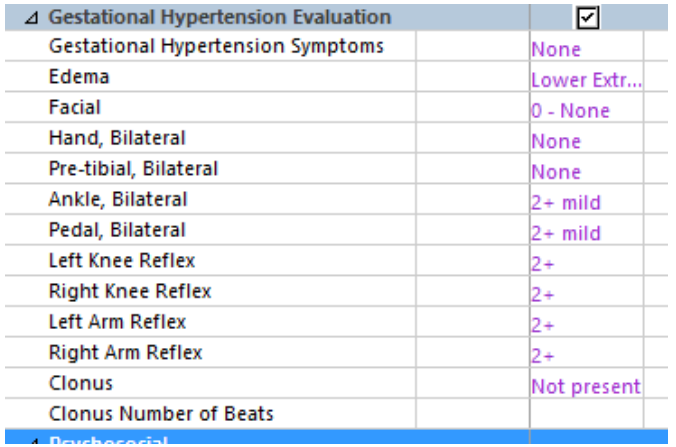
Formalizing the OBED

- Interdisciplinary planning meetings began in January 2018
- Nursing superusers identified
  - Policy and workflow development
  - Implementation plan for staffing
- All nurses completed the AWHONN Maternal Fetal Triage Index Training in May-June 2018
- Purchased ultrasound machine & infant warmer dedicated for this area
- Marketing campaign June-July 2018

Triage Assessments



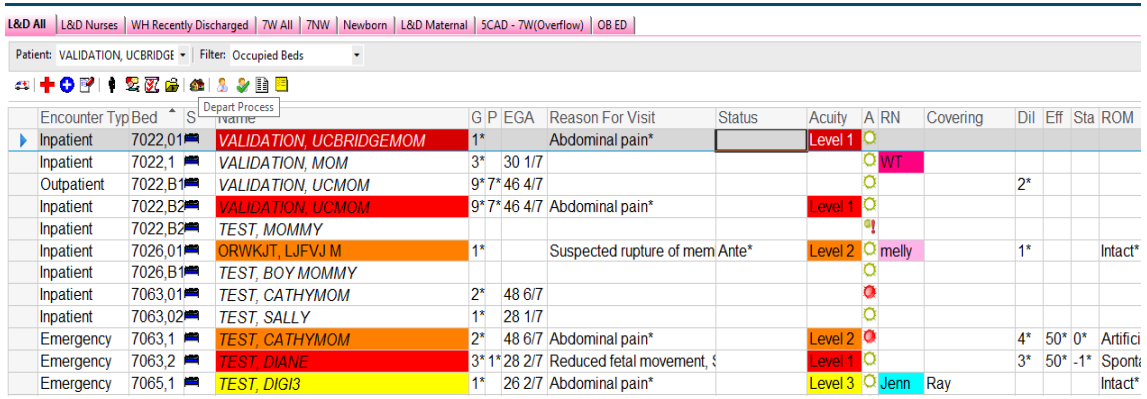




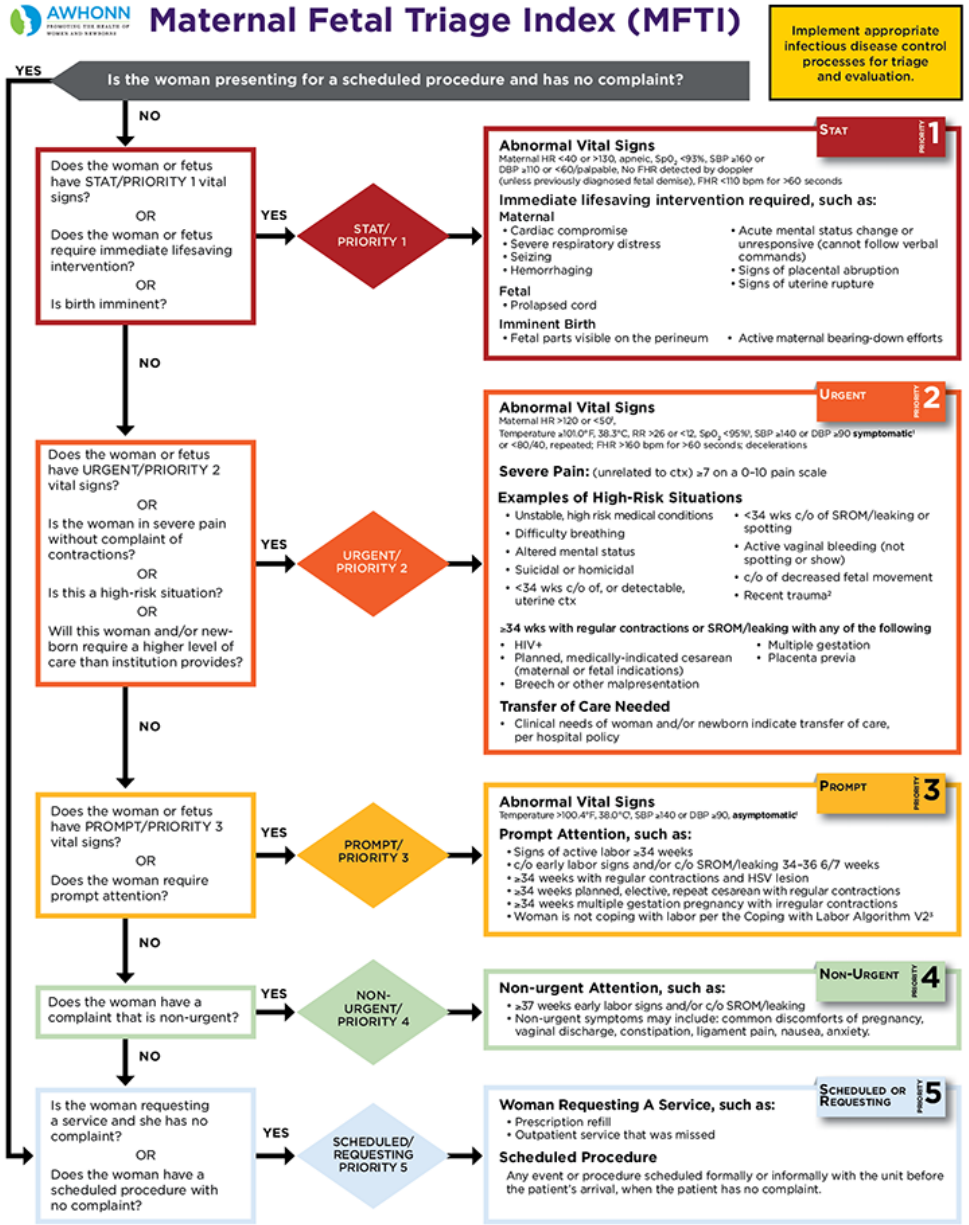
Level of Acuity is assigned based on Chief Complaint using MFTI Algorhithm

- Level 1 is the most acute & should be seen IMMEDIATELY

The level of acuity then flows to our tracking board which alerts the MD of level based on shading on the tracking board (this mimics the MFTI algorithm)

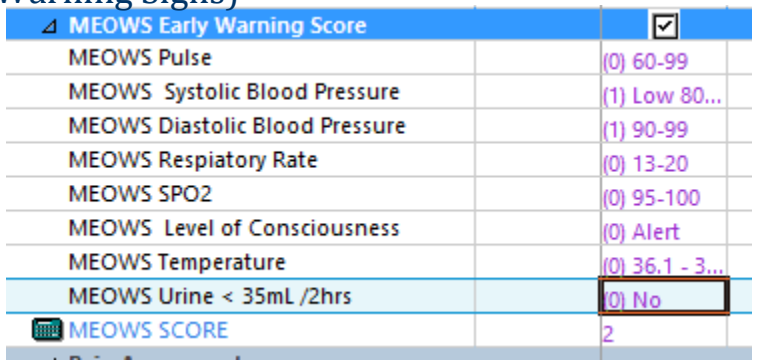


Encounter Typ	Bed	S	Name	G	P	EGA	Reason For Visit	Status	Acuity	A	RN	Covering	Dil	Eff	Sta	ROM
Inpatient	7022,01		VALIDATION, UCBRIDGEMOM	1*			Abdominal pain*		Level 1							
Inpatient	7022,1		VALIDATION, MOM	3*		30 1/7					WT					
Outpatient	7022,B1		VALIDATION, UCMOM	9*	7*	46 4/7							2*			
Inpatient	7022,B2		VALIDATION, UCMOM	9*	7*	46 4/7	Abdominal pain*		Level 1							
Inpatient	7022,B2		TEST, MOMMY													
Inpatient	7026,01		ORWKJT, LJFVJ M	1*			Suspected rupture of mem	Ante*	Level 2		melly		1*			Intact*
Inpatient	7026,B1		TEST, BOY MOMMY													
Inpatient	7063,01		TEST, CATHYMOM	2*		48 6/7										
Inpatient	7063,02		TEST, SALLY	1*		28 1/7										
Emergency	7063,1		TEST, CATHYMOM	2*		48 6/7	Abdominal pain*		Level 2				4*	50*	0*	Artifici
Emergency	7063,2		TEST, DIANE	3*	1*	28 2/7	Reduced fetal movement,		Level 1				3*	50*	-1*	Sponta
Emergency	7065,1		TEST, DIGI3	1*		26 2/7	Abdominal pain*		Level 3		Jenn	Ray				Intact*



MEOWS Scoring

Vital Signs pull from initial triage data & nurse completes the MEOWS (Medical Early Obstetrical Warning Signs)



MEOWS Reference Score

TOTAL MEOWS SCORE	RESPONSE
0-2	• Continue monitoring at ordered frequency.
3-5	• Notify Primary RN of results, including pain & urine output. Re-evaluate VS in 4 hours. If patient has score of 4-5 nurse should assess patient to determine if additional monitoring or physician notification is necessary.
6-8	• Notify Primary RN of results. RN to bedside within 10 minutes to further assess pain and urine output to evaluate impacts on MEOWs score. Re-evaluate VS in 1 hour. If patient has 3 consecutive scores of >6, consider moving patient to higher level of care. Immediate notification of resident MD required if Oliguria (<35ml in 2 hours), maternal agitation/confusion, or patient with hypertension reporting headache or shortness of breath.
9-21	• CALL PRIMARY RN & CHARGE NURSE IMMEDIATELY. Notify Attending MD immediately (should be available at bedside within 10 minutes). Recommended RRT & possible move to higher level of care.

MEOWS SCORE FOR PROTOCOL

SCORE	3 (Low)	2 (Low)	1 (Low)	0	1 (High)	2 (High)	3 (High)
PULSE	<30	30-40	41-59	60-99	100-120	121-129	130-300
SYSTOLIC BLOOD PRESSURE	40-70	71-79	80-89	90-139	140-150	151-160	161-360
DIASTOLIC BLOOD PRESSURE				40-89	90-99	100-110	111-360
RESPIRATORY RATE		0-8	9-12	13-20	21-29	30-35	36-100
SPO2	<85	86-90	91-94	95-100			
LEVEL OF COUSCIOUSNESS				Alert	Reacts only if aroused	Agitation, Confusion	Unresponsive
TEMPERATURE		< or equal to 35.0	35.1-36.0	36.1-37.9	38.0-38.5	>38.5	
URINE				No			Yes

Post Partum Hemorrhage Risk Scoring

- Pre-Birth Scoring
  - Antepartum Patients
  - Intrapartum Patients
  - Done on Admission & at least every shift

- Post—Birth Scoring
  - Postpartum Patients
  - Done immediately post delivery

- Scores create an icon for Medium & High Risk Patients that flow to the tracking board

PPH Risk Assessment, Pre-Birth	
Previous Uterine Incision	
Gestation Description	
Previous Vaginal Deliveries	
Bleeding Disorder	
History of PPH	
Family History of PPH	
Induction of Labor	
Large Uterine Fibroids	
Chorioamnionitis	
Estimated Fetal Weight	
BMI	
Polyhydramnios	
Bleeding	
Placental Complications	
Labs	
Length of Labor	
Augmentation of Labor	
Pre-Birth Risks	
PPH Risk Factor Score, PRE-BIRTH	

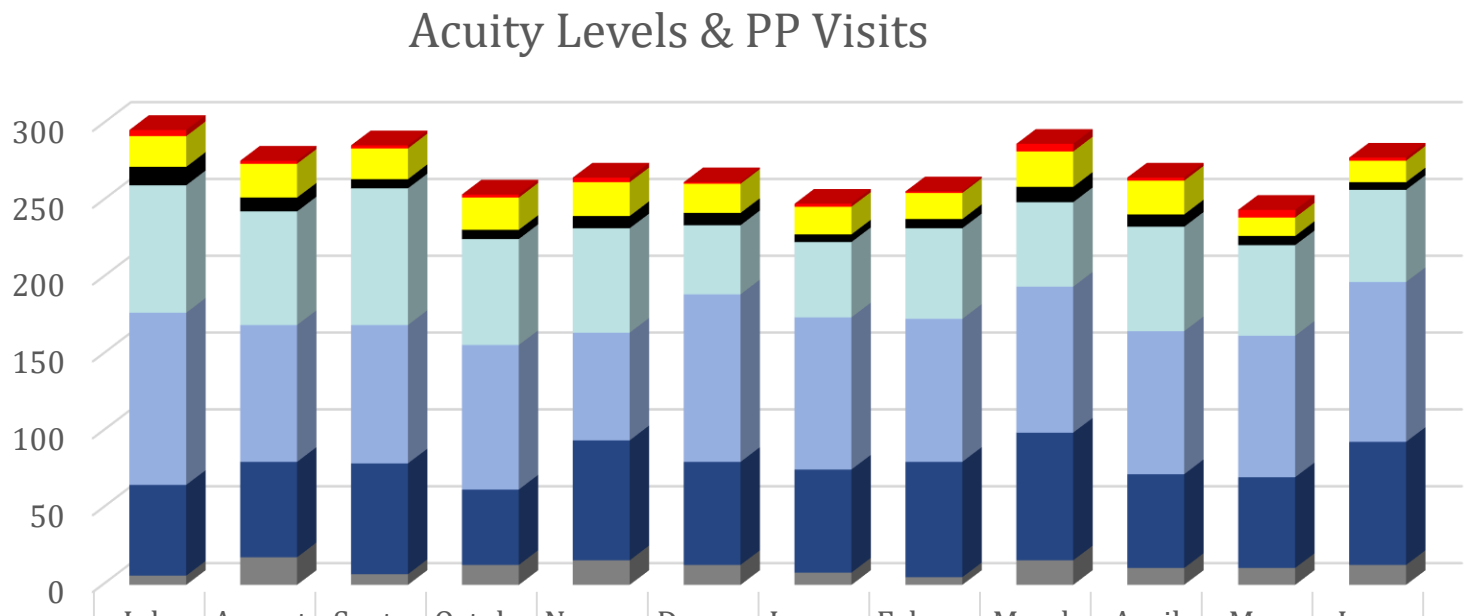
PPH Risk Assessment, Post-Birth	
Large Uterine Fibroids	
Chorioamnionitis	
BMI	
Lacerations	
Delivery Risks	
Delivery Complications	
PPH Risk Factor Score, POST-BIRTH	

L&D All | L&D Nurses | WH Recently Discharged | 7W All | 7NW | Newborn | L&D Maternal | SCAD - 7W(Overflow) | OB ED

Patient: TEST, CATHYMOM (2) Filter: Occupied Beds

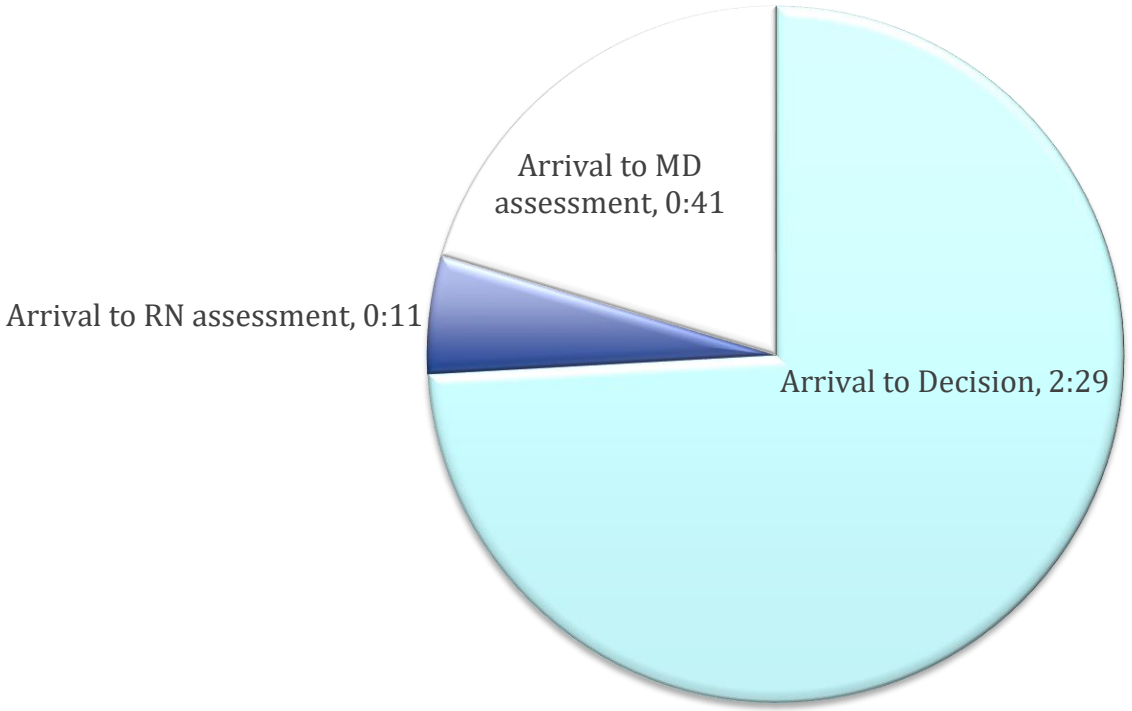
Encounter Typ	Bed	S	Name	G	P	EGA	Reason For Visit	Status	Acuity	A	RN	Covering	Dil	Eff	Sta	ROM	Color	Epidural	To Do	IV Stop	Communications	NR
Inpatient	7022,01		VALIDATION, UCBRIDGEMOM	1*			Abdominal pain*		Level 1													
Inpatient	7022,1		VALIDATION, MOM	3*		30 1/7					WT											
Outpatient	7022,B1		VALIDATION, UCMOM	9*	7*	46 4/7							2*									
Inpatient	7022,B2		VALIDATION, UCMOM	9*	7*	46 4/7	Abdominal pain*		Level 1													
Inpatient	7022,B2		TEST, MOMMY																			
Inpatient	7026,01		ORWKJT, LJFVJ M	1*			Suspected rupture of mem	Ante*	Level 2		melly		1*			Intact*	Clear*					
Inpatient	7026,B1		TEST, BOY MOMMY																			
Inpatient	7063,01		TEST, CATHYMOM	2*		48 6/7																

OBED Patient Data



	July	August	September	October	November	December	January	February	March	April	May	June
AMA/LWBS	4	2	2	2	3	1	2	1	5	2	5	2
PP Visits	20	22	20	21	22	19	18	17	23	22	12	14
Level 5	12	9	6	6	8	8	5	6	10	8	6	5
Level 4	83	74	89	69	68	45	49	59	55	68	59	60
Level 3	112	89	90	94	70	109	99	93	95	93	92	104
Level 2	59	62	72	49	78	67	67	75	83	61	59	80
Level 1	6	18	7	13	16	13	8	5	16	11	11	13

Hours Data


Arrival to MD assessment, 0:41
Arrival to RN assessment, 0:11
Arrival to Decision, 2:29

Additional Actions

- Review stats monthly at our Perinatal Quality Meeting
- Continue to work on get <2hrs arrival to decision average
- Use Post-Birth Warning Tools & OBED information Card to direct Postpartum patients back to OBED for care

Questions??

Contact Info:
Carla Allen – Nurse Manager
AUHealth Perinatal Services
callen@augusta.edu

Hemorrhage Education Plan

Webinar:

- January 7, 2020: Implicit Bias, Dr. Magloire, Grady Health Systems

Regional Training:

- Clinical Simulation Drills and Debrief

Joining the GaPQC Team!


SAVE THE DATE
APRIL 23-24, 2020
Georgia Perinatal Quality Collaborative
3rd Annual Meeting
Atlanta, GA
Agenda and registration information to follow.
For more info: Visit www.georgiapqc.org or email info@georgiapqc.org
GaPQC
GEORGIA PERINATAL QUALITY COLLABORATIVE

GaPQC

GEORGIA PERINATAL QUALITY COLLABORATIVE

Questions?