

Insights

A Mother-Centered Approach to Treating Neonatal Abstinence Syndrome



With rising opioid addiction rates, increasingly high

numbers of babies are being born with neonatal abstinence syndrome ([NAS](#)). Babies with NAS may suffer from multiple withdrawal symptoms including tremors, sleeping problems, irritability, fever, diarrhea, difficulty eating and gaining weight, and seizures.

Researchers at Yale-New Haven Children's Hospital have [published findings](#) (Hospital Pediatrics, January, 2018) that suggest a mother-centered approach to caring for NAS may reduce the need for drug treatment and length of hospital stays. The researchers' Eat, Sleep, Console (ESC) model monitors how the baby is behaving to determine whether the baby should be transitioned to a drug protocol, and critically, it keeps baby and mother together. Specifically, the ESC model looks at:

- Eat: Is the baby feeding normally?
- Sleep: Is the baby able to sleep?
- Console: Can the baby be consoled within ten minutes of crying?

The ESC model supports an approach to NAS that centers on the natural mother-child relationship, explains Matthew Grossman, MD, Assistant Professor of Pediatrics at the Yale School of Medicine and Quality and Safety Officer at Yale-New Haven Children's Hospital. It actively involves and empowers the mother in her baby's care so that both benefit from the

proven advantages of [keeping mother and baby together](#). Findings from the study show that babies treated following ESC guidelines were significantly less likely to receive a drug treatment and reduced hospital stays by more than two weeks.

Recently, Grossman shared his findings at a learning session for the [New York State \(NYS\) Opioid Use Disorder in Pregnancy \(OUD\) and NAS Project](#), an initiative led by the NYS Department of Health's NYS Perinatal Quality Collaborative, in collaboration with the American College of Obstetricians and Gynecologists District II, Healthcare Association of NYS, Greater New York Hospital Association, and NICHQ. The project, which is currently being piloted in 18 NYS birthing hospitals, seeks to identify and manage care for women with OUD during pregnancy, and improve identification, standardization of therapy, and coordination of aftercare of infants with NAS. In the coming months, some of the participating hospitals plan to test how best to implement the ESC approach in their work to improve care of infants with NAS.

"The ESC approach has important potential for quality improvement initiatives like New York State's, which seeks to shorten neonatal length of stay for this population of infants," says NICHQ Executive Project Director Pat Heinrich, RN, MSN, CLE, who leads NICHQ's work providing [quality improvement and technical expertise](#) for the initiative. "ESC is a promising approach with documented good outcomes to date. By testing the approach locally using quality improvement methodologies, collaborative teams can learn more about its potential for improving treatment and shortening stays."

Interested in finding out more? Below, Grossman expands on the potential benefits of this approach and provides advice on putting it into practice.

Empower mothers as caregivers

When the ESC approach is used to guide treatment, mother and babies are kept together whenever possible so that the mother is able to respond to her baby's needs. Along with proven health benefits of skin-to-skin contact, moms and other caregivers can provide support, or 'treatment,' that their baby can't get anywhere else. They can give their baby their undivided attention—holding the baby when cranky or upset, which is more common for a baby with NAS, and providing feedings as often as the baby is hungry.

Hospitals may not have the infrastructure to keep mothers and babies in the same room, so may need to adopt creative solutions that support mom-baby togetherness. These creative solutions are possible though, Grossman urges. For example, he describes how a hospital that cared for babies in an open-bay Neonatal Intensive Care Unit (NICU) created privacy for mothers by closing off one area of the unit.

Empowering mothers also means reserving judgment, says Grossman. Blaming families is never helpful and does not acknowledge that substance use disorders are a chronic disease and need to be treated as such. Along with supporting mothers in getting medical treatment if needed, such as substance-use treatment, Grossman recommends repeatedly sharing positive messages about the care they can provide.

Helping mothers address their needs after birth is critical to improving maternal and infant health outcomes. Learn more about ways to support the mother-child dyad in [this recent NICHQ article](#).

“Telling mothers, ‘You can be the treatment for your baby, you’re the one who is going to make this better, and you have everything your baby needs,’ can help build her confidence because it shows that she has a unique capability to help her baby thrive,” says Grossman. “A critical part of setting families up for success when they leave is not only helping them get the medical support they need, but also building trust in their abilities while at the hospital. Judgmental attitudes do the opposite.”

Support a holistic continuum of care

This philosophy of ‘moms as treatment’ not only benefits the health of the baby and helps build a mother's confidence and self-esteem, but it can also support the family's ability to care for the child after they leave the hospital. It gives mothers an opportunity to model the kinds of behaviors that will continue to help the baby heal once home, establishing a positive relationship that will also support the baby's future social and emotional growth.

“Because the ESC approach gives families a chance to bond and practice caring for their baby, it can help set families up for success while still in the hospital,” explains Grossman. “When families go home, they're already a team—they have done all the work, managing the symptoms and keeping the baby calm and fed. They feel confident when they leave instead of unprepared.”

Similarly, hospital staff can help families prepare for the transition home by mapping out a plan for next steps that support both the family and the baby.

“Planning the hand-off to the pediatrician, scheduling appointments with a follow-up clinic for extra developmental testing, setting the family up with birth-to-3 services, connecting with the mother's obstetrician to support the mother's care, and connecting them up with some form of parenting support—these are all things we can do before families leave the hospital to support success once they get home,” says Grossman.

Ultimately, while the ESC model is still in the process of being validated, it may have powerful potential to empower mothers who may feel marginalized from their child's care and set them up to succeed once they leave the hospital.