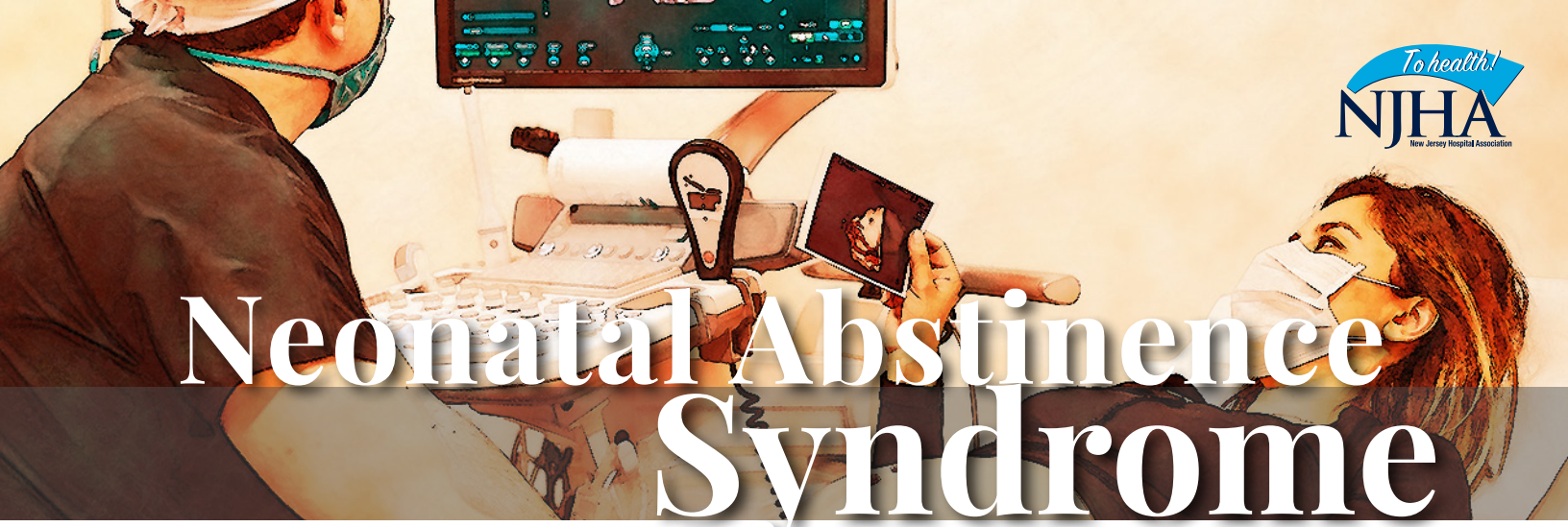


Neonatal Abstinence Syndrome

The impact of opioid use by women of child-bearing age has reached epidemic proportions. The Neonatal Abstinence Consensus Initiative provides the following resources for health systems, hospitals and providers as they implement policies and protocols for screening and referral services for women and children. The goal is to promote local policies and practices based in evidence and incorporated into practice statewide to drive safe patient outcomes and quality care.

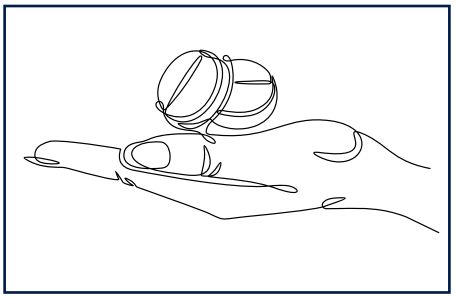
LINK TO .PDF OF RESOURCES/BIBLIOGRAPHY

PRIORITY: Establish a Quality Improvement Framework to Address NAS - A multi-modal quality improvement initiative is a proven way to standardize your organization's approach to pharmacologic and nonpharmacologic care for infants exposed to opioids. Valuable tactics of large and small system change include stakeholder engagement where physician leaders are essential to the process and aid in setting priorities, strategies and best practices for better outcomes. Standard work processes help sustain improvements when multidisciplinary teams identify strategies to increase access to care, coordinate services, improve provider awareness and develop appropriate training for those caring for pregnant and postpartum women and infants impacted by these substances. By using the fundamentals of quality improvement, providers are able to harness powerful tools that accelerate change.

ACTIONS ☑

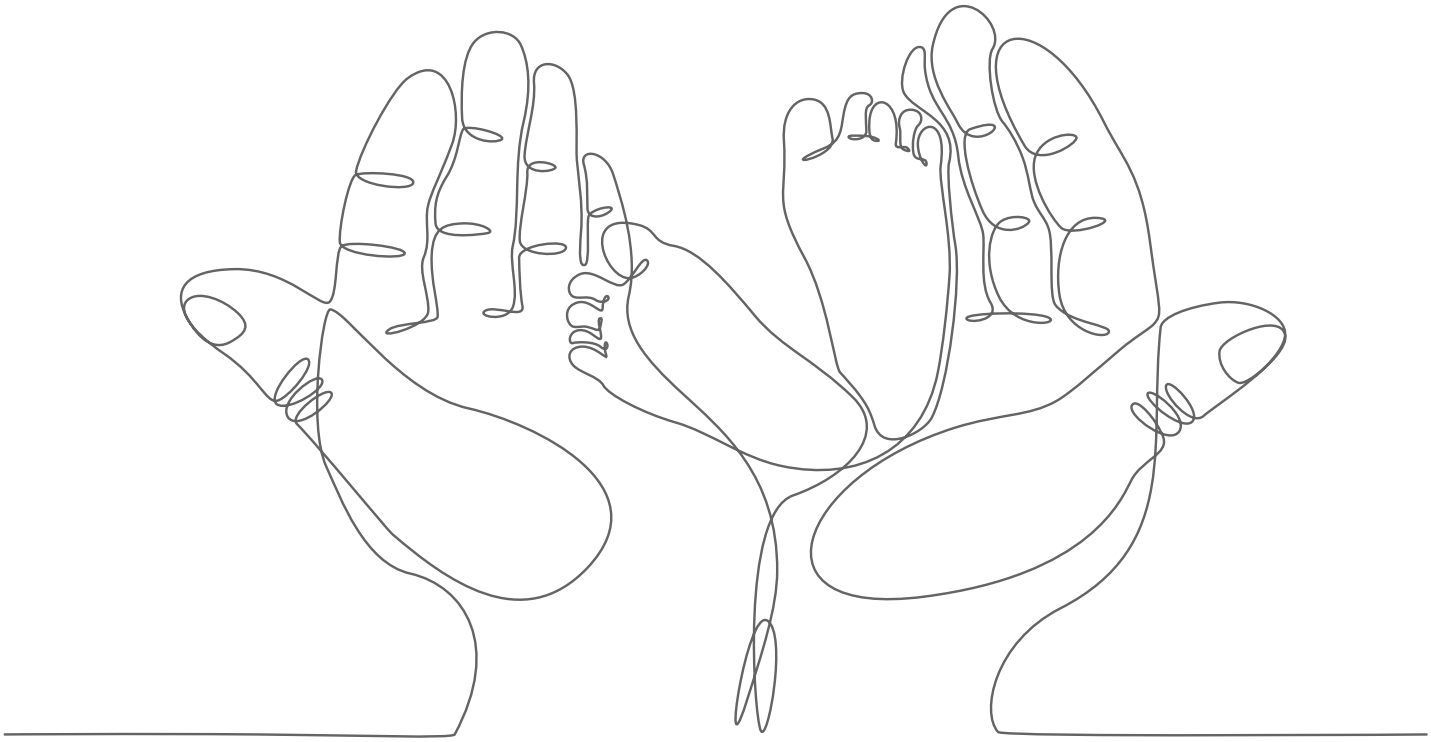
- ☑ *Identify the strategic priority for tackling this issue now.*
- ☑ *Create a list of stakeholders necessary to inform and drive this imperative.*
- ☑ *Identify the business case for this quality improvement initiative.*
- ☑ *Identify the gap between current and possible performance.*
- ☑ *Consider evidence of best practice describing the ideas to best describe ideas to close the gap.*
- ☑ *Identify the strategic primary and secondary drivers of change and the actionable change concepts necessary to take to testing.*
- ☑ *Create a timeline for implementation.*
- ☑ *Describe early theory of what changes the teams will need to test, adapt and implement in order to reach the initiative's aim.*
- ☑ *Plan for spread that considers a timetable and appropriate units for adopting change.*

PRIORITY: Implement Alternative Models for Opioid Prescribing - Prescribing practices and clinical protocols that emphasize alternative therapies or procedures in an ED to address pain can significantly reduce opioid use and prescribing in healthcare settings. Providers should create guidelines and policies that reflect the characteristics of the populations served to eliminate disparities in pain management. The complex psycho-social factors facing women at risk for substance use disorder pose significant challenges to obstetric care providers. The relationship between patients and their healthcare teams will be a critical linchpin to successful outcomes for moms and babies.



ACTIONS ☑

- ☑ *Develop a shared understanding of the core concepts of using alternative practices to prescribing opioids.*
- ☑ *Identify evidence-based practices that providers can implement to improve patient satisfaction related to pain management.*
- ☑ *Ensure that efforts to reduce opioid misuse do not interfere with the physician-patient relationship and the physician's ability to help manage the patient's pain.*



PRIORITY: Engage Mothers, Caregivers and Others - Opioid use disorder among pregnant women is rapidly increasing nationwide. Engaging patients and their families and support networks is at the core of a framework for driving actions that create safe, reliable, high quality care. Clinicians often express difficulty navigating family dynamics and frustration with overcoming preconceived biases. An integrated approach to perinatal care and addiction treatment, with engaged mothers and support teams, can help create a pathway to address the complex medical, behavioral and social needs of women at risk for substance use disorder.

ACTIONS ☑

- ☑ *Partner with credentialed physician practices to enlist participation and active engagement in pre- and post-natal consultation guidance.*
- ☑ *Create consultation guidance that includes preparing for a healthy pregnancy, NAS signs and symptoms, expectations after childbirth, treating NAS, breastfeeding and discharge expectations.*
- ☑ *Develop a framework forassessing clinical readiness, family preparedness and coordination of transfer of care, meeting new mothers and families 'where they are."*
- ☑ *Design a workforce education and competency assessment to ensure cultural and linguistic competency.*

PRIORITY: Develop Non-Punitive Policies and Protocols to Screen and Refer Mothers and Babies at Risk – Screening questions about prenatal exposure to alcohol and other substances, as well as disclosure of that information, is often hampered by fear of punitive sanctions. Research suggests that women of color have a greater likelihood of screening for drug use during pregnancy, so it's important that protocols to engage women are non-punitive and free of barriers to treatment including stigma, fear of losing child custody and worries about being away from family during inpatient or residential treatment. According to the American Academy of Pediatrics, such punitive measures toward pregnant women with SUD are ineffective, and women who experience them are less likely to seek treatment and more likely to avoid prenatal care. Instead, research supports a comprehensive evidence-based, non-punitive approach to coordinated health, including primary prevention, universal screening aligned with ACOG recommendations, access to comprehensive prenatal care and providers trained in policies and requirements.

Neonatal Abstinence Syndrome

What's missing is the evidence that provides guidance for the prevention and management of substance use disorders during pregnancy. While providing an individual baseline that includes information about unhealthy drug use, screening is most effective when there are services in place to accept referrals to care. Models should include a framework for continued engagement with women between pregnancies to provide opportunities to address complications and medical issues that impact long-term health.

ACTIONS ☑

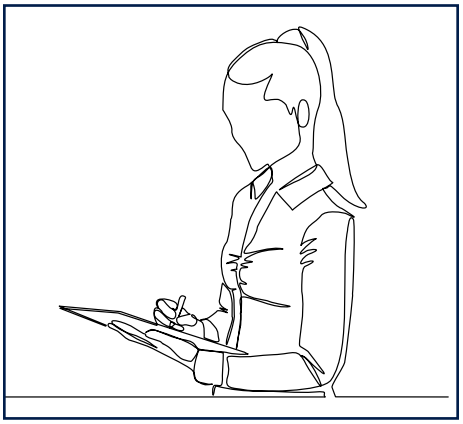
- ☑ *Engage health system, hospital, community and family stakeholders who meet the unique diverse needs of the populations served by hospital providers.*
- ☑ *Evaluate the complement of stakeholders involved in the process to ensure effective engagement.*
- ☑ *Consider and engage referral sources for inpatient and outpatient care.*
- ☑ *Establish baseline measurements that include:*
  - *– pregnant women universally screened for substance misuse by physicians at the hospital*
  - *– which criteria pregnant women are screened and tested for at the hospital for substance misuse*
  - *– percentage of pregnant women who receive prenatal care at hospital-operated clinics who are screened prior to entering labor and delivery.*
- ☑ *Identify strengths and weaknesses of the evidence supporting clinical action steps to be considered when caring for women and their infants.*
- ☑ *Apply a universal screening approach to identify women at risk for substance use disorder that includes: understanding the nature of the patient's substance use, underlying or co-occurring diseases or conditions, effect of opioid use on the patient's physical and psychological functioning and outcomes of past treatment episodes.*
- ☑ *Establish a standard for when (during the pregnancy) and where (location of care) screening will occur.*
- ☑ *Build clinician consensus on the use of validated tools for screening and assessment.*
- ☑ *Apply a universal referral and transfer protocol for women and infants at risk.*
- ☑ *Develop orientation and education protocols for all pharmacological staff who interact with mothers and babies, as appropriate*

PRIORITY: Identify, Refer and Treat Infants at Risk for NAS and Nutritional Deficit - Practice lags behind policy in terms of supporting breastfeeding in women receiving medication-assisted treatment, particularly for Black women. Provider education on best practices and support for this population is necessary to improve outcomes. Research shows that breastfeeding decreases symptom severity, infant pharmacologic use and length of pharmacologic treatment. However, despite most pregnant women reporting plans to breastfeed, relatively few infants with neonatal opioid withdrawal syndrome are exclusively breastfed at hospital discharge postpartum. . Standardized policies, practices and support systems in caring for opioid-exposed infants – particularly care that focuses on family engagement and nonpharmacologic care – can reduce the likelihood of extensive inpatient stays and medication therapy.

ACTIONS ☑

- ☑ *Implement bundles for non-pharmacologic feeding supports.*
- ☑ *Consider on-demand feeding as routine nonpharmacologic management.*
- ☑ *Promote breastfeeding, pumping expressed breast milk and use of human milk products when possible.*
- ☑ *Encourage infant sucking behaviors that are a ssociated with decreased agitation.*
- ☑ *Consider hypercaloric formulas for suboptimal growth and alternative formulas if there is feeding intolerance.*
- ☑ *Provide a written feeding schedule and encourage caregivers to maintain the regimen until the follow-up pediatric evaluation.*
- ☑ *Consider protocols for occupational, speech and other therapies.*

PRIORITY: Implement Medication-Assisted Treatment for Mother's at Risk – The Substance Abuse and Mental Health Services Administration (SAMHSA) developed clinical guidance to assist providers in optimizing outcomes for women and their babies. The literature supports innovative care alternatives including models that integrate prenatal care, counseling, medication-assisted treatment and unique approaches to stakeholder engagement across all health professions. The goal is to build a trusted provider-patient relationship that supports an improved prenatal care and birth experience and increased resilience for relapse prevention. Referral to appropriate treatment also can optimize maternal and fetal outcomes. The American Society of Addiction Medicine (ASAM) defines treatment as any planned, intentional interventions designed to help the individual "achieve and maintain sobriety, physical, spiritual,



and mental health, and a maximum functional ability." ASAM treatment dimensions are used to determine which level of care are most appropriate, given the unique needs of the individual. Treatment referrals should be based on a comprehensive assessment that considers the ASAM criteria:

DIMENSION 1
Acute intoxication and/or withdrawal potential

DIMENSION 2
Biomedical conditions and complications

DIMENSION 3
Emotional, behavioral, or cognitive conditions and complications

DIMENSION 4
Readiness to change

DIMENSION 5
Relapse, continued use, or continued problem potential

DIMENSION 6
Recovery environment

ACTIONS ☑

- ☑ *Ensure patient interaction is delivered in an empathetic, non-judgmental way.*
- ☑ *Use a standardized, validated screening instrument for self-identified polysubstance use.*
- ☑ *Implement a formal screening, brief intervention and referral to treatment (SBIRT) protocol.*
- ☑ *Refer to counseling and education services on the medical and social consequences of pharmacotherapy for opioid use disorder.*
- ☑ *Counsel patient on risks to mother and baby at time of relapse.*
- ☑ *Offer medication-assisted treatment that includes methadone or buprenorphine and evidence-based behavioral interventions.*

PRIORITY: Optimize the Use of Non-Pharmacological Interventions - From hospital admission to the weeks or months following discharge of mother and baby, interventions should be guided by non-judgmental, empathic care. Whenever possible, the use of non-pharmacological interventions should be considered and encouraged. Non-pharmacological interventions may reduce prolonged hospitalization and separation of the mother–infant dyad. While these practices can potentially disrupt breastfeeding or disturb mother-infant bonding, there are tested models that may keep the mother-infant dyad together, reduce admissions to the NICU and reducethe need for pharmacotherapy. To minimize the common symptoms of restlessness, tremors, agitation and gastrointestinal disturbances that often occur in infants with NAS, nonpharmacological treatment should be universally incorporated into standards of care. Quality improvement initiatives demonstrate the benefits of non-pharmacologic care, including reducing extended inpatient stays and separation of mother and baby.

ACTIONS ☑

- ☑ *Develop a universal approach to nonpharmacologic management of substance-exposed infants as a standard of care.*
- ☑ *Optimize nonpharmacologic management by designing inpatient and outpatient environments that foster care for NAS infants.*
- ☑ *Promote methods to decrease infant agitation and promote healthy sleep.*
- ☑ *Promote swaddle, skin-to-skin contact, decreased stimulation, rooming-in, breastfeeding, education for primary caregivers and support systems.*
- ☑ *Provide guidance that encourages calming techniques for infant, caregiver, environment.*
- ☑ *Encourage continuity in caregiving to develop trust and rapport.*

PRIORITY: Ensure Framework for Consistent Application of Discharge Planning and Referral Protocols – After delivery, the risk of relapse for women with substance use disorder is heightened. Support services, continuation of pharmacotherapy and planning for future pregnancies are critical. Safe, sustainable plans of care that provide for the appropriate discharge, referral and linkage to care that are responsive to an infant's needs are essential to promoting healthy behaviors and optimal clinical outcomes. Discharge plans should include home visitation and early intervention services and support a plan of safe care for mother and infant, addressing maternal comorbid conditions.

ACTIONS ☑

- ☑ *Create a foundation of collaborative relationships with primary caregivers, physicians, social workers, community services and other stakeholders.*
- ☑ *Initiate discharge planning for mothers with OUD and infants at risk for NAS upon admission.*
- ☑ *Consider modifying the infant discharge checklist developed by SAMHSA to align with your hospital's criteria for infant discharge.*
- ☑ *Prior to discharge ensure exposed (or at risk) infants have been properly monitored for development of NAS.*
- ☑ *Provide the primary caregiver with a written list of community resources (e.g., postpartum depression, peer-to-peer counseling, home visitation, safe housing).*
- ☑ *Ensure primary and secondary caregivers can demonstrate how to create a safe sleep environment, soothe agitation and use other nonpharmacologic management techniques with infants.*
- ☑ *Provide contraception counseling and provide immediate, easy access to contraceptive choices.*
- ☑ *Ensure pediatric follow-up within 72 hours of hospital discharge.*

PRIORITY: Ensure Sustainable and Standardized Practice – Evaluation workplans help organizations think systematically about their improvement initiatives and continually evaluate all of their tests of change. They should be created at the outset of the initiative to focus the team's vision of which drivers will be tackled first. The evaluation plan helps keep goals, process and outcome measures front-of-mind and assigns responsibilities for tasks. The workplan should be considered a living document that is continually evaluated and updated to align with the iterative findings of this work. Evaluation measures should be linked to the larger goal of standardized screening and referral to services. They should help identify barriers that impede change such as fear, need for training, inadequate staffing levels, lack of technology, outdated organizational policies or other system issues that could stall an initiative. Performance metrics may include outcomes, process or balancing measures. Outcome measures speak to how change impacts patients, their health and wellbeing. Process measures, the parts in the system, aid in tracking efforts to improve screening and referral. Balancing measures are chosen to understand whether changes to improve one part of the system are causing new problems in other areas. Creating a balanced scorecard with complementary metrics will aid in tracking the effectiveness of this workCommunication also is key to the success of any program. Communication reinforces the results of positive change, builds credibility among leaders and fosters an environment where improvement is embedded in the culture. Communication should not be limited to staff – sharing with patients and families encourages transparency in two-way communication and ensures that everyone is engaged in the process and its success.

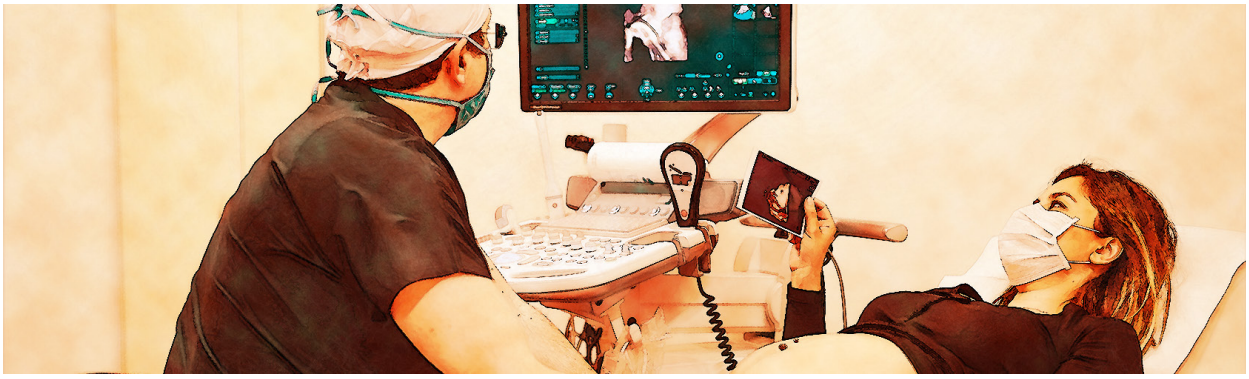
ACTIONS ☑

- ☑ *Create an evaluation workplan that includes specific, measurable, applicable, realistic and timely steps toward change.*
- ☑ *Implement small tests of change that you think will lead to improvement over a short period of time.*
- ☑ *Refine and broaden approaches, leveraging generated learning to plan for scaling the changes.*
- ☑ *Establish standardized templates and educate stakeholders on their use.*
- ☑ *Agree to standardized application guidance and share across all stakeholder communities.*
- ☑ *Create continual evaluation and feedback mechanisms to ensure consistency in design, application and practice.*

PRIORITY: Incorporate the Voices of Moms and Those Who Love Them - Consumer engagement in the development and delivery of health services to enhance the care of pregnant women results in improved outcomes. Involving consumers in developing patient information material results in material that is more relevant, readable and understandable for patients.

ACTIONS ☑

- ☑ *Make sure mothers are aware of available services and how to access them.*
- ☑ *Ensure that clinicians are well-versed in best practices in treating mothers who use substances.*
- ☑ *Emphasize the language and vocabulary used when working with women at risk to remove stigma and treat them in a bias-free environment.*
- ☑ *Treat women at risk for substance use disorder the same as others at risk for any other chronic disease.*
- ☑ *Provide easy access to information on the availability of wraparound supports.*



Neonatal Abstinence Syndrome Consensus Initiative

Funding

This work was made possible by funding from the N.J. Department of Health to New Jersey Hospital Association's (NJHA) Health Research and Educational Trust of N.J. (HRETNJ), grant PHLP19EMG001.

Acknowledgments

The preparation of the Neonatal Abstinence Syndrome Consensus Initiative guidance and on-line resources would not have been possible without the valuable contribution of all stakeholders who were involved in this work. From across our state, maternal and child, behavioral, addictions and medical providers, professionals, researchers, policy makers and other influencers provided insight and expertise to the shape and form of this content. Equal value and importance have been given to each contribution.

Engagement of mothers, partners and their loved ones is central to promoting healthy support mechanisms. The power of that engagement helps the healthcare community understand what is important and necessary when designing systems of care in a meaningful, sustainable way.

Thank you to the women, their partners and family members who took the time to tell their personal stories and re-live experiences in an effort to help inform this work.

And finally, without the great work of those who preceded us in their dedication to improving outcomes for mothers and babies, this guidance would not be possible. A special thank you to each of the national and state agencies, professional organizations, Perinatal Quality Collaboratives, maternal health consortia, community-based programs, and academic institutions whose publications have informed this work.

Disclaimer

The content herein should not be considered as an exclusive direction of action or serve as the standard of medical or obstetric care. This consensus guidance is considered a resource for health systems, hospitals and providers. Readers should adapt the guidelines and resources based on their organization's level of care, population served and resources available. As a living document it is the intent of the authors to make available additional resources, guidelines and protocols published or otherwise available to the public.