### **Maternal Mortality: Hypertension**

Site Name:	Key Interventions:
Allegheny Health	Provide each antepartum/postpartum elevated BP/pre-eclamptic discharged patient with automated BP cuff DME
Network- Saint Vincent	to take, track BP's outside of the hospital. (Target go live September 2020)
Hospital	<ul> <li>Pre-eclampsia specific discharge instruction sheets for elevated BP/pre-eclamptic post-birth patients with provider indicated range of BP expectations. <i>Implemented July 2020</i></li> </ul>
	<ul> <li>Provide each antepartum/postpartum discharged patient with <u>Save Your Life</u> magnets and <u>Save Your Life</u> flyers (completed January 2019)</li> </ul>
	• Share <u>Save Your Life</u> magnets and <u>Save Your Life</u> flyers with ED providers and staff. (completed December 2019)
	<ul> <li>Signage in each ED triage room to notify any patient to tell/notify ED staff if they have recently given birth. (<u>Save</u> <u>Your Life</u> information - completed December 2019)</li> </ul>
Commonwealth Health-	Provide education to Labor and Mom Baby staff on use of the appropriate size BP cuff and the appropriate way to
Moses Taylor Hospital	obtain a BP.
	Developed scripting to help staff notify MD of severe range BPs.
	Development of Hypertensive Critical Event Checklist.
	• Education of Labor, Mom Baby, ED, and ICU staff on the use of the Hypertensive Critical Event Checklist.
<b>Evangelical Community</b>	We are currently participating in multi-disciplinary meetings to accomplish the following:
Hospital	Patient education opportunities
	Assessment, treatment, and follow-up protocols
	Standardized order set and discharge instructions
	Standardization of patient placement
	Staff education: office, inpatient and ED
	Simulation drills/ Badge buddies
	Data collection
Geisinger	Implementing checklist for HTN Crisis
	Providing simulation & drills for education
	Reviewing medication access
	Creating order sets to avoid unnecessary clinical variation (final phase)
	• Instituted home BP monitoring for patients with a diagnosis of CHTN, GHTN or Pre-Eclampsia/Eclampsia prenatally and postpartum (GHP patients only).

Site Name:	Key Interventions:
Lehigh Valley Health Network- Pocono	<ul> <li>All providers and nursing staff were educated with a Hypertension Disorders in Pregnancy module through GNOSIS</li> <li>Clinical Practice Guidelines (CPG) related to perinatal hypertension reviewed with all OB providers and OB nursing staff with ED providers being educated in the near future</li> <li>Daily interdisciplinary team rounding with reference to CPG's on HTN patients</li> <li>Submitted a Grant proposal collaboratively with ESU to have the nursing students provide blood pressure equipment and education to hypertensive pregnant patients in their home. Patients will proactively self-monitor and report blood pressures to OB office.</li> </ul>
Penn Medicine- Chester County Hospital	<ul> <li>Preeclampsia Pathway</li> <li>Hypertensive Management Pathway</li> <li>Postpartum Hypertension Pathway</li> <li>Adoption of Heart Safe Motherhood</li> </ul>
Punxsutawney Hospital	<ul> <li>Develop order sets for the ED for timely treatment of Hypertensive pregnant/postpartum patients</li> <li>Education of ED staff/physicians on identifying &amp; treating Hypertensive pregnant/postpartum patient using ACOG &amp; AIM guidelines</li> </ul>
St. Luke's University Health Network	<ul> <li>Verified with ED if current screening process is to determine if patient recently had a baby</li> <li>Enlisted our EPIC IT team members to assist us with building a screening tool to be used in ED</li> <li>Contacted WellSpan contact to get input on what they have included in their screening tool</li> <li>Ordered AWHONN magnets to distribute at discharge for mothers to put on fridge</li> </ul>
Tower Health- Reading Hospital	<ul> <li>HTN protocol in place by 7/1/20 (model after the California Quality Collaborative).</li> <li>AWHONN postbirth warnings signs education for staff &amp; for all post-partum patients prior to discharge.</li> </ul>

Site Name:	Key Interventions:
UPMC Womens Health	Readiness:
Service Line	<ul> <li>Diagnostic criteria, monitoring &amp; treatment of severe preeclampsia/eclampsia, algorithms, order sets, protocols, staff &amp; provider education, unit-based drills, debriefs. Process defined for timely triage &amp; inpatient, outpatient, &amp; ED evaluation. Medications for treatment stocked and immediately available.</li> <li>Recognition and Prevention:</li> <li>Protocol for measurement and assessment of BP and labs for all pregnant and postpartum women</li> <li>Prenatal &amp; postpartum patient education on signs and symptoms of hypertension &amp; preeclampsia</li> <li>Implemented remote monitoring for outpatient B/P monitoring and symptomatology</li> <li>Implemented a new daily discern report providing the nursing staff with patients who have blood pressures &gt;</li> </ul>
	150/90 and communicate results to provider for further B/P management and a candidate for further remote monitoring.
	Response:
	<ul> <li>Expanded Nurse Driven Protocol for ordering remote monitoring to Northwest and Horizon.</li> </ul>
	<ul> <li>Provided take home toolkit for participants. Due to Covid-19, more patients are provided blood pressure cuffs in the outpatient setting.</li> </ul>
	Post birth warning sign magnets provided to all mothers upon discharge across UPMC
	Implemented Maternal Fetal Triage Index (MFTI) obstetrical triage rapid assessment tool
	Commercials and interviews by Medical Staff leaders on Maternal Morbidity & Mortality
	Draft system wide policy for assessing and managing HTN
	<ul> <li>Providing patients with purple wrist bands to be worn for the 4<sup>th</sup> trimester as a reminder to tell any healthcare provider they delivered, and issue can be related to the recent delivery HTN. Rolled out systemwide except UPMC Western Maryland</li> </ul>
	<ul> <li>Follow up phone calls for all post-partum discharges and documented in the EHR and concerns routed to the physicians' office staff</li> </ul>
WellSpan Health	Completed:
	Roll out of low dose aspirin screening in epic at the first OB visit
	Free aspirin provided at office
	Roll out of Relias OB education-Hypertension module complete
	Roll out of Meds to Beds (YH) to get severe HTN meds to patients prior to discharge.
	<ul> <li>Implemented new policy on severe hypertension</li> <li>Implemented new physician guidelines on severe hypertension</li> </ul>
	<ul> <li>Implemented new physician guidelines on severe hypertension</li> <li>Implemented severe maternal morbidity reviews</li> </ul>
	<ul> <li>Creation of an Epic grease board alert to OB team of severe HTN and to trigger need for repeat BP measurement in pregnant and postpartum women with severe hypertension</li> </ul>
	Education on SMM for all ED nurses rolled out at each entity
	System wide ED policy approved by the ED system workgroup
	<ul> <li>System wide to pointy approved by the ED system workgroup</li> <li>System wide debriefing form created and approved by the WCSL Education Committee</li> </ul>
	In process:
	Post-birth screen in the ED with BPA (DONE) goes live Sept. 15th

## **Maternal Mortality: Hemorrhage**

Site Name:	Key Interventions:
Einstein Medical Center	Change in workflow for providers and nursing staff
Philadelphia	Solution – educational plan developed for provider and nursing staff
	PPH Scoring in AeCIS
	Solution – Cerner working with CMQCC to standardize scoring for risk tool based on AWHONN project
Jefferson Health- Thomas	Upgrade to EMR allows PPH calculation tool to flow directly into Delivery Summary
Jefferson University	Collect data to determine predictability of PPH score
Hospital	Hemorrhage supplies added to delivery cart for remote deliveries (ICU)
	Assign K2 antepartum hemorrhage module
Penn Medicine- Lancaster	Train champions to facilitate QBL process
General/Women and	<ul> <li>Feedback and process recommendations for clinical workflow</li> </ul>
Babies	o Communication/Education with teams
	Implemented EMR tool for PPH risk assessment (Go-Live 12/2/19)
	Inventory tools/equipment required for QBL process
	<ul> <li>Additional scale obtained for L&amp;D</li> </ul>
	Implemented QBL with EMR calculator (Go-Live 2/2/20)
	<ul> <li>Expanded QBL process to all vaginal delivery patients (7/27/20)</li> </ul>
	<ul> <li>Expand QBL process to include cesarean deliveries (TBD – Dec 2020)</li> </ul>
	Order set changes approved by OBGYN Care Management team
	Established a method for reporting and determining baseline data
	OB Vaginal & Cesarean PPH reports built in EMR
	Blood utilization and uterotonic usage reports
Day and all at a	O QBL report
Penn Medicine-	We implemented a comprehensive Code Crimson policy that includes 3 levels of hemorrhage with specific
Pennsylvania Hospital	assessments, actions, and checklists for each.
	We made significant improvements to our QBL calculator and created a dashboard to measure our progress.
	We educated all nurses and providers working in L&D or Mother Baby and had drills prior to implementation. A debrief occurs after each event.
Penn State Health-	
Hershey Medical Center	Assessment by provider using an evidence- based tool.      Bick Assessment score placed in EMB and an electronic Challeboard.
& Children's Hospital	Risk Assessment score placed in EMR and on electronic Chalkboard.      Destruction Homography With with empressions proceed at every delivery.
& Ciliuren's Hospital	Postpartum Hemorrhage kit with emergency medications present at every delivery.      Postpartum Hemorrhage Cost containing guidelines for actions 8 amorgangy symplics immediately available.
	Postpartum Hemorrhage Cart containing guidelines for actions & emergency supplies immediately available.      Simulation eversions are engine.
St Clair Hospital	Simulation exercises are ongoing.      Unit standard, stage based, electoric homographage emergency management plan with shocklists.
St. Clair Hospital	<ul> <li>Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists</li> <li>Quantification of blood loss</li> </ul>
	• Standards for early warning signs, diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms)
	Establish a culture of huddles for high risk patients & post-event debriefs to identify successes and opportunities

Site Name:	Key Interventions:
Temple University	Risk assessment for every patient
Hospital	Implement the hemorrhage protocol (everything will be consistent)
	Hemorrhage cart (virtual)
	Running Drills
	Cultural diversity training
	Pain Management protocol
Tower Health- Reading	Create standard for prenatal identification of high-risk patients, quantitative blood loss, and early interventions
Hospital	<ul> <li>All nurses, providers attend yearly sim. QBL roll-out scheduled for 3/7/20; Sims – yearly</li> </ul>
	Policy / protocol in place and communicated by 7/1/20
UPMC Womens Health	Readiness:
Service Line	<ul> <li>Includes: hemorrhage cart supplies, checklist, algorithms, hemorrhage medication kit, response team, advanced gynecologic surgery, massive transfusion protocols, unit guidelines, unit-based drills with post-drill debriefs, and staff/provider education</li> <li>Recognition and Prevention:</li> </ul>
	Standardized assessment tool.
	<ul> <li>Admission, other appropriate times</li> </ul>
	Measurement from EBL to QBL & defined quantity
	Response:
	Support programs for patients, families, staff
	Service Line MMRC has been established, meeting held July 13, 2020, 5 cases reviewed.
	July 13, 2020 MMRC findings presented to the UPMC Perinatal PQC
	<ul> <li>Workgroups to be formed to address recommendations. Currently focus on standardized VTE prophylaxis.</li> <li>WHSL Perinatal SUD committee established. Data is reflecting the primary cause of Maternal mortality is related to overdose both at UPMC and state. Multidisciplinary committee membership. Committee meets every 2 months and 2 meetings have been completed.</li> <li>Drug testing policy revised.</li> </ul>
	• Completed tracers for compliance to 2020/2021 The Joint Commission Standards to determine compliance to new TJC standards.
	Draft system wide policy for assessing and managing PPH with hemorrhage simulation scenario
	<ul> <li>Established a Service Line Education Committee to address opportunities identified in the Gap Assessment</li> <li>PPH protocol, addressing key elements within the 4 domains.</li> <li>Standardizing education for all members of the healthcare team</li> </ul>
	Reporting:
	Event reporting to Risk/Quality Department
	Multidisciplinary review for opportunities in systems and processes
	Internal hospital systematic reviews are conducted per occurrence
	Monitor outcomes and metrics via Obstetrical Dashboard all hospitals have direct access
	Report as appropriate to various committees

# **Maternal Mortality: Timely Fourth Trimester Contact**

Site Name:	Key Interventions:
Jefferson Health-	Standardized guidelines for PP follow-up (current focus on Htn and PPD)
Abington Hospital	Interprofessional postpartum rounding on inpatient Mother-baby units
	Developing standardized guidelines for postpartum follow-up

#### **Maternal OUD**

Site Name:	Key Interventions:
Allegheny Health	Have OB offices send list of patients who have positive screen.
Network- Forbes	Social work able to initiate plan before patient even arrives for delivery.
Hospital	<ul> <li>Social work to reach out to other facilities to see how they are working through this.</li> </ul>
Allegheny Health Network- Jefferson	<ul> <li>Work with IT department to develop online tablet-based 5P questionnaire</li> <li>Development of a system-wide algorithm for further assessment and possible treatment based on 5P score. This</li> </ul>
Hospital	includes referral to the Perinatal Home Program within AHN as well as phone consultation by social work
	<ul> <li>5/7/20: Teaching of all providers regarding 5P tool and how/when to implement. Discussed referral for services</li> <li>5/11/20: Implementation of the 5P screening tool starting at all NOB visits for Jefferson Women's Health and Allegheny Health Midwives</li> </ul>
	<ul> <li>5/12/20: Meeting with L&amp;D nurses to discuss 5P tool and review how it will be utilized eventually on admission to L&amp;D.</li> </ul>
	• 7/1/20: Began screening ALL new OB patients and all Post-partum visits at JWH and CNM's office
	7/14/20: Refresher for all nurses at the staff meeting
Allegheny Health	Staff Education – See NAS QI update
Network- Saint Vincent	Provider documentation education (completed)
Hospital	Laminated tip sheets located at provider PC's
	• Incorporate information on SVH Growing Hope program and community support available for addicted moms-to- be
	<ul> <li>Utilization of NAS informational booklet – implemented, access in provider offices and community locations.</li> <li>Distribution of community agency support listing – still being worked on. Target for completion – November 2020</li> </ul>
Geisinger	Implementing universal NIDA screening
	Implementing a clinical pathway for positive screens
	Re-educating on urine toxicology protocol

Site Name:	Key Interventions:
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)
Jefferson Health-	Universal Screening with 5Ps tool at first prenatal visit & all triage & inpatient admissions to L&D
Abington Hospital	
Lehigh Valley Health	Educate all Prenatal Care Providers on the 4P's and scripting
Network- Pocono	Educate on the referral process to the LSW
	Provide educational materials to pregnant women with OUD
	Created an OB nurse navigator position to follow at risk patients from prenatal through post-partum for compliance
Main Line Health	Revised UDS Policy for Reflex Testing
	Worked MLH Clinical Informatics to enhance Risk Assessment
	Developed Sensitivity Education 2020 Timeline:
	NAS Education Brochure for Parents
	Computer Based Training: Interdisciplinary Providers
	o Grand Rounds with Dr. Gary Stoner
	Social Work Evaluation of Outpatient Resources
Penn Medicine- Chester	Completed process mapping, gap analysis, Affinity Diagram, & brainstorming
County Hospital	Evaluated screening tools; Agreed to use 5P's screening tool
	Engaged County & Community representatives
Penn Medicine- Hospital	Prenatal consultation:
of the University of	Creation of an EMR template for a prenatal consult for pregnant women with OUD
Pennsylvania	Consistent use of NAS pamphlet with consult
	Educated OB staff about need for prenatal consultation when able
	NAS care:
	PAH-specific NAS protocol (vs using CHOPs)
	Guidelines on obtaining UDS for mothers and infants just went live
	El referral:
	Standardized EI referral (via EMR) by assigning neonatal NP who tracks/reports all OENs

Site Name:	Key Interventions:
Penn State Health-	Gain consensus and approval on a validated screening tool to screen all pregnant women for substance use-
Hershey Medical Center	Done
& Children's Hospital	Draft a paper patient-friendly form to screen patients at the time of the first prenatal appointment- <b>Done</b>
	Develop workflow to identify: who will respond to patients who screened positive; who will refer patients to
	treatment; and to whom can we refer our patients- <b>Done</b>
	Draft Substance Use Treatment Referral Reference List- <b>Done</b>
	Provide unbiased non-judgmental, trauma-informed care:
	<ul> <li>Complete baseline attitudes measurement staff survey- Done</li> </ul>
	<ul> <li>Provide education/intervention- Done</li> </ul>
	<ul> <li>Complete reassessment through the attitude's measurement staff survey</li> </ul>
	Complete staff education regarding:
	<ul> <li>The 5Ps tool and screening rationale- <b>Done</b></li> </ul>
	<ul> <li>The 5Ps screening process and SBIRT- Done</li> </ul>
	Spread to other practice sites within the health system- In progress
St. Clair Hospital	• We began using the 5Ps tool for outpatient prenatal visits and inpatient admissions to our hospital in June 2019.
	We coordinated with the affiliated OB offices for them to utilize this tool for screening their pregnant patients in
	the office setting, starting with the 1st prenatal visit and then again in the 2nd and 3rd trimester.
	We provided the 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.
	We educated inpatient nursing staff on 5Ps screening tool and implemented it to be utilized on all patients
	admitted.
Tower Health- Reading	Clinical pathway for pregnant women with OUD
Hospital	<ul> <li>Screening for SUD</li> </ul>
	<ul> <li>Hospital observation for MAT induction, methadone and buprenorphine offered</li> </ul>
	<ul> <li>Connection with methadone program in county.</li> </ul>
	<ul> <li>Suboxone maintenance program at Women's Health Center for pregnant women with OUD.</li> </ul>
	<ul> <li>Intensive case management with the COE, drug &amp; alcohol treatment, social services, prenatal</li> </ul>
	development of Plan of Safe Care, connection with Early Intervention, prenatal parent education on NAS.

Site Name:	Key Interventions:
<b>UPMC Womens Health</b>	Access:
Service Line	<ul> <li>Maternal medical support to prevent withdrawal during pregnancy</li> </ul>
	<ul> <li>On call service for all UPMC hospitals 24/7</li> </ul>
	<ul> <li>Provide regular prenatal and other medical appointments</li> </ul>
	<ul> <li>4 Outreach Community Centers</li> </ul>
	<ul> <li>Same day on next day within 24-hour appointments</li> </ul>
	Prevention:
	<ul> <li>Community education</li> </ul>
	<ul> <li>Obstetrical provider education</li> </ul>
	<ul> <li>Minimize fetal exposure to Opioid substances</li> </ul>
	<ul> <li>Early engage mother as a leader in her recovery</li> </ul>
	o Narcan "to go"
	Response:
	Pregnancy Recovery Center (Prenatal & Postpartum)
	<ul> <li>UPMC Healthplan engagement</li> </ul>
	<ul><li>Support programs for patients, families, staff</li></ul>
	<ul> <li>Multidisciplinary team OB, MFM, SW, Nurses, Mental Health therapists</li> </ul>
	<ul> <li>Methadone Conversion to buprenorphine from inpt. to outpt.</li> </ul>
	Outpatient buprenorphine medication treatment
	o Warm hand overs
	<ul> <li>ED Physician and APP trained in buprenorphine treatment</li> </ul>
	Reporting: Centers of Excellence
	<ul> <li>State, Allegheny County, UPMC Healthplan</li> </ul>
	Report as appropriate to various committees
Wayne Memorial	Use of standardized codes & documentation for SEN's and NAS. Including specific ICD codes for OEN's
Hospital	Educate staff re: OEN and NAS, trauma informed care and MD wise guidelines.
	Develop screening criteria for prenatal ID of infants at risk
	Provide family education about NAS and what to expect.

# **Neonatal Abstinence Syndrome (NAS)**

Site Name:	Key Interventions:
Allegheny Health	• Two NICU RN's researched and developed education in classroom format to teach all WAIC staff proper methods
Network- Saint Vincent	and tips to use when assessing neonates for withdrawal using Modified Finnegan Assessment
Hospital	Core group of 6 RN's identified to perform skill validation on all of WAIC staff.
	Each staff RN must perform assessments proficiently for skill validation & watch/review NAS Scoring DVD
	Comparison of retrospective RN assessment scores and post-education/validation scores by each RN
	Develop ESC guidelines (utilizing network resources as to not re-invent the wheel)
	9/3 presentation at PAPQC collaborative

Site Name:	Key Interventions:
Allegheny Health	Reviewing and enforcing our process of inter-user reliability with Finnegan
Network- West Penn	Implementation of Eat-Sleep-Console strategy for management of NAS
Hospital	Improve communication and provide education to referring PCP's
	Obtain certification as NAS Center of Excellence
<b>Doylestown Hospital</b>	Reinforced education to all staff on ESC approach. Develop inter-rater reliability education.
	Continued use of 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 for Neonatal consult in order to begin
	prenatal education, tour maternity and pediatric unit, and discuss care of infant prior to delivery.
<b>Einstein Medical Center</b>	Sustain:
Montgomery	Multidisciplinary meetings bi-monthly
	Continued distribution of information antenatally (pamphlets), and updated results at OB provider meetings
	Non-pharmacologic supportive measures
	Breastfeeding "Traffic Lights"
	Improve:
	Transportation and Food Vouchers for parents to stay with infants
	Post discharge follow-up and evaluation of Plan of Safe Care
	Community Out-reach through clinics and support groups
	Start:
	Transition to ESC with finalization of protocol and pathway
	Infant massage training
	Facility enhancements - parent lounge
Einstein Medical Center	ESC (pilot in December 2020)
Philadelphia	Open baby type NICU
	<ul> <li>Solution – Maryann Malloy to transition Care-by-Parent room to be able to be used for ESC dyad</li> </ul>
	No current protocol in place for ESC at EMCP
	<ul> <li>Solution – Development of policy &amp; procedure by EMCP PA PQC team</li> </ul>
	No educational materials for staff re: ESC
	<ul> <li>Solution – Development of Healthstream educational module by EMCP PA PQC team in conjunction with</li> </ul>
	Nursing Education and Professional Development Dept.
	Prenatal Consults (implementation in September 2020)
	Data collection of total opioid use mothers
	Solution – place ticket for report from AeCIS
	Lack of educational materials in out-pt OB offices
	Solution – finish informational pamphlet for mothers
	Ensure on-going inter-rater reliability for use of the MOM NAS Score in the NICU by implementing a process for
	above by October 1, 2020

Site Name:	Key Interventions:
	Standardize use of MOM NAS Scoring system at EMCP by introduction of system to Term Nursery by December
	31, 2020
	On-going Inter-rater Reliability in NICU (begins September 2020)
	• None
	Use of MOM NAS Score on MBU (Implementation SeptDec. 31, 2020)
	Staff perception of difficulty of using MOM NAS Score
	o Solution –
	■ Education
	Score NICU infants prior to rollout on MBU
Jefferson Health –	Implementation of Eat, Sleep, Console tool for NAS assessment
Abington Hospital	
Mount Nittany Health	Help mothers recognize they are encouraged/welcome with new brochure (Given at 28-week appt AND now ORT      The state of the stat
System-Mount Nittany	clinic closer to birth if not received prior)
Medical Center	Increase staff interest and knowledge with VON training
"	Standardize non-pharmacologic interventions to help improve their maximization
Penn Medicine-	Identified physician & unit-based champions to participate in Eat, Sleep, Console implementation team
Lancaster	<ul> <li>Completed assessment of current state with champions and identified areas of opportunity to improve</li> </ul>
General/Women and Babies	standardization and care of NAS infants.
Dables	Established a target condition to identify stakeholders and develop an action plan    Stablished FMR tools for OLD screening FSC assessment and order set changes.
	Investigate EMR tools for OUD screening, ESC assessment and order set changes     Establish a method for reporting and determining baseling data.
	<ul> <li>Establish a method for reporting and determining baseline data</li> <li>Validate current NAS report provides correct information</li> </ul>
	<ul> <li>Validate current NAS report provides correct information</li> <li>% Pharmacologic treatment rates</li> </ul>
	<ul> <li>% Weight loss during hospital stay</li> </ul>
	<ul> <li>% Weight loss during hospital stay</li> <li>% 30-day readmission rates for NAS infants</li> </ul>
Penn Medicine-	Review pharmacologic treatment for every OED newborn from 3/1/2019 - 8/31/2019 to determine total
Pennsylvania Hospital,	medication use & weaning process
Newborn Medicine	
Penn Medicine-	Non-pharmacological interventions – supplies, huddle process
Hospital of the	Education – staff and families
University of	Family support, volunteer program
Pennsylvania	Optimal care guidelines (safe sleep, nutrition)
	NAS Prenatal Consults
Penn State Health-	Universal collection of meconium at delivery or transfer
Hershey Medical Center	Cerner (EHR) order and task created
& Children's Hospital	
- Ja. J J. 100pica	Store refrigerated specimen for 7 days

Site Name:	Key Interventions:
St. Luke's University	Working with IT to create an EPIC report to accurately identify any babies with NAS & who are affected by OUD
Health Network	PA PQC core team: working on completing the required NAS education to build competence & consistency within
	our NAS scoring throughout the network
Temple University	Education to Moms pre/post delivery
Hospital	Getting OUD screening into EPIC
	Teaching for Eat, Sleep, Console approach available on Healthstream
	Created Nesting Room protocol
Thomas Jefferson	Improve Parental and Staff Education
University Hospital-	ICN nurses to treatment program for education sessions
Center City (Intensive	Educational materials and provider education at OB clinic
Care Nursery /Well	Breast feeding education during methadone/buprenorphine stabilization hospitalization
Baby Nursery)	Standardized prenatal neonatology consult
	Improve Breast Pump Access
	Coordinating with WIC
	Standardized process with post-partum and case management
	Improve Treatment Program Involvement in supporting breast feeding
	Working with new management to
	improve maternal access from inpatient treatment to hospital
	Create pumping and milk storage space
	Support leaving sessions to pump
	Improve breast feeding support while in hospital
	Improving lactation consultant access
	Support skin-to-skin in NICU
	Encourage early breast feeding in DR, upon post-partum arrival
Tower Health- Reading	Implement "Eat Sleep Console" program on Specialty care unit. (Moms will room-in with newborns.) Transfer
Hospital	family to pediatrics when mother is discharged.
	Staff education, music therapy, cuddlers, OT, patient/family education, community education

Site Name:	Key Interventions:
<b>UPMC Womens Health</b>	Access:
Service Line	Maternal medical support to prevent withdrawal during pregnancy
	Provide regular prenatal and other medical appointments
	Prevention:
	Minimize fetal exposure to illicit substances
	Engage mother as a leader in her recovery
	Response:
	o Parent Partnership Unit (PPU)
	<ul> <li>Eat, Sleep, Console (ESC) implemented and spreading across system</li> </ul>
	Expanding room availability adding 4 additional rooms
	<ul> <li>Rolled Eat, Sleep, Console across UPMC hospitals</li> </ul>
	<ul> <li>Developing a PPU model at each hospital based on each hospital's capabilities/resources</li> </ul>
	<ul> <li>Established a service line SUD Committee with membership consisting with representatives from each</li> </ul>
	hospital for Plans of Safe Care. Two meetings have occurred.
	<ul> <li>Policies revisions, case studies are underway.</li> </ul>
	Reporting:
	<ul> <li>Pa DOH of all NAS occurrences</li> </ul>
	<ul> <li>Internal leadership and appropriate committees e.g. NICU</li> </ul>

## **Immediate Postpartum Long Acting Reversible Contraception (IP LARC)**

Site Name:	Key Interventions:
Geisinger	(re)educate providers and nurses on IUD insertion immediately postpartum.
	Clarified billing, coding, and reimbursement processes.
	Clarified patient eligibility for reimbursement outside of the DRG.
	Improving device access on L&D (storage).
	Assessing patient desire for IP LARC.
St. Luke's University	Providing counseling materials to outpatient offices and labor & delivery
Hospital- Anderson &	Using EMR to identify patients who desire and receive LARC
Allentown campuses	
UPMC Horizon	Educating providers on PP insertion of IUD
	Increasing education for support staff in the hospital and the offices
	Increasing patient knowledge regarding options for postpartum contraception.
	Strategies for billing
	Patient tracking so that those patients who desire it can receive it
	Ensuring proper and appropriate documentation