



STRATEGY BRIEF

SUPPORTIVE COMMUNITIES

What can child protection agencies learn from **Yale New Haven Children's Hospital's** response to infants with Neonatal Abstinence Syndrome?

In Connecticut, one hospital's willingness to rethink the traditional approach to treating infants born with Neonatal Abstinence Syndrome (NAS) has resulted in markedly better outcomes, including shorter hospital stays, decreased use of morphine, and lower treatment costs.¹ The state's Department of Children and Families (DCF) enthusiastically supports the Yale New Haven Children's Hospital (Yale) new protocols, which align well with a DCF and Yale School of Medicine treatment model, [Family-Based Recovery \(FBR\)](#). Both institutions have left behind approaches rooted in tradition rather than evidence, and turned in favor of new strategies that aim to promote healthy parent-child attachment, destigmatize substance use disorders, and prevent unnecessary interventions.

DCF has reported that thanks to Yale's new approach, caseworkers are able to engage more easily with families impacted by NAS and parental substance use while they are in the hospital. **Specifically, DCF reported that the agency is removing fewer infants from their mothers, and that staff are able to more**



What can child protection agencies learn from Yale New Haven Children's Hospital's response to infants with Neonatal Abstinence Syndrome?

easily assess, observe, and create safety plans for families when they are readily able to see interactions between the mother and baby, and have access to health and care information.²

Under Yale's approach to care, even in instances where the mother is unable to provide for the infant's needs or must complete inpatient treatment after discharge, she has an opportunity to bond with her baby during its first few days of life. Research shows that the parent-child relationship may be a strong motivating factor for parents in substance use treatment, and **this bonding time may increase the chances of future reunification.**³ The new approach, and the path Yale took to develop it, offer insights for child protection leaders that may help to further transform the experience of infants born with NAS and their families.

The traditional standard of care for NAS

NAS occurs when a fetus is exposed to prolonged periods of parental opioid use; once born, the infant's body is physically addicted to the drug and the infant experiences withdrawal symptoms.⁴ Based on national data collected from neonatal intensive care units (NICUs), the rate of infants diagnosed with NAS has grown exponentially in recent years, [increasing by more than 400% from 2004 to 2014](#), from 1.5 to 8.0 per 1,000 hospital births.

INITIAL RESISTANCE FROM NURSERY STAFF

The decision to pull infants with NAS from the NICU and place them in traditional rooms with their mothers was not initially popular with nursery staff. It took 18 months of negotiating before staff began placing babies with their mothers outside of the NICU. Even then, nursery staff found "medical problems" (usually problems that could be resolved in minutes) that sent infants with NAS back to the NICU. However, after about a year, and with evidence that the new approach worked for both babies and mothers, nursery staff stopped transferring infants back to the NICU and began supporting the new model.

Despite this rapid increase in cases, the standard approach to NAS care in most hospitals has not changed significantly since the 1980s. It involves removing infants from their mothers' care, placing them in the NICU, suppressing withdrawal symptoms with medication (usually morphine), using a complex scoring tool to assess symptoms at regular intervals, and weaning infants from medication on strict dosing schedules.

When Yale's team began to question the traditional approach, they were surprised to discover that very little evidence supported it. The approach was

It became clear that there was absolutely no real evidence behind what we were doing — we were just doing it because it was what we had always done. We took babies having a tough time, and separated them from their moms. We had moms going through tough times, and we separated them from their newborns. And then we were leaving the babies in a box and treating them with morphine. But we found out that if we treated them like babies, they responded like babies. And they got better, faster.

- DR. MATTHEW GROSSMAN
YALE NEW HAVEN CHILDREN'S HOSPITAL

What can child protection agencies learn from Yale New Haven Children's Hospital's response to infants with Neonatal Abstinence Syndrome?

QUESTIONS FOR CHILD PROTECTION LEADERS TO CONSIDER

- In what ways are we “doing what always has been done” in child welfare practice today?
- Which strategies currently employed are grounded in research and evidence, and which might benefit from further examination or experimentation?

costly, outcomes were generally poor and, despite the standardized model, there was substantial variation in the length of stay for infants with NAS across hospitals. In addition, the standard of placing infants in the NICU was based on one article from the 1970s that pertained only to infants who had experienced seizures. The Finnegan Neonatal Abstinence Scoring System, a 21-item scale commonly used to determine an NAS infant's course of treatment, never had been properly evaluated despite being widely employed for more than 30 years.

Child protection involvement for these infants is also common. In some cases, this is due to concomitant abuse or neglect. Often, however, hospital staff believe they should (and some states are legally required to) report the family to CPS because the infant was born substance exposed, even if the mother's substance use disorder is well managed and no signs of maltreatment are present.⁵

Both the traditional approach to medical care, and inflexible or broadly interpreted CPS reporting

guidelines, can result in interventions that create additional stress for new families. In some cases, they can result in unnecessary separation of vulnerable infants from their parents at a critical point in their development.

An evidence-informed, family-focused approach

Yale's approach didn't change overnight. It evolved over time, through a process of observing the unique needs of infants with NAS and their caregivers, asking what might work better for babies and families, experimenting with new approaches, and attending to outcomes.

Today, there are three primary tenets:

- Mom is the best medicine.
- Treat babies like babies.
- Treat the family with the same respect you give any other family.

Mom is the best medicine

The first step was to see what would happen if the infants and mothers were kept together. Hospital staff noticed that infants with NAS require more frequent feeding, soothing, and physical interaction than staff can provide in the NICU. If these needs are not met, withdrawal symptoms exacerbate. They also noticed that when mothers spent the night with their infants, babies did better. Yale therefore determined that the best person to provide the level of care needed by these infants was their mother.

We quickly learned that giving a mom to a baby is like providing albuterol for someone having an asthma attack.

- DR. MATTHEW GROSSMAN
YALE NEW HAVEN CHILDREN'S HOSPITAL

What can child protection agencies learn from Yale New Haven Children's Hospital's response to infants with Neonatal Abstinence Syndrome?

QUESTIONS FOR CHILD PROTECTION LEADERS TO CONSIDER

- How can we more consistently apply the premise that parents — despite the challenges they may be facing — are children and youth's "best medicine" in child protection practice?
- How might our personal beliefs or morals about substance use impact how we engage and support families struggling with substance use disorder?
- How can child welfare support more natural environments and caregiving for infants and children?

Hospital staff also observed that, due to limited space and an over-stimulating environment, the NICU is not an ideal setting for these babies, who do better in quieter, calmer environments. **By having mothers tend to their infants in general inpatient rooms or other quieter, more private environments, Yale saw an initial reduction in infant average length of stay from 22 days to 13 days. Since then, the length of stay continued to decline to six days, which has been sustained over the last few years.**

Treat babies like babies

Next, the Yale team shifted its attention to the use of the Finnegan scoring tool. In addition to the lack of

evidence supporting it, the Yale team observed that this traditional assessment required staff to disturb infants for long periods of time, which sometimes exacerbated withdrawal symptoms. This could result in infants receiving more medication than otherwise would be required.

Instead, Yale adopted what they consider a more functional scoring system: the [Eat, Sleep, Console \(ESC\)](#). The ESC model focuses on three questions based on normal expectations for infant behavior: Can the baby eat? Can the baby sleep? Can the baby be consoled? If not, mothers are supported in feeding and consoling more frequently before turning to medication. Yale initially [studied the use of ESC with 50 infants](#) and found that when staff made care decisions using this model, they were **less likely to administer morphine, and none of the infants treated with ESC were readmitted, experienced seizures, or needed to be transferred to the NICU.**

Treat the family with the same respect you give any other family

Even after the above changes, hospital staff still was providing the majority of infant care. When the Yale team asked mothers how they felt about the changes in approach, Yale learned that many felt guilty about the impact of their addiction on their newborns and felt that staff judged them. In turn, many staff felt angry about the impact of the mothers' drug use on the babies, who were among the most difficult to care for.

At the end of the day the question we ask ourselves is always, 'Do we think this is going to be good for families and children?' For Eat, Sleep, Console, the answer is yes. Empowering mom, giving her confidence that she can be a capable parent that she's integral to the success of this infant feeling better — that's good for families. It's good for the infant to attach and bond to a mom who feels competent and has some confidence in her parenting.

- MARY PAINTER

DIRECTOR, OFFICE OF INTIMATE PARTNER VIOLENCE AND SUBSTANCE ABUSE TREATMENT AND RECOVERY,
CONNECTICUT DEPARTMENT OF CHILDREN AND FAMILIES

What can child protection agencies learn from Yale New Haven Children's Hospital's response to infants with Neonatal Abstinence Syndrome?

QUESTIONS FOR CHILD PROTECTION LEADERS TO CONSIDER

- In what ways do we assess and treat children and youth involved with child protection differently from other children?
- In what areas might children and youth in the child protection system simply need what any other child or youth would need?
- How could we do more to ensure that we treat babies like babies, kids like kids, and teens like teens?

Through trainings and team meetings, **Yale began to encourage staff to empower parents and provide nonjudgmental coaching on how to best care for their infants.** For example, instead of treating the side effects of methadone treatment as a character flaw, nurses were expected to be direct and supportive: "You are going to be extra sleepy, and there's a risk you could drop your baby. We're going to help manage that risk for you. We can start by helping with nighttime feedings so that you get more rest. How else can we support you?"

Nowadays, **hospital staff inform new mothers that they are the best and first line of treatment for**

their babies. This has increased parental engagement as well as confidence and trust in hospital staff. It has helped to enhance the treatment provided to infants in the hospital, as well as better prepare families for the infant's return home.

Considerations for child protection

Yale's approach has been successfully replicated at other hospitals in recent years.⁶ As partners in the community-wide system of care for children and families, child protection agencies can support and encourage their local hospitals in providing NAS care that promotes attachment and helps families get the best possible start.

- **Ask local hospitals or hospital associations whether they are employing approaches like rooming-in and Eat, Sleep, Console with infants affected by NAS.** If not, encourage them to [learn more about the effectiveness of these strategies](#).
- **Promote policies that require notification rather than reporting to meet CAPTA's Plan of Safe Care requirements.** Too often, hospital staff report families to CPS because an infant was born substance exposed, even if the mother's substance use disorder is well managed and no signs of maltreatment are present. According to CAPTA, in those instances states must only require health care providers to notify the CPS agency; reporting is not required. Connecticut DCF chose to set up an online notification system that does not collect

I think more child protection agencies should be pursuing this. It promotes attachment and bonding, it's good for infants, it's good for moms, and it's good for families. It decreases costs if a baby is not in the hospital for 30 days, and that benefits everybody. I also love the culture shift aspect: If we truly believe that substance use disorder is a health condition, then let's treat families like they're managing a health condition. I think it really helps to shift people's perspective.

- MARY PAINTER

DIRECTOR, OFFICE OF INTIMATE PARTNER VIOLENCE AND SUBSTANCE ABUSE TREATMENT AND RECOVERY,
CONNECTICUT DEPARTMENT OF CHILDREN AND FAMILIES

What can child protection agencies learn from Yale New Haven Children's Hospital's response to infants with Neonatal Abstinence Syndrome?

QUESTIONS FOR CHILD PROTECTION LEADERS TO CONSIDER

- How can we destigmatize substance use disorder in general, and medication-assisted treatment for pregnant and parenting women in particular?
- How can we cultivate caseworkers' empathy for parents with substance use disorder?
- In what ways are our systems showing respect and empowering family members to be the most effective caregivers they can be?

identifying information about families unless there is a concern about child abuse and neglect.

- **Examine the foundation of child welfare practices for families affected by substance use.** "The research about what works for

substance use treatment and recovery has evolved much more rapidly than the treatment system," observes Mary Painter, director of DCF's Office of Intimate Partner Violence and Substance Use Treatment and Recovery. That's why it's especially important to regularly question "business as usual" and seek out practices that have a strong evidence base.

- **Support a continuum of services for families with substance use disorder who are leaving the hospital with a new infant so that those services can be included in the family's Plan of Safe Care.** Mothers with substance use disorder need extra support providing sensitive and responsive caregiving.⁷ They can begin developing those skills in the hospital, but many will need additional help. Consider services like family-based residential treatment, [Native American Connections](#), or [Family-Based Recovery](#) for those who need them.

- 1 This brief was informed by interviews with Dr. Matthew Grossman, Department of Pediatrics, Yale University School of Medicine, and Mary Painter, Director of the Office of Intimate Partner Violence and Substance Abuse Treatment and Recovery, Connecticut Department of Children and Families.
- 2 Hanson, K. E., Saul, D. H., Vanderploeg, J. J., Painter, M., & Adnopoz, J. (2015). Family-based recovery: An innovative in-home substance abuse treatment model for families with young children. *Child Welfare, 94*(4), 161-183.
- 3 Hanson, K. E., Saul, D. H., Vanderploeg, J. J., Painter, M., & Adnopoz, J. (2015). Family-based recovery: An innovative in-home substance abuse treatment model for families with young children. *Child Welfare, 94*(4), 161-183.
- 4 Tolia, V. N., Patrick, S. W., Bennett, M. M., Murthy, K., Sousa, J., Smith, P. B., Clark, R. H., & Spitzer, A. R. (2015). Increasing incidence of neonatal abstinence syndrome in U.S. neonatal ICUs. *The New England Journal of Medicine, 372*(22), 2118- 2126.
- 5 Patrick, S. W., Frank, R. G., McNeer, E., & Stein, B. D. (2019). Improving the child welfare system to respond to the needs of substance-exposed infants. *Hospital Pediatrics, 9*(8), 651-654.
- 6 See for example Blount, T., Painter, A., Freeman, E., Grossman, M., & Sutton, A. G. (2019). Reduction in length of stay and morphine use for NAS with the 'Eat, Sleep, Console' method. *Hospital Pediatrics, 9*(8), 615-623; Parlamán, J., Deodhar, P., Sanders, V., Jerome, J., & McDaniel, C. (2019). Improving care for infants with Neonatal Abstinence Syndrome: A multicenter, community hospital-based study. *Hospital Pediatrics, 9*(8), 608-614; Achilles, J. S., & Castaneda-Lovato, J. (2019). A quality improvement initiative to improve the care of infants born exposed to opioids by implementing the Eat, Sleep, Console assessment tool. *Hospital Pediatrics, 9*(8), 624-631; Dodds, D., Koch, K., Buitrago-Mogollon, T., & Horstmann, S. (2019). Successful implementation of the Eat Sleep Console model of care for infants with NAS in a community hospital. *Hospital Pediatrics, 9*(8), 632-638.
- 7 Wright, C. L., Dallas, R., Moldenhauer, R., & Carlson, E. A. (2018, May). Practice and policy considerations for parents with opioid use disorders. *ZERO TO THREE*, 10-16.

P 800.228.3559

P 206.282.7300

F 206.282.3555

casey.org | KMResources@casey.org

