Maternal Mortality: Hypertension

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
Evangelical Community Hospital	* Completed standardized order set * Standardized assessment and treatment protocol formatted in quick access manual * Standardization of patient placement * Provided staff education for OB, L&D, ER, outpatient educator including providers * Enhanced patient education with comprehensive discharge instructions * Data collection * Evaluation of data * Report findings to multidisciplinary team and PA PQC dashboard	
Geisinger	* Implementing checklist for HTN Crisis * Providing simulation & drills for education * Reviewing medication access * Creating order sets to avoid unnecessary clinical variation	
Jefferson Health-Abington Hospital	* Standardized guidelines for PP follow-up (current focus on HTN & PPD) * Inter-professional postpartum rounding on inpatient Mother-baby units * Developing standardized guidelines for postpartum follow-up	
Penn Medicine-Chester County Hospital	* Preeclampsia Pathway * Hypertensive Management Pathway * Postpartum Hypertension Pathway * Adoption of Heart Safe Motherhood	
Punxsutawney Hospital	* Develop order sets for the ED for timely treatment of Hypertensive pregnant/postpartum patients * Education of ED staff/physicians on identifying & treating Hypertensive pregnant/postpartum patient using ACOG & AIM guidelines	
St. Luke's University Health Network	* Verified with ED if current screening process is to determine if patient recently had a baby * Enlisted our EPIC IT team members to assist us with building a screening tool to be used in ED * Contacted WellSpan contact to get input on what they have included in their screening tool * Ordered AWHONN magnets to distribute at discharge for mothers to put on fridge	

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
UPMC Womens Health Service Line	* Standardized: • Diagnostic criteria, monitoring & treatment of severe preeclampsia/eclampsia, algorithms, order sets, protocols, staff & provider education, unit-based drills, debriefs. Process defined for timely triage & inpatient, outpatient, & ED evaluation. Medications for treatment stocked & immediately available. * Recognition & Prevention: • Protocol for measurement & assessment of BP & labs for all *pregnant & postpartum women* ○ Prenatal & postpartum patient education on signs & symptoms of hypertension & preeclampsia ○ Implemented Vivify for outpt. B/P monitoring & symptomatology * Response: • Protocols for management & treatment of hypertension • Every 4 hr. patient safety rounds in L&D • Post discharge process for monitoring blood pressures • Vivify patient portal monitored through Call Center if B/P elevated reaches out to physician on call to respond to the patient's needs M-F 8am-4:30pm • Support plan for pts & families * Timely scheduled follow-up appts • Implementation of the Nurse Driven Protocol for ordering Vivify • Conducting Service Line Gap Assessment (2020 The Joint Commission Standards) * Developing a Service Line MMRC * Reporting: • Multidisciplinary review of all severe hypertension/eclampsia event cases * Post event debriefs • Team monitoring outcomes & metrics, communication to leaders	
WellSpan Health	* Education to staff specific to the AIM bundle * Revision of nursing policy specific to the care of women with preeclampsia/severe hypertension * Preeclampsia Order Set severe hypertension * Collaboration with ER-education of ER providers regarding definition of severe hypertension in pregnancy/postpartum, importance of early obstetrics consults in this population, timely treatment of severe hypertension, update early policy to include care of postpartum women * Update EPIC to clearly identify obstetrical history * Bracelets * Looking at SMM and preeclampsia by Race * Reviewing data on severe hypertension treatment	

Maternal Mortality: Hemorrhage

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
Jefferson Health-Thomas Jefferson University Hospital	* Reviewed data of hemorrhage * Calculator updated * Inservice hemorrhage and emergency cards * Simulation completed in Simulation Center October 2019 * Requested review and update to Risk Assessment in EPIC	
Penn Medicine-Lancaster General/Women and Babies	* Train champions to facilitate QBL process * Investigate EMR tools for hemorrhage risk assess * Inventory tools/equipment required for QBL process * Establish a method for reporting & determining baseline data	
Penn Medicine-Pennsylvania Hospital	* Now include the risk assessment in every pre-op huddle (seen reduction in use of massive transfusion protocol) * Increase in communication of risk assessment & decrease in the need for the massive transfusion protocol	
Penn State Health: Hershey Medical Center & Children's Hospital	* Assessment by provider using an evidence-based tool * Risk Assessment score placed in EMR and on Chalk board * Postpartum Hemorrhage kit with emergency medications present at every delivery * Postpartum Hemorrhage Cart containing guideline for actions and emergency supplies immediately available * Simulation exercises planned for the future	
Temple University Hospital	* Risk assessment for every patient * Implement the hemorrhage protocol * Hemorrhage cart * Running Drills * Cultural diversity training * Drug Screening * Pain Management protocol * NAS Protocol	

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
UPMC Womens Health Service Line	* Standardized hemorrhage cart to include: • supplies, checklist, algorithms, hemorrhage medication kit, response team, advanced gynecologic surgery, massive transfusion protocols, unit guidelines, unit-based drills with post-drill debriefs, & staff/provider education * Recognition & Prevention: • Standardized assessment tool ○ prenatally, admissions, other appropriate times ○ measurement from EBL to QBL & defined quantity * Response: • Support programs for patients, families, staff • Conducting service Line Gap Assessment (2020 The Joint Commission Standards) • Developing a Service Line MMRC * Reporting: • Event reporting to Risk/Quality Department; • Multidisciplinary review for opportunities in systems & processes; • Monitor outcomes & metrics; • Report to various committees	

Maternal OUD

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
Allegheny Health Network	* Identify a standardized tool to use at all OB care practices by June 30th * Work with the IT team to build the screening tool within the Welcome tablet for consistent screening of all AHN patients * Meet with IT data collection/reports team to review PAPQC quality metrics for OUD/SUD	
Commonwealth Health- Moses Taylor Hospital	* Introduction of a drug screening tool (5P's) distributed to a single provider for the patient's initial prenatal visit * Intervention- 30-day Duration	
Geisinger	* Universal screening for SUD with a validated screening tool • Pilot the NIDA-ASSIST	
Guthrie Hospital	* Finding a validated screening tool- chose 4P's tool * Educating staff and training on chosen tool * Implement screening of all pregnant women at least once during prenatal care (to start)	

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
Jefferson Health-Abington Hospital	* Universal Screening with 5Ps tool at first prenatal visit & all triage & inpatient admissions to L&D	
Lehigh Valley Health Network-Pocono	* Educate all prenatal care providers on 4P's scripting * Educating on referral process to LSW * Provide educational material to pregnant women with OUD	
Main Line Health (MLH)	* Working with MLH Legal and Clinical Informatics for approval to adopt 5 Ps Risk Assessment * Segment % Screened data by Provider and Investigate who is *not* being Screened? * Investigate how to get SUD Diagnosis Data from EPIC * Analyze PA PQC Baseline Survey Results & Best Practices to identify Gaps in Care/Education * Social Work Analysis of Outpatient Resources Across 4 Hospitals and 4 Geographic Counties: Goal to Optimize & Standardize	
Penn Medicine-Chester County Hospital	* Completed process mapping, gap analysis, Affinity Diagram, & brainstorming * Evaluated screening tools; Agreed to use 5P's screening tool * Engaged County & Community representatives	
Penn Medicine-Hospital of the University of Pennsylvania	* Creation of a template for a prenatal consult for pregnant women in OUD * Educate/email OB staff about need for prenatal consultation when able (& why) * Assigned EI referral (through EMR) to neonatal NP who tracks all OENs in our hospital	
Penn State Health: Hershey Medical Center & Children's Hospital	* Gain consensus & approval on a validated screening tool to screen all pregnant women for substance use * Draft a paper patient-friendly form to screen patients at the time of the first prenatal appointment *Develop an ambulatory tool- OUD worklist to enhance the workflow & care of patients with OUD & to enhance data collection capabilities * Complete staff education regarding: • 5Ps tool & screening rationale • 5Ps screening process & SBIRT • education on the OUD worklist & documentation * Complete follow-up phone calls & track data via the ambulatory tools-OUD worklist	

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
St. Clair Hospital	* Began using 5Ps tool for outpatient prenatal visits & inpatient admissions to our hospital in June 2019 * Coordinated with affiliated OB offices for them to utilize 5Ps tool for screening their pregnant patients in the office setting, starting with the 1st prenatal visit & then again in the 2nd & 3rd trimester. * Provided OB offices with referral forms to be faxed to our Level 2 Nursery Coordinator for follow-up care. When our nursery coordinator receives a referral, she reaches out to the family to discuss the care they can expect when they arrive for their delivery. * Educated inpatient nursing staff on 5Ps screening tool & implemented it to be utilized on all patients admitted.	
UPMC Womens Health Service Line	* Access: • Maternal medical support to prevent withdrawal during pregnancy • On call service for all UPMC hospitals 24/7 • Provide regular prenatal and other medical appointments • 4 Outreach Community Centers • Same day on next day within 24-hour appointments * Prevention: • Community education • Obstetrical provider education • Minimize fetal exposure to Opioid substances • Early engage mother as a leader in her recovery • Narcan “to go” * Response: • Pregnancy Recovery Center (Prenatal & Postpartum) • UPMC Healthplan engagement ○ Support programs for patients, families, staff • Multidisciplinary team OB, MFM, SW, Nurses, Mental Health therapists • Methadone Conversion to buprenorphine from inpt. to outpt. • Outpatient buprenorphine medication treatment • Warm hand overs • ED Physician and APP trained in buprenorphine treatment * Reporting: Centers of Excellence • State, Allegheny County, UPMC Healthplan • Report as appropriate to various committees	

Neonatal Abstinence Syndrome (NAS)

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
Commonwealth Health- Moses Taylor Hospital	* Revised NAS protocol for medication administration & weaning process for NICU admissions	
Doylestown Hospital	* Educated all staff on Eat, Sleep, Console Approach, will perform inter-rater reliability assessment. * Created and currently use NAS Order Sets with standardized medication dosing and faster weaning. * Educated staff and parents regarding non-pharmacological interventions. Empower parents to provide these interventions to their baby. * Reaching out to obstetric providers to refer pregnant women with OUD to hospital team in order to begin prenatal education, tour unit and discuss care of infant prior to delivery.	
Einstein Medical Center Philadelphia	* Create pamphlet for families * Provide anticipatory guidance to families during prenatal visits * Chart review for adherence to NAS protocols * Create OB trigger at 28 weeks for NICU consult * Obtain prenatal joint medicine/nursing consult: Create template for this team consult * Add Picker-type question to discharge phone calls	
Einstein Medical Center Montgomery	* Multidisciplinary monthly meetings to improve all 3 focus areas * NAS pamphlets for OB; presenting info at their monthly meeting * Transportation and Food Vouchers for parents to stay with infants * Actively educating staff to transition to Eat, Sleep, Console * Supportive care equipment (blankets, MamaRoos, Ergo Baby, etc) * Attending Plan of Safe Care meetings * Developing both EMCM hospital and CHOP Network policy for ESC * Breastfeeding "Traffic Lights" * Community outreach to Methadone Clinic * Infant massage training * Facility enhancements	
Jefferson Health – Abington Hospital	* Implementation of Eat, Sleep, Console tool for NAS assessment	
Mount Nittany Health System- Mount Nittany Medical Center	* Invite mothers with welcome brochure * Implement Eat/Sleep/Console * Maximize non-pharmacologic interventions * Consider PRN medication dosing	

Site Name:	Key Interventions:	This is what I learned from my peers on this topic:
Penn Medicine-Pennsylvania Hospital, Newborn Medicine	* Review pharmacologic treatment for every OED newborn from 3/1/2019 - 8/31/2019 to determine total medication use & weaning process	
Penn State Health: Hershey Medical Center & Children's Hospital	* Refresher education * Plan for huddles / collaboration of scoring at times of key decisions - Identification of champions/ team members to be included in huddles - Additional education for huddle team members	
St. Luke's University Health Network	* Working with IT to create an EPIC report to accurately identify any babies with NAS & who are affected by OUD * PA PQC core team: working on completing the required NAS education to build competence & consistency within our NAS scoring throughout the network	
UPMC Womens Health Service Line	* Access: • Maternal medical support to prevent withdrawal during pregnancy; • Provide regular prenatal & other medical appts. * Prevention: • Minimize fetal exposure to illicit substances; Engage mother as a leader in her recovery * Response: • Newborn pharmacological treatment protocol in place; • Parent Partnership Unit (PPU) Eat, Sleep, Console; • Cuddler Program; • Increased lactation education & support; • Social service support; • Behavioral Health assistance; Buprenorphine management; • Longer gestational time till delivery * Reporting: • PA DOH of all NAS occurrences; • Internal leadership & committees (NICU)	
Wayne Memorial Hospital	* Create & use standardized coding & documentation for SEN's & NAS including specific ICD-10 codes for OEN's * Educate staff regarding OEN & NAS, trauma informed care & MDWISE guidelines * Develop screening criteria for prenatal identification of infants at risk for NAS * Provide family education about NAS & what to expect	