

Eat, Sleep, Console

Authors: Christine Gold, MD, and Colleen Wheeler, PA
On behalf of the Colorado Hospital Substance Exposed Newborns
Quality Improvement Collaborative Steering Committee

Colorado Chapter

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN® 

OVERVIEW

Historically, many institutions have utilized various scoring methods to calculate a neonatal opioid withdrawal score for infants with prenatal opioid exposure, which were used to determine the implementation of medication management for neonatal opioid withdrawal syndrome (NOWS). However, many of those scoring methods lead to arbitrary escalation of medication and overemphasis on individual symptoms. In 2017, a novel approach to neonatal opioid withdrawal recognized that despite symptoms of withdrawal, an infant's ability to function (defined as the ability to eat, sleep, and console (ESC)), rather than his or her symptoms, should drive management decisions. Additionally, supportive measures may improve management of withdrawal and functioning without an automatic need to escalate to medication management. Since its publication, the Eat-Sleep-Console method has revolutionized the care of NOWS.

Eat Sleep Console or ESC: This tool focuses on the functioning of a newborn, rather than individual signs of opioid withdrawal. Infants are considered to be well-managed by using the ESC approach if the infant is able to meet the criteria below:



Eat- able to eat at least one ounce or breastfeed well (often interpreted as eating the appropriate volume for age or breastfeeding well)



Sleep- able to sleep undisturbed at least one hour or more



Console- able to be consoled, if crying, within 10 minutes

ESC assessments are made prior to each infant feeding, or roughly every 3-4 hours. A typical length of stay in the hospital for those infants who do NOT require medication is a minimum of 72 hours, but often 96 hours.

Supportive Interventions: Maximize these interventions to manage neonatal opioid withdrawal:

- Low-stimulation environment
- Rooming-in
- Skin-to-skin
- Swaddling
- On-demand feedings
- Pacifier use
- Grouping newborn cares to maximize undisturbed time frames between clinical care



SCAN HERE
FOR MORE
RESOURCES

In Partnership with
CHOSEN

Escalation management:

If the infant is not eating, sleeping, or consoling as defined above due to opioid withdrawal, the medical team should be notified. Nonpharmacologic, supportive interventions should be increased if possible. If despite maximizing supportive interventions, the infant continues to not meet the above criteria, the infant should then be escalated to medication management. This may require a transfer from the level 1 newborn unit to a neonatal ICU or pediatric inpatient unit, depending on the facility.



Medication management:

Start with morphine, 0.05 mg/kg every three hours as needed. The signs of withdrawal in newborns are not linear, so reassessment after each medication dosage would be appropriate initially to determine further medication needs. Some infants may require scheduled medication treatment, with either morphine or methadone, to improve their symptoms.



SCAN HERE
FOR MORE
RESOURCES

Outpatient weaning of medication for newborns is not recommended.

Frequently Asked Questions:

Will this shift the burden from inpatient management to outpatient PCPs?

No. Our data has shown the risk of readmission has not increased after implementation of ESC.

Won't newborns all end up on medication anyway?

No. We have seen fewer newborns requiring medication management with the ESC tool.

What if a newborn is not feeding well due to a different reason than withdrawal?

With each eat-sleep-console assessment, consideration is given to factors impacting that infant's functioning. For example, certain late preterm infants may not be expected to eat well at baseline, which is attributable to their gestational age and not necessarily withdrawal leading to impaired functioning.

What if an infant ends up needing morphine scheduled every three hours? What is the next management step?

Many providers may adjust an infant who is requiring scheduled morphine to a higher dosage or an alternate medication, such as methadone.

What are the benefits observed from switching to ESC management?

Decreased length of stay, increased parent satisfaction, and reduced medication usage for newborns have all been observed.

How do I manage medication weaning in an opioid-exposed newborn after discharge?

It is not recommended or endorsed to discharge a newborn from the hospital requiring medication, such as morphine or methadone.

Shouldn't all opioid-exposed newborns be encouraged to bottle feed instead of breast feed?

No. In fact, many prescribed opioid medications for a pregnant or birthing person, such as buprenorphine or methadone, are safe to use while breast feeding. Breast feeding is encouraged in these patients, if desired by the birthing person. Prescribed opioids such as oxycodone may require adjustments to a safe breast/chest feeding plan, depending on dosage. In general, active illicit opioid use at the time of birth may warrant establishment of a milk supply if desired by the birthing individual, but temporary alternate feeding plans should be established until sobriety is achieved.

This project is supported by the Centers for Disease Control and Prevention (CDC) Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of cooperative agreements OT38000282 and U2DMC32394 with 100 percentage financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government.



SCAN HERE
FOR MORE
RESOURCES