Maternal Mortality: Hypertension (PA AIM)

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Allegheny Health Network-Saint Vincent Hospital	• Provide each antepartum/postpartum elevated BP/pre-eclamptic discharged patient with automated BP cuff DME to take, track BP's outside of the hospital. (*On Hold. Not moving forward with this Focus Area*) • NOTE: Discharge Instruction/patient education documentation should include: warning signs – "Save Your Life" magnet, how to use BP cuff and tracking of BP's, responses to education/information and available support	• What is the impact of patient self BP monitoring on hypertension management, reduction vs. increase in readmissions - post-delivery?	Lani Erdman Kim Amon Jill O'Connor
Evangelical Community Hospital	• Our Severe Hypertension Protocol for Obstetric Patients is easily located on the Tools list in our EMR. • We also have a Severe Hypertension binder with the protocol, antihypertensive medication algorithms, Severe HTN/ Preeclampsia order set, and our hospital procedure for Severe HTN/ Preeclampsia.	• Any ideas to help with providers following the protocol?	Jen Sullivan RN, BSN Jennifer.Sullivan@evanhospital.com
Geisinger-Medical Center (GMC)	• Implementing checklist for HTN Crisis • Providing simulation & drills for education • Reviewing medication access • Created order set to avoid unnecessary clinical variation • Instituted home BP monitoring for patients with a diagnosis of CHTN, GHTN or Pre-Eclampsia/Eclampsia prenatally and postpartum (GHP patients only). • Comprehensive reviews of each non-compliant case to understand our gaps in care and whether or not they are justified.	• How do clinician leaders manage physician non-compliance with recommendations? • How do nursing leaders handle nursing non-compliance with alerting provider of the elevated readings?	Amy Schauer, BSN
Geisinger-Wyoming Valley (GWV)	• Implementing checklist for HTN Crisis • Providing simulation & drills for education • Reviewing medication access • Created order set to avoid unnecessary clinical variation • Instituted home BP monitoring for patients with a diagnosis of CHTN, GHTN or Pre-Eclampsia/Eclampsia prenatally and postpartum (GHP patients only).	• Are you using any sort of notification system/alarming for severe range BPs that need attention?	Elissa Concini emconcini@geisinger.edu

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
	• Comprehensive reviews of each non-compliant case to understand our gaps in care and whether or not they are justified. • Including ED in education including hospitals with no OB department (ongoing)		
Penn Medicine-Chester County Hospital	• Preeclampsia Pathway • Hypertensive Management Pathway • Postpartum Hypertension Pathway • Adoption of Heart Safe Motherhood • System-wide Collaborative	• How were you able to sustain improvements made with managing hypertensive disorders?	

Penn Medicine-Lancaster General/Women and Babies	• Identified physician and unit-based champions to participate in sub-committee of care management team
	  ○ Completed assessment of current state with champions and identified areas of opportunity to improve standardization and care.
	  ○ Established a target condition to further identify stakeholders and develop an action plan
	• Developed provider and nursing education (Jan 2021)
	• Updated order sets to assist with antihypertensive medication ordering – Jan 2021
	• Refined EMR best practice alerts for preeclampsia to better target treatment of severe range hypertension – June 2021
	• Established a method for reporting and determining baseline data
	  ○ Validated current preeclampsia pathway report provides correct information
	• Monthly case reviews to determine additional opportunities for improvement
		• We would like to hear success stories from other hospitals who have improved and sustained treatment of patients with severe range BPs within 60 minutes.	Janay DiBerardino, Perinatal Safety Nurse, Janay.DiBerardino@pennmedicine.upenn.edu

Penn Medicine-Pennsylvania Hospital	• Revised and updated the hypertension policy that is used in all areas that women are treated (Women's Health, ED & Critical Care) • Severe hypertension education and drills • In process of developing a system wide report to obtain data for evaluation • Perinatal disparities workgroup to implement the disparities bundle		Melissa McKinney CRNP

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Penn State Health- Hershey Medical Center and Children's Hospital	• Development of written evidence-based guidelines for management of acute hypertensive emergency in pregnant and postpartum patients (completed) • ED, ICU, and WBC nursing staff education (initial and ongoing)- (completed/ongoing) • Availability of guidelines in the electronic manual(s) and posted on the unit (completed) • Development of a quick reference tool/checklist based on the written guidelines (completed) • Placement of medications in Medication Pyxis machines for quick and easy access (completed) • OB Provider education distributed and tracked via an electronic education module (completed/ongoing) • ED, Anesthesia, Trauma Provider education (completed/ongoing) • Complete case reviews for patients who were not treated within 60 minutes, per the PA PQC measure. Disseminate key findings and improvement opportunities at the monthly WBC UACT (completed/ongoing) • Conduct interdisciplinary simulations on hypertensive emergencies biannually or more frequently (completed/ongoing) • Collaboration with ED staff to improve comfort and awareness of treatment with antihypertensive medications and mag bolus/gtt. (ongoing) • New: Availability of OB HTN Emergency tackle boxes (provided through Pharmacy) Go Live Date: 3/1/22 (completed/ongoing)	• How are you providing, and tracking education completed for providers outside of OB specialty?	Lisa Murphy, MSN RNC-OB, lmurphy2@pennstatehealth.psu.edu
St. Clair Hospital	• Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists • Quantification of blood loss • Standards for early warning signs, diagnostic criteria, monitoring, and treatment of severe preeclampsia/eclampsia (include order sets and algorithms)	• Data tracking tips. • Discussion/debrief with families • Data tracking tips • Discussion/debrief with families • HIS/EMR Support – tips on how other organizations-built tools to help collect data from the EMR	Shawndel Laughner

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:

	• Establish a culture of huddles for high-risk patients and post-event debriefs to identify successes and opportunities
	• Next Steps:
	  ○ PA AIM Bundle participation
	  ○ Data collection started on triage patients seen for hypertension and review of those records to assess for timely treatment of Hypertension- the data is collected- need to add it to the PA-PQC data portal
	  ○ Data collection stratified by race and ethnicity		

UPMC Womens Health Service Line-Hamot	• Collected pre-data that validated disparity. Data continues to display disparity • Recognized an issue with blood pressure cuffs and need to measure arm and ensure appropriate cuff • Created badge buddy for nursing staff to display nurse-driven protocol and thresholds for action • Excited for recent- PAPQC innovation award for UPMC Hamot and further efforts to reduce maternal morbidity and improve time to treatment • Currently working with Cerner for analytic solution		Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu
UPMC Womens Health Service Line- Horizon	• Collected pre-data that validated disparity • Recognized an issue with blood pressure cuffs and need to measure arm and ensure appropriate cuff • Created badge buddy for nursing staff to display nurse-driven protocol and thresholds for action • Currently working with Cerner for analytic solution		Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu
UPMC Womens Health Service Line- Magee-Womens Hospital	• Collected pre-data that validated disparity • Recognized an issue with blood pressure cuffs and need to measure arm and ensure appropriate cuff • Created badge buddy for nursing staff to display nurse-driven protocol and thresholds for action • Currently working with Cerner for analytic solution		Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu

Moving on Maternal Depression (MOMD)

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:

Geisinger-Medical Center (GMC)	• Increase prenatal screening rate
	• Increase postpartum screening rate
	  ○ RN started QI initiative to increase rates at specific clinics via reviewing data and re-educating on screening processes. Each clinic has a specific goal
	• Examine all data by race/ethnicity
	  ○ Address any identified disparities
	• Improve follow-up to at-risk screens
	• Improve tracking of metrics
		• NICU – what is the primary role of the person screening (e.g., nurse, psychologist, nursing assistant)? Is screening their full-time job?
		• Peds – what do we do with the positive screen immediately? What are your plans/algorithm? What supports do you have in place at Pediatric clinics?
		  ○ How can Pediatricians be better trained to deal with mothers screening positive for PPD?
		  ○ What is your referral process for postpartum mothers that screen positive, but they are not a patient of the health system themselves (e.g., don't have an MRN)?
			Karena Moran
			Research and Quality Project Manager
			Northeastern PA Perinatal Quality Collaborative
			kmoran3@thehealthplan.com

Einstein Medical Center-Montgomery	• The team plans to conduct patient surveys, focus groups, and analyze EPDS scores of Inpatient and Outpatient OB GYN patients of the EMCM Hospital system. We will review data and determine gaps in care. Initial plan may be to increase awareness of staff through education on screenings for Perinatal Mood Disorder. Then, based on data, increase the screenings	• Addressing administrative hurdles and maintaining enthusiasm for project. Recruitment of members to project.	Daryl Stoner, MD
Jefferson Health-Abington Hospital	• Implementation of patient-generated depression screening using EPDS within electronic health record (EHR) for all individuals assessed in L&D triage or directly admitted to L&D • Conducting assessment of current state and recruiting stakeholders • Establishing workflow for patient generated screening in triage/on admission to L&D	• Best practices for documenting and capturing data on response to screening • Experience using patient generated data	Susan Utterback, DNP, MSIT, RN-BC Director Women's Services susan.Utterback@Jefferson.edu

	• Working with business analytics team to enable reporting on screening and interventions in all care settings • DNP student led project to implement patient generated screening in EHR in triage and on admission to L&D		
Penn State Health- Hershey Medical Center and Children's Hospital	• Edinburgh Postnatal Depression Scale (EPDS) completed after delivery prior to hospital discharge (screening completed within first day on postpartum unit). • Social work consulted for elevated scores • Early follow up for repeat screening for elevated scores or individuals with identified risk factors • Routine repeat screening at 6-week postpartum visit • Creation of Women's Health dashboard for continual tracking of progress	• Relevance of early screening in relation to follow up scoring • Improving access to mental health services for abnormal screenings • How to achieve the largest impact on reducing racial and ethnic disparities?	Amy Cruz, MD, FACOG, acruz6@pennstatehealth.psu.edu
St. Clair Hospital	• To date we hold a Postpartum support group for women with perinatal mood changes. • Reach out to OB offices – assess the screening tool • Plan QI project ○ Implement the Edinburgh Screening tool for hospital outpatients and inpatients	• Data collection tactics • Screening tools used • Postpartum follow up • Community resources used	Shawndel Laughner

UPMC Womens Health Service Line- Magee-Womens Hospital	• HEALTH EQUITY NOW met 12/2/21, 2/3/22, 3/4/22
	• Implemented PHQ9 across all birthing hospitals, July
	• 9/2 Created calendar for monthly events to recognize
	• 1/23/22: Maternal Health Awareness Day:
	  ○ ACOG/PA PQC MHAD topic- "Immunization in Pregnancy"-recorded talk, Grand Rounds Jan 25th
	  ○ Facebook Premiere with UPMC experts discussing safety and benefit of COVID vaccine
	• Currently planning Black Maternal Health Week April 11-17
			Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu

Immediate Postpartum Long-Acting Reversible Contraception (IP LARC)

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Geisinger Medical Center (GMC)	• (Re)educate providers and nurses on IUD insertion immediately postpartum. • Clarify billing, coding, and reimbursement processes. • Clarify patient eligibility for reimbursement outside of the DRG. • Improve device access on L&D (storage). • Assess patient desire for IP LARC. • Monitor and address expulsion rates (as applicable).	• Do you limit your IPLARC placement to patients with certain insurances?	Amy Schauer, BSN
Geisinger Lewistown Hospital (GLH)	• (Re)educate providers and nurses on IUD insertion immediately postpartum • Improve device access on L&D (storage) • Assess patient desire for IP LARC • Monitor and address expulsion rates with the clinic	• What are you considering as contraceptives? Who are you offering IPLARC to?	Abby Newman Jen Sunderland
Geisinger Wyoming Valley (GWV)	• (Re)educate providers and nurses on IUD insertion immediately postpartum. • Clarify billing, coding, and reimbursement processes. • Clarify patient eligibility for reimbursement outside of the DRG. • Improve device access on L&D (storage). • Assess patient desire for IP LARC. • Monitor and address expulsion rates (as applicable).	• How have sites worked through provider barriers related to comfort-levels in placing IPLARC, specifically IUDs?	Karena Moran Research and Quality Project Manager Northeastern PA Perinatal Quality Collaborative kmoran3@thehealthplan.com

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:

Main Line Health-Lankenau Medical Center	• "Desires IPLARC" has been implemented as a field in the EMR
	• Education for providers, residents, and staff about offering and documenting LARC desire and LARC placement – supply, role, etc.
	• Prenatal patients are educated about pros/cons of IPLARC, and determination of interest is obtained
	  ○ Prenatal counseling
	  ○ Video on display in clinic
	  ○ Patient education materials and information sheets being distributed
		• Expanding services to commercial insurance patients.
		• What are the options for counseling and billing if they do desire LARC?
		• Is there an opportunity to encourage insurance providers to consider including LARC in their coverage?
		• Expanding services to other hospitals and educating private practices on counseling
		• What is the most effective way for spreading the word? Seminars, training sessions, newsletters, etc.
			Sam Meske, MS, MBA
			Business Manager
			meskes@mlhs.org

St. Clair Hospital	• To date we formed a team: *team updates due to turnaround*
	  ○ Key physician lead
	  ○ Social Work/Case Management
	  ○ Clinical Integration Specialist
	  ○ Director W&C Services
	  ○ Director Inpatient Pharmacy
	• Develop the supporting structure, processes, team roles, and skills to offer contraceptive counseling and access, including IPLARC
	• OB department will identify in the office those in need of IPLARC
	• Insertion added to charge OB charge master
	• Work with pharmacy to obtain product
	  ○ Pharmacy working on charge structure IPLARC purchasing – we are adding Liletta and Nexplanon
	  - Depo Provera currently available.
	  ○ HIS working on ordering the devices in
		• How you were able to implement the structures and processes to routinely counsel, offer, and provide IPLARC?
		• Did you meet any resistance on offering IPLAC in the hospital setting?
		• Did you find a large need/desire from patients for IPLARC?
			Shawndel Laughner

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
St. Luke's University Hospital-Anderson Campus	• Use EMR to identify patients who desire and receive IPLARC • Use EMR to make ordering and documenting provision of IPLARC more streamlined for physicians	• Methods for tracking which patients desire IPLARC to more accurately follow PA PQC metrics • How to overcome insurance barriers to make IPLARC available for all patients	Danielle Johnson, DO Danielle.johnson@sluhn.org
St. Luke's University Hospital-Allentown Campus	• Use EMR to identify patients who desire and receive IPLARC • Use EMR to make ordering and documenting provision of IPLARC more streamlined for physicians	• Methods for tracking which patients desire IPLARC to more accurately follow PA PQC metrics • How to overcome insurance barriers to make IPLARC available for all patients	Danielle Johnson, DO Danielle.johnson@sluhn.org
UPMC Womens Health Service Line-Altoona	• Ensure IT systems are modified to document acquisition, stocking, ordering, placement, counseling, consent, billing and reimbursement for IPLARC. • Ensure all patients receive contraceptive information prenatally- including the option to receive IPLARC. • Modify L&D, OB OR, postpartum workflows to identify and have devices available for pts desiring LARC. Store LARC devices for easy access in a timely manner. ○ Educate clinicians, community partners and nurses on informed consent and shared decision making. • Involve pharmacy for obtaining the device & distribution to ensure timely placement. • Assure billing codes are in place and that staff in all necessary departments are educated on correct billing procedures- device and procedure costs. • Participate in hands-on training of IPLARC insertion. • Shared UPMC consent processes for IPLARC to customize for each hospital. • Educate providers, nurses, lactation consultants, social workers about clinical recommendations related to IPLARC placement and breastfeeding. • Assure all patients receive comprehensive contraceptive counseling prior to discharge.	• This is a difficult project to implement. The training is still remote for providers and not in-person related to on-going pandemic. • Billing and reimbursement for cost of device and insertion remains challenging	Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
UPMC Womens Health Service Line-Hamot	• Ensure IT systems are modified to document acquisition, stocking, ordering, placement, counseling, consent, billing and reimbursement for IPLARC. • Ensure all patients receive contraceptive information prenatally- including the option to receive IPLARC. • Modify L&D, OB OR, postpartum workflows to identify and have devices available for pts desiring LARC. Store LARC devices for easy access in a timely manner. ○ Educate clinicians, community partners and nurses on informed consent and shared decision making. • Involve pharmacy for obtaining the device & distribution to ensure timely placement. • Assure billing codes are in place and that staff in all necessary departments are educated on correct billing procedures- device and procedure costs. • Participate in hands-on training of IPLARC insertion. • Shared UPMC consent processes for IPLARC to customize for each hospital. • Educate providers, nurses, lactation consultants, social workers about clinical recommendations related to IPLARC placement and breastfeeding. • Assure all patients receive comprehensive contraceptive counseling prior to discharge.	• This is a difficult project to implement. The training is still remote for providers and not in-person related to on-going pandemic. • Billing and reimbursement for cost of device and insertion remains challenging	Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu
UPMC Womens Health Service Line-Harrisburg	• Ensure IT systems are modified to document acquisition, stocking, ordering, placement, counseling, consent, billing, and reimbursement for IPLARC. • Ensure all patients receive contraceptive information prenatally- including the option to receive IPLARC. • Modify L&D, OB OR, postpartum workflows to identify and have devices available for pts desiring LARC. Store LARC devices for easy access in a timely manner.	• This is a difficult project to implement. The training is still remote for providers and not in-person related to on-going pandemic. • Billing and reimbursement for cost of device and insertion remains challenging as well as identifying who has SUD	Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
	○ Educate clinicians, community partners and nurses on informed consent and shared decision making. • Involve pharmacy for obtaining the device & distribution to ensure timely placement. • Assure billing codes are in place and that staff in all necessary departments are educated on correct billing procedures- device and procedure costs. • Participate in hands-on training of IPLARC insertion. • Shared UPMC consent processes for IPLARC to customize for each hospital. • Educate providers, nurses, lactation consultants, social workers about clinical recommendations related to IPLARC placement and breastfeeding. • Assure all patients receive comprehensive contraceptive counseling prior to discharge.		

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
UPMC Womens Health Service Line- Horizon	• Ensure IT systems are modified to document acquisition, stocking, ordering, placement, counseling, consent, billing, and reimbursement for IPLARC. • Ensure all patients receive contraceptive information prenatally- including the option to receive IPLARC. • Modify L&D, OB OR, postpartum workflows to identify and have devices available for pts desiring LARC. Store LARC devices for easy access in a timely manner. ○ Educate clinicians, community partners and nurses on informed consent and shared decision making. • Involve pharmacy for obtaining the device & distribution to ensure timely placement. • Assure billing codes are in place and that staff in all necessary departments are educated on correct billing procedures- device and procedure costs. • Participate in hands-on training of IPLARC insertion. • Shared UPMC consent processes for IPLARC to customize for each hospital. • Educate providers, nurses, lactation consultants, social workers about clinical recommendations related to IPLARC placement and breastfeeding. • Assure all patients receive comprehensive contraceptive counseling prior to discharge.	• This is a difficult project to implement. The training is still remote for providers and not in-person related to on-going pandemic. • Billing and reimbursement for cost of device and insertion remains challenging as well as identifying who has SUD	Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu
UPMC Womens Health Service Line- Williamsport	• Ensure IT systems are modified to document acquisition, stocking, ordering, placement, counseling, consent, billing and reimbursement for IPLARC. • Ensure all patients receive contraceptive information prenatally- including the option to receive IPLARC. • Modify L&D, OB OR, postpartum workflows to identify and have devices available for pts desiring LARC. Store LARC devices for easy access in a timely manner.	• This is a difficult project to implement. The training is still remote for providers and not in-person related to on-going pandemic. • Billing and reimbursement for cost of device and insertion remains challenging	Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
	○ Educate clinicians, community partners and nurses on informed consent and shared decision making. • Involve pharmacy for obtaining the device & distribution to ensure timely placement. • Assure billing codes are in place and that staff in all necessary departments are educated on correct billing procedures- device and procedure costs. • Participate in hands-on training of IPLARC insertion. • Shared UPMC consent processes for IPLARC to customize for each hospital. • Educate providers, nurses, lactation consultants, social workers about clinical recommendations related to IPLARC placement and breastfeeding. • Assure all patients receive comprehensive contraceptive counseling prior to discharge.		

Maternal OUD and Maternal Substance Use

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Allegheny Health Network- Forbes Hospital	• Screen all pregnant and postpartum patients using a validated screening tool for substance abuse • Follow up on all positive substance use screens	• How this process has impacted care for mothers and newborns • Any barriers that we might face	Tiffany Mayer, Nurse Manager Tiffany.Mayer@ahn.org
Allegheny Health Network- Jefferson Hospital	• We provided staff-wide education on SUD/OUD as well as use of the 5P screening tool. • We began screening all pregnant people for OUD/SUD in the outpatient setting at the first prenatal visit, at 28 weeks, and again at post-partum visit. • We refer appropriate patients to our Perinatal Hope Program and/or a social worker to more fully identify their needs and make a plan for the remainder of their pregnancy care. • We educated our inpatient staff and started using the 5P screen inpatient on any patient without a previous outpatient screen.	• Are infants exposed to substances during pregnancy being missed due to new screening tools? • How are other locations' policies address the need for a urine drug screen or cord stat? • What screening tools are other locations using?	Ashley Preksta RN, BSN

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Allegheny Health Network- Saint Vincent Hospital	• Staff Education • Provider documentation education completed; Laminated tip sheets located at provider PC's • Incorporate information on Growing Hope/Perinatal Hope program and community support available for addicted moms-to-be • Utilization of NAS informational booklet – implemented, access in provider offices and community locations. • Distribution of community agency support listing – still in process • Re-education of ED staff for referral process* (June 2022 target)	• Are chart audits completed randomly to ensure coding accuracy? • How is incorrect coding identified and how is provider documentation reviewed to reflect accurate patient picture/level of acuity?	Lani Erdman Kim Amon Erika Pluta Jill O'Connor
Allegheny Health Network- West Penn Hospital	• Continue to screen patients with 5 Ps on admission to labor and delivery • Establish clear protocols based on clinical criteria for when drug tests are indicated and obtain informed patient consent for toxicology prior to testing • Establish policies and protocols to provide Naloxone to anyone who may witness an overdose	• Ways to improve discharge follow-up and resources for patients	Kristen Maguire
Allegheny Health Network- Wexford Hospital	• Quarterly education with Dr. Tracey Vogel on trauma-informed care. • Wexford has formed a multidisciplinary team that meets on the 4th Tuesday of every month. First meeting scheduled for March 29th • All charts are audited by staff RNs on admission to ensure 5 P's screening was done *at least* once during pregnancy. If patient has not been screen, staff RN will give patient 5P's screening tool on paper to fill out privately and then input in HER.	• How other sites have educated staff on stigma and breaking biases surrounding mothers with substance use disorder. Guest speakers? Role playing?	Alycia Kerstetter, MSN, RNC-OB

Einstein Medical Center- Philadelphia	• No workflow in current state
	  ○ Solution – work with current MAT program LCSW to determine how to implement standardized screening on all women presenting for prenatal care
	• Change in workflow for providers and MA staff
	  ○ Solution – develop educational plan for provider and MA staff		

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Evangelical Community Hospital	• Positive screening initiates a plan of care by an obstetrical provider and consult with Care Management as needed	• Does anyone have a clinical pathway for SUD that we could review?	Jen Sullivan RN, BSN Jennifer.Sullivan@evanhospital.com
Geisinger-Bloomsburg Hospital	• Implementing universal SUD screening in L&D and Outpatient • Implementing a clinical pathway for at-risk screens • Re-educating on existing protocol for when to obtain a urine drug test • Streamlining workflow and information sharing with data entry in EMR	• Process for when patient refuses to complete screening tool. ○ Or mother refuses to give urine sample? • How to implement and track universal screening and adherence to algorithm in outpatient prenatal clinics? ○ How often do you screen prenatally? • What is your process for medical marijuana?	Sara Whyne Debra Knittle
Geisinger-Community Medical Center (CMC)	• Implementing universal SUD screening: L&D and Outpatient • Implementing a clinical pathway for at-risk screens • Re-educating on existing protocol for when to obtain a urine drug test • Streamlining workflow and information sharing with data entry in EMR	• Process for when patient refuses to complete screening tool. ○ Or mother refuses to give urine sample? • How to implement and track universal screening and adherence to algorithm in outpatient prenatal clinics? ○ How often do you screen prenatally? • What is your process for medical marijuana?	Karena Moran Research and Quality Project Manager Northeastern PA Perinatal Quality Collaborative kmoran3@thehealthplan.com
Geisinger-Lewistown Hospital (GLH)	• Implementing universal SUD screening in L&D and Outpatient • Implementing a clinical pathway for at-risk screens • Streamlining workflow and information sharing with data entry in EMR	• How do you address conflicted information? ○ Patient statement on SUD vs. OB History • How do you track universal screening and adherence to the algorithm in outpatient prenatal clinic?	Abby Newman Jen Sunderland

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Geisinger Medical Center (GMC)	• Implementing universal SUD screening in L&D and Outpatient • Implementing a clinical pathway for at-risk positive screens • Re-educating on existing protocol for when to obtain a urine drug test • Streamlining workflow and information sharing with data entry in EMR	• Process for when a patient refuses to complete the screening tool? • How to ensure compliance of nursing staff completing the electronic medical record documentation of the screening tool? • What is your process for medical marijuana?	Amy Schauer, BSN
Geisinger-Wyoming Valley (GWV)	• Implementing universal SUD screening in L&D and Outpatient • Implementing a clinical pathway for at-risk screens • Re-educating on protocol for when to obtain a urine drug test • Upon admission patients are given a packet to fill out for NIDA screening. That packet is scored by the RN and then given to department educator who then scans all of this information to Karena to capture compliance. How have other platforms been successful with this?		Karena Moran Research and Quality Project Manager Northeastern PA Perinatal Quality Collaborative kmoran3@thehealthplan.com
Holy Redeemer Health	• All validated screens are attached to the DAST in Athena for follow up and data collection • Need to identify how many new OB's each office has to obtain percentage of moms screened (started in Jan 2022) • Follow up with OB offices to assure screens are being scanned in • Hiring a navigator for our SUD Program- need to incorporate the COE's	• How are referrals followed up on? • Is there a designated individual for follow ups? • Does the office follow up, if so, what is the process, challenges, outcomes?	Julie Greenfield, Director of Nursing, OB-GYN Acute and Ambulatory Alliance jgreenfield@holyredeemer.com

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Main Line Health- Bryn Mawr Hospital	• Social Work Evaluation of Outpatient Resources Across 4 Hospitals and 4 Geographic Counties: Goal to Optimize & Standardize • Develop Clinical and Psychosocial Pathways for OUD/SUD and NAS • Coordinate early consultation with Neonatology to optimize therapies and care plan • A BPA (Best Practice Advisory) will now launch when a patient screens positive For Urine Drug Screen Criteria Row in the OB Patient Profile ○ This BPA will prompt the nurse to place the order for the Inpatient OB Drug Screen Panel. If one or more of the UDS criteria is met, the BPA allows the nurse to place the order directly from BPA.	• Best Practices for OUD/NAS Pathways • Outpatient Resource Referrals	Sharon Register, Project Manager
Main Line Health (MLH) - Lankenau Medical Center	• Social Work Evaluation of Outpatient Resources Across 4 Hospitals and 4 Geographic Counties: Goal to Optimize & Standardize • Develop Clinical and Psychosocial Pathways for OUD/SUD and NAS • Coordinate early consultation with Neonatology to optimize therapies and care plan • A BPA (Best Practice Advisory) will now launch when a patient screens positive For Urine Drug Screen Criteria Row in the OB Patient Profile ○ This BPA will prompt the nurse to place the order for the Inpatient OB Drug Screen Panel. If one or more of the UDS criteria is met, the BPA allows the nurse to place the order directly from BPA.	• Best Practices for OUD/NAS Pathways • Outpatient Resource Referrals	Sharon Register, Project Manager

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Main Line Health (MLH) - Paoli Hospital	• Social Work Evaluation of Outpatient Resources Across 4 Hospitals and 4 Geographic Counties: Goal to Optimize & Standardize • Develop Clinical and Psychosocial Pathways for OUD/SUD and NAS • Coordinate early consultation with Neonatology to optimize therapies and care plan • A BPA (Best Practice Advisory) will now launch when a patient screens positive For Urine Drug Screen Criteria Row in the OB Patient Profile ○ This BPA will prompt the nurse to place the order for the Inpatient OB Drug Screen Panel. If one or more of the UDS criteria is met, the BPA allows the nurse to place the order directly from BPA	• Best Practices for OUD/NAS Pathways • Outpatient Resource Referrals	Sharon Register, Project Manager
Main Line Health (MLH) - Riddle Hospital	• Social Work Evaluation of Outpatient Resources Across 4 Hospitals and 4 Geographic Counties: Goal to Optimize & Standardize • Develop Clinical and Psychosocial Pathways for OUD/SUD and NAS • Coordinate early consultation with Neonatology to optimize therapies and care plan • A BPA (Best Practice Advisory) will now launch when a patient screens positive For Urine Drug Screen Criteria Row in the OB Patient Profile ○ This BPA will prompt the nurse to place the order for the Inpatient OB Drug Screen Panel. If one or more of the UDS criteria is met, the BPA allows the nurse to place the order directly from BPA	• Best Practices for OUD/NAS Pathways • Outpatient Resource Referrals	Sharon Register, Project Manager
Penn Medicine-Chester County Hospital	• Strengthening relationships with community partners through monthly meetings • Accessing community resources for mothers after discharge **Next steps:** • Postpartum contraception education and administration before discharge • Improving and standardizing urine toxicology screening • Retrospective analysis of ESC cohort data	• How to more effectively capture mothers prenatally for prenatal counseling?	

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:

Penn State Health- Hershey Medical Center & Children's Hospital	• Gain consensus and approval on a validated screening tool to screen all pregnant women for substance use Done
	• Develop and implement SBIRT workflow Done
	• Draft Substance Use Treatment Referral Reference List- Done
	• Pilot SBIRT process at a single ambulatory site and follow PDSA methodology- Done
	• Develop written guidelines for universal substance use screening, brief intervention, and referral for treatment in the prenatal setting- Done
	• Spread SBIRT to other sites providing obstetrical care within the health system- In Progress (Tentative Go Live 4/18/22)
	• Complete/Expand staff education regarding:
	  ○ The 5Ps tool and screening rationale- In Progress (e-learning Go Live 4/4/22)
	  ○ The 5Ps screening process and SBIRT- In Progress (e-learning Go Live 4/4/22)
	  ○ Stigma/Words Matter- In Progress (e-learning Go Live 4/4/22)
		• What steps has your site taken to develop and consistently utilize unique clinical pathways/order sets for pregnant women with OUD?	Lindsey Reese RN BSN
			lreese@pennstatehealth.psu.edu

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.	• Growing the role of our newly created perinatal social worker position • Post-discharge patient follow-up strategies	Shawndel Laughner

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
St. Luke's University Hospital-Anderson campus	• Working to update our current screening tool to a PAPQC validated screening tool • Use of same screening to for both outpatient and inpatient settings • Work with L&D education specialist to develop and distribute education about SUD including stigma	• Is the screening tool questions asked by the health care provider or do you have a tool to allow patient to answer the questions independently?	Jessica Peters BSN, RN
Washington Health System	• Team now includes a Greene County Commissioner • Washington and Greene CYS and EI have representatives on the team; training opportunities have been shared • OB offices are working on SBIRT data collection • Successfully connected to Cornerstone Care – one of the local FQHCs; robust partnership including referrals to primary care	• Implementing MAT/MOUD in primary care settings while complying with Privacy & Security issues in the electronic medical record.	Lisa Pareso, Manager Rural Health Model lpareso@whs.org
Wayne Memorial Hospital	• Monitor screening rate monthly and report out at OB and PI committees. • Monitor the follow up and referrals to MAT • Monitor patients that started MAT	• How to get back on track and sustain.	Janice Pettinato, pettinatoj@wmh.org Mary Beth Dastalfo, dastalfom@wmh.org

Neonatal Abstinence Syndrome (NAS) and Substance Exposed Newborn (SEN)

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Allegheny Health Network-Saint Vincent Hospital	• Met with key stakeholders (neonatologists, pediatrician, pharmacy, NICU nurse manager, MCH educator, two NICU nurses) re: modified Finnegan assessment, pharma logical intervention, nurse education/process in place to achieve a more standardized approach in NAS scoring babies in the NICU • Presented Eat, Sleep, Console (ESC) initiative to (9) Family Practice Residents plus medical students on 11/5/2020. Presented by: Dr. Susheel, NICU NM, and NICU nurse • Mother-baby staff assigned to watch YouTube video titled "Reconsidering the Standard Approach to Neonatal Abstinence Syndrome" by Dr. Matthew Grossman on 11/2/2020 • Two Mother-baby nurses (as part of their Master's capstone project) spearheading (ESC) initiative on Mother-baby. Started on 11/16/2020. One of the nurses will focus on the mothers and their NAS babies, the other nurse will focus on the other mothers and their babies to prepare them to better manage the Baby's Second Night and reinforce the '5 S's' by Dr. Harvey Karp • Identified (6) super users on Mother-baby to resource mother-baby nurses re: ESC scoring • NICU NM working with IT re: EPIC build for ESC documentation COMPLETED • Developed a tracking sheet titled "NAS Admission Log" for babies admitted to NICU. Data points include: patient label, baby from Mother-Baby or outside transfer, Strict No Publicity, date and time of NICU admission, discharge date, pharma logical intervention • ESC implemented on 5 N. Provider met with nurse managers, re: ESC, outcome was both ESC and Modified Finnegan scoring would be completed on babies on 5N		Lani Erdman Kim Amon Anita Alloway Molly Soltis

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Allegheny Health Network-West Penn Hospital	• All NICU staff will be trained in SENs, trauma-informed care, and state and county guidelines (e.g., Family Care Plans / Plans of Safe) • Prioritization of private rooms for substance exposed newborns. • All NICU nurses will be trained in caring for newborns on validated ESC tool. • Staff will be trained in trauma-informed principles for compassionate care for SENs and parents. • Utilization of baby cuddlers to provide consolation in the absence of family. • Plan to begin post discharge phone calls with target date of June 1, 2022	• Strategies to support mothers and their partners in rooming in with their infant • Identification of potential follow-up needs for families	Mona Dubaich, NICU Manager
Doylestown Hospital	Standardize compassionate, non-judgmental prenatal education and support: • Provide family education abut NAS and ESC and what to expect in prenatal period through discharge • Reinforce the Neonatal Consult template and pamphlet to help families understand their hospital stay from beginning to end • Create a questionnaire for mother to complete p at time of discharge to monitor effectiveness of educational process and identify areas of improvement • Follow up phone calls 1 month after discharge • Update our NAS parent folders to provide more information regarding services/support available to them after discharge Encourage breastfeeding or breastmilk feeding: • Provide family education about medications mom is taking and how it can affect breastmilk/breastfeeding • Neonatology to discuss with parents any contradictions to breastfeeding • Lactation Consult • Establish breastfeeding guidelines and parameters based on national guidelines for parents with SUD/OUD	• Comparative information on breastfeeding statistics at other hospitals and what they implemented to help increase that percentage	Michelle Joseph BSN, Pediatric Clinical Lead mijoseph@dh.org

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Einstein Medical Center-Montgomery	Sustain: • Multidisciplinary meetings targeted for every two months • Continued distribution of information antenatally (pamphlets), and updated results at OB provider meetings • Non-pharmacologic supportive measures • Pathway revisions and ESC education Improve: • Rates of any breastfeeding at discharge • Unified approach to testing infants in concert with OB to develop standardized screening and testing of mothers • Post discharge follow-up and evaluation of Plan of Safe Care • Community Out-reach through clinics and support groups Start: • Infant massage training • Meeting with pediatricians to disseminate updated treatment for these infants	• Changes/obstacles/solutions due to COVID visitation restrictions and changing hospital policies? • How many infants being scored with ESC tool have needed a second line medication? • Anyone able to report a readmission for NAS in the 2 weeks following discharge when using ESC tool? • **Has anyone seen an infant exposed to daily long-acting benzodiazepine in the absence of any opioid or opioid like substance? If so, how was that infant evaluated?** • What gestational age is used as a cutoff? (35 vs 36wk) • Does anyone switch between scoring tools? • What are people doing to improve BF rates?	Celina Migone, MD

Einstein Medical Center-Philadelphia	ESC
	• Open baby type NICU
	  ○ Solution – adapt ESC methodology to open bay NICU as per pilot case
	• No current protocol in place for ESC at EMCP
	  ○ Solution – Development of policy & procedure by EMCP PA PQC team
	Prenatal Consults
	• Data collection of total opioid use mothers
	  ○ Solution – obtain data from report from coding dept
	• Lack of educational materials in out-pt OB offices
	  ○ Solution – finish informational pamphlet for mothers
	  ○ Solution – with advent of LCSW position being filled, providers often defer to that position for
		• Who has modified the Eat/Sleep/Console methodology to accommodate an open NICU floor plan and how?	

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
	follow-up, and cancel the consult. Need to do education for providers.		
Geisinger-Bloomsburg Hospital	• Reviewed maternal risk factors • Sought guidance from PQC members • Evaluated equipment needs • Implemented staff education • Implemented Eat Sleep Console for NAS monitoring • Created process to identify eligible patients • Involved physicians, nurses, and pharmacists in MFM, prenatal care and pediatric care • Involved Certified Recovery Specialists and care managers • Developed EMR documentation • Developed education for prenatal patients • Survey of patient experience in process	• Do you have collaborative relationships with external MAT programs and how did you create this relationship? How does it work (e.g., data sharing, communication, etc.)? • Suggestions on additional metrics to track (maternal or infant)? • Are you collecting feedback from patients about the ESC program/process?	Sara Whyne Debra Knittle

Geisinger-Lewistown Hospital (GLH)	• Reviewed maternal risk factors
	• Sought guidance from PQC members
	• Evaluated equipment needs
	  ○ Obtained Mama Roo
	  ○ Halo swaddles
	• Implemented staff education
	• Implemented Eat Sleep Console for NAS monitoring
	• Created process to identify eligible patients
	  ○ MAT & NIDA
	• Involved physicians, nurses, and pharmacists in MFM, prenatal care and pediatric care
	• Involved case managers
	• Developed EMR documentation
	• Developed education for prenatal patients
	• Developed educational folders for mothers and family related to ESC
	• Survey of patient experience in process
	  ○ Leadership Rounds
		• Do you have collaborative relationships with external MAT programs and how did you create this relationship? How does it work (e.g., data sharing, communication, etc.)?
		• Are you collecting feedback from patients about the ESC program/process? How?
			Abby Newman
			Jen Sunderland

Penn Medicine-Hospital of the University of Pennsylvania	• Centered around mother-infant dyad collaborating with newborn nursery to reduce Mom/Baby separation • Prenatal Consults	• Creating opportunities for parents to spend more time at the bedside • Space; Food; Transport; Childcare • Continued education on ESC	

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:

	• Staff & Family education regarding Eat, Sleep, Console
	• Facilitating and participation in ESC escalation huddles to maximize non-pharmacologic interventions:
	  ○ Nonpharmacologic bundle
	  ○ Transfer from S8 to ICN
	  ○ Escalation in treatment in the ICN
	  ○ *Both with discussion of non-pharm measures attempted prior to escalation
	• Volunteer program- on hold (COVID)
	• Feeding policies created: breastfeeding eligibility policy, routine fortification
	• Data collection and discharge phone calls to collect data and patient feedback
		○ Strategies for increasing comfort level of the staff.
		○ Sustaining education with new staff
		• Strategies to engage with hospital administration/regulatory around rooming in patient rooms after birth parents are discharged but infants remain in the hospital for observation.
		• Plans of safe care: How are you deeming infants as “affected by substance use” for plans of safe care.
		○ We use ESC huddle, ICN admission for medication treatment
		• Question for other Philadelphia County Hospitals: What improvement efforts have you done for increasing/connecting prenatal care & involvement?	

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:

Penn Medicine-Lancaster General/Women and Babies	• Identified physician and unit-based champions to participate in Eat, Sleep, Console (ESC) implementation team
	  ○ Completed assessment of current state with champions and identified areas of opportunity to improve standardization and care of NAS infants.
	  ○ Established a target condition to identify stakeholders and develop an action plan
	  ○ Investigated EMR tools for OUD screening, ESC assessment and order set changes
	  ○ Implemented ESC program for well newborn population - Feb 2021
	  ○ Further expand ESC for NICU population – Current state and target condition completed. Currently working through action plan. Planned go-live Dec 2021.
	• Established a method for reporting and determining baseline data
	  ○ Validated current NAS report provides correct information
	  ○ % Pharmacologic treatment rates
	  ○ % 30-day readmission rates for NAS infants
		• If the infant requires a rescue dose of Morphine, is the infant transferred to the NICU for care, or is there another process for a single dose treatment?	Janay DiBerardino, Perinatal Safety Nurse
			Janay.DiBerardino@pennmedicine.upenn.edu

Penn Medicine-Pennsylvania Hospital, Newborn Medicine	Prenatal consultation: • Creation of an EMR template for a prenatal consult for pregnant women with OUD • Consistent use of NAS pamphlet with consult • Educating 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 now live EI referral: • Standardized EI referral (via EMR) by assigning neonatal NP who tracks/reports all OENs	• How to successfully implement Eat Sleep Console without private rooms?	Melissa McKinney, MSN, CRNP Dustin Flannery, DO, MSCE

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:

Penn State Health- Hershey Medical Center & Children's Hospital	Maintain IRR in Finnegan Scoring
	• Baseline assessment
	• Refresher education
	• Plan for huddles / collaboration of scoring at times of key decisions
	  ○ Identification of team members to be included in huddles
	  ○ Reinforce and remind team to conduct and document huddles
	Standardization of nonpharmacologic care for OEN
	• Revision of NAS Care Guidelines
	• Introduce OT consults early in postpartum care
	  ○ Parent education and engagement
	• Create an "All About Me" card to communicate infant likes and dislikes
		• Any other suggestions or ideas from other centers?	Mary Lewis, MSN RNC-NIC

St. Luke's University Health Network- Anderson Campus	• Data in EMR	• When there are times of high census how do you accommodate moms/families staying for a 5 day stay?	Jessica Peters BSN, RN

Thomas Jefferson University Hospital- Center City (Intensive Care Nursery /Well Baby Nursery)	• Previous interventions now in place
	  ○ Standardized non-pharm bundle of care
	  ○ Standardized pharmacologic treatment
	  ○ Family care plans prior to discharge
	  ○ EI, lactation, home visits, developmental medicine follow up referrals prior to discharge
	  ○ Improving breast feeding –pumping in DR, education about importance
	  ○ Expand interventions/measurement to all NAS population, not just those receiving pharmacologic treatment and admitted to our "NAS room"
	  ○ Expand standard bundle of care to well-baby nursery and remainder of intensive care nursery
	  ○ Expand donor milk use to NAS population as needed as a bridge to maternal breast milk use
		• Improving % eligible to breast feed at time of admission – we have a large percentage of polysubstance use mothers that we currently precluded from breast feeding
		• Implementing ESC without moms being able to stay in house past their recovery from delivery and without cuddlers available
			Dave Carola

UPMC Womens Health Service Line- Magee	• Opened the NTU (Neonatal Transitional Unit) July 12. This is a 6-bed unit where the parents can stay with their infant who may require an extended stay for	• Still remain very interested in protocols that provide intermittent medication	Vivian Petticord Director, Women's Health Service Line pettvm@upmc.edu

Site Name:	Key Interventions:	Our team would most like to learn from our peers:	Key Contact:
Altoona Cole Hamot Horizon Northwest	treatment of bili light therapy for jaundice, antibiotics for treatment of chorio. Two rooms are designated as Parent Partnership Unit. The benefit to this new unit is that previously when babies required treatment with morphine, they required transfer to the NICU, and the parents could not stay and continue to provide that non-pharm care. • We also received a small grant to offer milk bank breast milk to infants in the PPU whose mothers are breastfeeding and may require supplementation as a means to support the mother's choice to breastfeed. • In recognition of Safe Sleep & SIDs Awareness (new UPMC swaddles!)- understanding mothers with SUD are high risk population: Facebook Premiere Nov 23rd. • Updated our ABCD Poster to include: Tell us where baby will sleep for naps and nighttime! • This will be in every pt room to trigger the conversation of where the baby will sleep – to assess if the parents have a safe place to sleep. We know that our SUD moms are very high risk for unsafe sleep deaths • Applying for system-wide Cribs 4 Kids Safe Sleep Designation for all 15 birthing hospitals	treatment for symptoms versus protocols that dose on a routine basis.	
Wayne Memorial Hospital	• Create and use non-pharm order sets for SEN's, including NAS • Educate staff to protocols and treatments. • Adhere to standardized non-pharm treatment protocols as the first line of treatment.	• Samples of booklets used to educate staff and parents.	Janice Pettinato pettinatoj@wmh.org