



Pennsylvania Perinatal Quality Collaborative

**Updated PA PQC Substance Use and Substance Exposed Newborn (SEN)
Driver Diagrams**

December 15, 2021

PA PQC Work Group Updates for Substance Use Expansion

Applies to PA PQC 2022 Maternal Substance Use & OUD Initiatives

Maternal Substance Use Co-Chairs



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Maternal Substance Use Driver Diagram

READINESS – EVERY UNIT

Aims

1. Increase **education** among patients related to substance use
2. Increase **education** among healthcare team members to address stigma related to substance use

Provide staff-wide education on substance use, stigma, racism, bias, and trauma-informed care

- Provide clinical and non-clinical staff education on optimal care for pregnant and postpartum individuals with SUDs including federal, state, and local notification guidelines for infants with in-utero substance exposure and comprehensive family care plan requirements (Plans of Safe Care)
- Provide clinical and non-clinical staff education on recovery and trauma-informed language and practices*
- Develop trauma-informed protocols and anti-racist training to address healthcare team member biases and stigma related to SUDs

Educate patients and their families on substance use and the care of infants with in-utero substance exposure

- Provide evidence-based education to pregnant and postpartum individuals related to SUD, naloxone use, harm reduction strategies, and care of infants with in-utero substance exposure
- Provide education for best practices for engaging and treating pregnant and postpartum individuals who themselves have an FASD*

Form a **Multi-Disciplinary Team**

- Engage appropriate partners to assist pregnant and postpartum people and families in the development of family care plans, starting in the prenatal setting
- Establish a multidisciplinary care team to provide coordinated clinical pathways for individuals experiencing SUD

Ensure **Access to Resources for all Identities**

- Develop and maintain a set of referral resources and communication pathways between obstetric providers, community-based organizations, and state and public health agencies to enhance services and supports for pregnant and postpartum families for social determinants of health needs, behavioral health supports, and SUD treatment.
- Have evidence-based substance use resources that are inclusive for people of all backgrounds, race, ethnicity, gender, social class, language, ability, and other personal or social identities and characteristics.*

RECOGNITION & PREVENTION – EVERY PATIENT

Aims

1. Increase universal **screening and follow-up** for substance use among pregnant and postpartum individual

Maternal Substance Use Driver Diagram

Screen all pregnant and postpartum individuals for substance use and co-occurring needs

- Screen all pregnant and postpartum people for substance use using validated self-reported screening tools and methodologies during prenatal care and during the delivery admission
- Screen each pregnant and postpartum person for co-occurring medical and behavioral health needs (e.g., HIV, Hepatitis B and C, behavioral health conditions, physical and sexual violence, Sepsis, Endocarditis), and provide linkage to community services and resources
- Screen for structural and social drivers of health that might impact clinical recommendations or treatment plans, and provide linkage to resources

Follow-up on all positive substance use screens

- Offer feedback, education, and goal-setting through brief interventions for all individuals who screen positive on substance use screens*
- Establish clear protocols based on clinical criteria for when drug urine tests are indicated and obtain informed patient consent for urine toxicology prior to testing*

Equip patients/families with resources to **save lives**

- Establish policies and protocols to provide Naloxone to anyone who may witness an overdose*

Offer **reproductive life planning** discussions and resources

- Offer comprehensive reproductive life planning discussions and resources, including access to a full range of contraceptive options in accordance with safe therapeutic regimens

RESPONSE – Every Event

Aims

3. Increase prenatal and postpartum individuals with SUD who initiate SUD treatment (including Medication for OUD) (Metric 3, 5 and 6)

Link all pregnant and postpartum individuals with SUD to **substance use treatment** programs (including Medication for OUD)

- Establish specific prenatal, intrapartum and postpartum care pathways that facilitate coordination among multiple providers during pregnancy and the year that follows
- Assist pregnant and postpartum people with SUD to receive evidence-based, person-directed SUD treatment that is welcoming and inclusive in an intersectional manner, and discuss readiness to start treatment, as well as referral for treatment with warm hand-off and close follow-up

Maternal Substance Use Driver Diagram

RESPECTFUL, EQUITABLE, AND SUPPORTIVE CARE – EVERY UNIT, PROVIDER, AND TEAM MEMBER

Place the **Patient at the Center of
their Own Care**

- Engage in open, transparent, and empathetic communication with the pregnant and postpartum person and their identified support person(s) to understand diagnosis, options, and treatment plans
- Integrate pregnant and postpartum persons as part of the multidisciplinary care team to establish trust and ensure informed, shared decision-making that incorporates the pregnant and postpartum person's values and goals
- Respect the pregnant and postpartum person's right of refusal in accordance with their values and goals

REPORTING AND SYSTEMS LEARNING – EVERY UNIT

Monitor Performance

- Identify and monitor data related to SUD treatment and care outcomes and process metrics for pregnant and postpartum people with disaggregation by race, ethnicity, and payor as able

Elicit **Community Feedback**

- Convene inpatient and outpatient providers and community stakeholders, including those with lived experience, in an ongoing way to share successful strategies and identify opportunities to improve outcomes and system-level issues

Structure Measures via Quarterly Survey:

Summary of Revised Survey for Maternal Substance Use and OUD

- ✓ Trauma-informed protocols
- ✓ Anti-racist training
- ✓ Substance use training to address biases/stigma
- ✓ Education materials on substance use and naloxone use
- ✓ System in place to provide naloxone
- ✓ Use a validated self-report screening tool
- ✓ Protocols and roles to provide brief interventions
- ✓ Provide medications for OUD
- ✓ Developed referral relationships with SUD services
- ✓ Perinatal care pathways for substance use
- ✓ Post-delivery and discharge pain management prescribing guidelines for all vaginal and cesarean births focused on limited opioids
- ✓ Pain management and opioid prescribing guidelines for vaginal and cesarean births for patients with OUD

Quarterly Process Measures: Maternal OUD

screened with validated substance use screen during pregnancy

with delivery in the **quarter**

with OUD diagnosis during pregnancy

with delivery in the **quarter**

administered a medication for OUD during or after pregnancy

with delivery and OUD diagnosis in the **quarter**

with postpartum visit 1-84 days after delivery

with delivery at least 84 days ago with OUD

What changes?

Quarterly submissions (not monthly)

*Additional reporting by
race/ethnicity annually*

Quarterly Process Measures: Maternal Substance Use

screened with validated substance use screen during pregnancy

with delivery in the **quarter**

received follow-up brief intervention or care up to 30 days

with delivery in the **quarter** that had a positive substance use screen during pregnancy

Additional reporting by race/ethnicity annually

received follow-up brief intervention or care up to 30 days

with delivery 84 days prior to start/end of month with a positive substance use screen during 84-day post delivery period

received or prescribed Naloxone prior to delivery

with SUD and delivery in the **quarter**

PA PQC Work Group Updates for Substance Use Expansion

Applies to PA PQC 2022 Substance Exposed Newborn (SEN) & NAS Initiatives

SEN Co-Chairs



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Substance Exposed Newborn Driver Diagram

Aims

1. Increase identification of SENs and diagnosed NAS and FASD

Standardize compassionate, non-judgmental maternal/infant **screening**, prenatal **education**, and **support**

- Use standardized definitions, diagnoses, ICD-10 codes, and documentation for SENs (for guidance, see CSTE NAS Case Definitions used by PA DOH)
- Train nurses caring for newborns on validated NAS assessments (e.g., Finnegan, Eat Sleep Console Care Tool) and practice inter-rater reliability
- Develop screening criteria for prenatal identification of infants at risk for substance exposure and NAS (see PA PQC SUD Driver Diagram)
- Screen for prenatal substance exposure (especially if not done during pregnancy) in the newborn nursery setting in the context of discussing health issues possibly affecting infant
- Educate staff re: SENs (including NAS), trauma-informed care, and state and county guidelines (e.g., Family Care Plans / Plans of Safe)
- Educate staff on appropriate communication strategies for engaging parents/caregivers who are individuals with an FASD
- Create standardized prenatal consult templates and family education materials about SENs (including NAS) and what to expect from beginning to end (e.g., see <https://www.ddap.pa.gov/Documents/Agency%20Publications/NAS%20Toolkit%20Book.pdf>)
- Use trauma-informed principles for compassionate care for SENs and parents

Substance Exposed Newborn Driver Diagram

Aims

2. Decrease hospital LOS for NAS
3. Increase percentage of NAS who receive non-pharmacologic treatment
4. Increase breastmilk feeding among parents with SUD if not contraindicated and caregivers

Balancing Measures

1. Percent NAS infants with ED visits in first 30 days after newborn discharge
2. Percent NAS infants with hospital readmissions in first 30 days after newborn discharge

Use standardized **non-pharmacological treatment** bundles as the first line of treatment for all SENs

- Create and use non-pharmacotherapy order sets for SENs, including NAS
- Establish and adhere to a standardized non-pharmacological treatment protocol as the first line of treatment (e.g., rooming in with safety measures, skin-to-skin contact, swaddling, rocking, dimmed lighting, limited visitors, quiet environment)
- Establish breastmilk feeding guidelines based on national recommendations, and educate staff on the guidelines and how to empower patients to make informed decisions about breastmilk feeding that support the health of their newborn
- Use empowering messaging to engage the parent/caregiver

Standardize **pharmacological management** of NAS

- Create and use pharmacotherapy EHR order sets for NAS
- Create standardized protocols for pharmacologic treatment of NAS

Substance Exposed Newborn Driver Diagram

Aims

5. Increase referrals to and engagement in outpatient family care services, including physical, behavioral, and social services

Establish Family Care Plans Prior to Discharge

- Partner with families and social/child services to establish family care plans (Plans of Safe Care) according to federal, state, and county guidelines
- Use Cuddler Program to free up parent for treatment

Support Engagement in Family Care Plans

- Refer SENs to appropriate follow-up services prior to discharge, including but not limited to Early Intervention (EI) Services, lactation support, and home visits, and close the loop on those referrals
- Follow-up with outpatient providers to ensure that the family care plans are adopted and engagement in outpatient care
- Follow the dyad for up to 15 months

Structure Measures via Quarterly Survey:

Summary of Revised Survey for Substance Exposed Newborns & NAS

- ✓ % nurses caring for newborns in the nursery and/or NICU trained on validated NAS assessments
- ✓ QI efforts in place to increase inter-rater reliability for NAS assessments
- ✓ Standardized definitions for SENs and NAS
 - ✓ SEN (in-utero exposure to any alcohol or other drug substance)
 - ✓ NAS (“confirmed” and “probable” Council of State and Territorial Epidemiologists’ (CSTE) NAS Standardize Case Definitions)
- ✓ Standardized set of ICD-10 codes for SENs and NAS
- ✓ % neonatal providers and nursing staff trained in respectful and equitable care
- ✓ Established breastmilk feeding guidelines for SUD
- ✓ Standardized pharmacologic treatment protocols for NAS
- ✓ Standardized non-pharmacologic treatment protocols for NAS
 - ✓ Check the type of non-pharm care
- ✓ Newborn care team educated on criteria for Plans of Safe Care, their role in establishing and initiating the Plans of Safe Care, and how to explain it to families
- ✓ Newborn care team educated on the criteria, protocols, and best practices for referring SENs and families to services (early intervention, home visiting services, etc.)
- ✓ Newborn care team created a protocol for closing the loop on the referral status

Quarterly Process & Outcome Measures: NAS

Median hospital length of stay for newborns with NAS

treated with a non-pharm bundle


NAS cases

receiving pharmacologic therapy

NAS cases

referred to appropriate follow-up services

NAS cases

 # readmitted within 30 days of discharge

NAS cases

 **NEW**

used ED within 30 days of discharge

NAS cases

What changes?

All NAS measures reported quarterly

*Additional annual breakdown for
LOS by treatment type (pharm and
non-pharm)*

*Additional annual reporting by
race/ethnicity*