



The Honorable Orrin Hatch  
Chairman  
Committee on Finance  
U.S. Senate  
Washington, DC 20510

The Honorable Ron Wyden  
Ranking Member  
Committee on Finance  
U.S. Senate  
Washington, DC 20510

February 16, 2018

Dear Chairman Hatch and Ranking Member Wyden:

Nemours Children's Health System (Nemours) appreciates the opportunity to submit comments to the Senate Finance Committee on opioid legislation. We appreciate the Committee's commitment to addressing the opioid epidemic that has affected millions of Medicare and Medicaid beneficiaries. We offer input on policies to address the opioid epidemic and improve the health of the pediatric population in Medicaid.

Nemours is an internationally recognized children's health system that owns and operates the Nemours/Alfred I. duPont Hospital for Children in Wilmington, Delaware, and Nemours Children's Hospital in Orlando, Florida, along with outpatient facilities in six states, delivering pediatric primary, specialty, and urgent care. Nemours also powers the world's most-visited website for information on the health of children and teens, KidsHealth.org and offers on-demand, online video patient visits through Nemours CareConnect. Established as The Nemours Foundation through the legacy and philanthropy of Alfred I. duPont, Nemours provides pediatric clinical care, research, education, advocacy, and prevention programs to families in the communities it serves.

Nemours has a long history of addressing pediatric health needs, and we know that the early years (birth to 5) of a child's life are critical in a child's health trajectory. Additionally, we recognize that adverse childhood experiences and toxic stress in early childhood can have lifelong consequences, impacting physical and mental wellbeing and leading to high-cost behavioral health and related conditions.<sup>i</sup> Parental substance abuse and the many health and social challenges that follow can lead to adverse childhood experiences and toxic stress. Moreover, direct exposure to addictive substances in-utero can result in a very serious health condition for newborn babies known as neonatal abstinence syndrome (NAS), which cause future health and social challenges in childhood and beyond.

**As the Committee considers future legislation to address opioid and substance abuse, we encourage the Committee to encourage the Centers for Medicare and Medicaid Services (CMS) to test innovative payment models to address NAS, with the goal of improving outcomes for mom and baby and reducing Medicaid costs.**

NAS is a drug-withdrawal condition in newborns caused by prenatal exposure to addictive illegal or prescription drugs.<sup>ii</sup> NAS babies exhibit a wide range of symptoms within the first few days of life, including irritability, gastrointestinal dysfunction, feeding difficulties, respiratory distress, neurologic problems, high-pitched and excessive crying, tremors, and temperature instability.<sup>iii, iv, v, vi, vii</sup> Affected

babies require extended time in the hospital and more complex treatment options than babies born without NAS. In 2012, the average length of stay (LOS) for NAS babies was 16.9 days compared to 2.1 days for normal birth babies.<sup>viii</sup>

From 2000 to 2012 in the United States, the incidence of NAS increased nearly five-fold, from 1.2 to 5.8 per 1000 hospital births, and costs have also risen <sup>Error! Bookmark not defined., ix, x</sup> The average total cost of care for a NAS-related birth at hospital discharge increased significantly from 2000 to 2012, starting at \$39,400 and increasing to \$66,700 (inflation-adjusted). Pharmacological interventions, a common approach for treating babies with NAS, can increase the cost of care even more, ranging from \$86,900-\$100,000 in 2012. This is a stark contrast compared to the range for an uncomplicated term baby, which was \$3,400 - \$3,600 in the same year. <sup>x</sup> Recent data shows that from 2009 to 2012, the combined total hospital charge for NAS across all-payers nearly doubled from \$732 million to \$1.5 billion with 80% covered by Medicaid. Medicaid payments to hospitals for NAS during the same time period increased from \$564 million to \$1.2 billion. <sup>x</sup> **Medicaid is currently paying for more than 80 percent of all NAS-related cases<sup>xi</sup>, presenting the opportunity to test innovative payment and delivery models to improve outcomes for NAS babies and reduce Medicaid costs.**

More specifically, in answer to the Committee's questions, we offer the following comments to Questions 3 and 8:

**Question 3: How can Medicare and Medicaid payment incentives be used to remove barriers or create incentives to ensure beneficiaries receive evidence-based prevention, screening, assessment, and treatment for OUD and other SUDs to improve patient outcomes?**

NAS is a complex issue that requires a multi-faceted clinical and community response that addresses the needs of the mother and the baby. Since there is great potential to improve care, reduce LOS and reduce costs to the health care system through a focus on improving NAS treatment approaches, **Nemours recommends that Congress encourage CMS to work with states to test value-based payment models under Medicaid for the mother-baby dyad, including the following guiding principles and key components for testing NAS value-based payment model designs.**

**Encouraging Collaboration:** A comprehensive response to opioid abuse requires collaboration among many sectors beyond health. As such, it is important that CMS work with other HHS agencies and public health and other community agencies to collaborate on consistent and reliable methods for coding and collecting data as well as comprehensive approaches to prevention, treatment and early detection of NAS. This includes promoting awareness of NAS and prenatal substance use through education of women of child-bearing age regarding the impacts of drug use on a baby, as well as screening women of childbearing age during routine medical visits once rapport and trust is established.

**Standardizing care and treatment:** The Government Accountability Office (GAO) published a report recommending standardized approaches for screening and treating NAS-affected babies.<sup>xi</sup> Literature suggests that effective standardized protocols can include NAS evaluation and treatment, scoring practices (used to screen newborns and to determine the appropriate course of treatment), as well as pharmacologic (e.g. buprenorphine, methadone or morphine) and non-pharmacologic interventions (e.g. breastfeeding, soothing, cuddling, swaddling, etc.) that are evidence-informed.<sup>xi, xii</sup> Hospitals with rigorous weaning guidelines (to help babies wean off opioid dependence) have seen lower health care utilization and improved outcomes such as shorter treatment time, reduced LOS and lower rates of adjunctive therapy.<sup>xiii</sup> Value-based models focusing on NAS should test the range of evidence-informed treatment protocols.

**Building resilience for mothers and families by focusing on social services connections, mental and behavioral health and parenting support:** Linking families with needed mental, behavioral, and social services should be accounted for in value-based payment models for NAS. Often, even when NAS surviving babies are discharged from the hospital, mothers find themselves without the resources and support needed to care for their babies. A 2015 investigation by Reuters found that many NAS babies die after being discharged from the hospital. For 75 percent of these cases, the mothers caused the deaths for various reasons related to neglect. When asked in retrospect, many of the mothers wished for social services interventions.<sup>xiv</sup>

**Please see Question 8 below for a description of additional social supports and mental/behavioral health services that could be included in a payment model test, with CMS paying for connections to social services.**

*Given the complexities of NAS at all levels from conception to post-birth, Nemours recommends that Congress encourage CMS to work with states to test a variety of payment models to support the comprehensive model described above. Such payment models could include:*

- Bundled payments that start at the time of NAS identification and extend at least 6 months post-discharge to track outcomes during the critical post-discharge period. Components of the bundle are described above (pharmacological and non-pharmacological treatment options for the baby, in addition to mental and behavioral health support for the mom, connections to social services, with follow-up from a navigator, and parenting supports).
- Pay for performance model that focuses on outcomes that include survival rates for the baby, health care utilization and spending.
- Furthermore, CMS could test a hybrid model such as a monthly case-management fee for NAS babies.

In the longer-term, CMS could track developmental outcomes for NAS babies to determine if interventions had any impact on these outcomes over time. **These payment models should be coordinated with broader prevention and early detection strategies that states and communities are pursuing so that the model is leveraging the other services and supports available but not paying for them and most importantly, is ensuring a coordinated and comprehensive response that has great potential to improve outcomes and reduce Medicaid costs.**

**Question 8: What human services efforts (including specific programs or funding design models) appear to be effective in preventing or mitigating adverse impacts from OUD or SUD on children and families?**

In addition to the treatment options outlined above for babies with NAS, Nemours recommends the following three-pronged approach to support the mother:

- 1) **Connections to social services** - As described above, it is critical that connections are made to a range of social services providers (e.g. housing, food, transportation, financial counseling, etc.). Initiation of connections should begin as soon as possible, even in the pre-natal period. A comprehensive model should include a navigator (e.g. social worker, care coordinator or community health worker) who actively connects the mother with these services and follows up post-discharge, and who is coordinating with the services the mom may be receiving at a Medication-Assisted Treatment (MAT) center.
- 2) **Mental and behavioral health supports** - Mothers of NAS babies could also benefit from programs that address their mental and behavioral health needs. For example, Thomas

Jefferson University Hospital in Philadelphia, PA has a program that provides a 12-week mindfulness-based parenting intervention for mothers on medication-assisted treatment (MAT) for opioid use disorder. Results show that participating mothers' stress levels significantly decreased after the intervention.<sup>xv</sup> There are other programs across the nation that provide crisis stabilization beds and counseling for recovering moms. By helping mothers better cope with stress and addressing their mental health needs, these types of interventions can help change the potential course of trauma and improve both children's and families' lives.

- 3) **Follow-up parenting supports in the home** - There is growing body of evidence-based research suggesting that improving parenting skills and competencies can help support a child's health and development.<sup>xvi</sup> One example of an evidence-based parenting program is the Nurse-Family Partnership (NFP). The program trains nurses to conduct regular home-visits to first-time, low-income mothers starting at pregnancy and continuing through the child's second birthday. Results from the program showed significant reductions in negative outcomes such as pregnancy complications, childhood injuries, and developmental challenges.<sup>xvii</sup> Similar in-home support could be provided to moms and NAS babies, post-discharge.

Nemours again thanks the Committee for its dedication to addressing the opioid epidemic and remains grateful for the opportunity to provide our comments. Please do not hesitate to reach out to me at [Daniella.Gratale@nemours.org](mailto:Daniella.Gratale@nemours.org) or Vy Luong at [vy.luong@nemours.org](mailto:vy.luong@nemours.org) with any questions or requests for additional information.



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Cc:

Sen. Tom Carper  
Sen. Bill Nelson  
Sen. Bob Casey  
Sen. Pat Toomey  
Sen. Bob Menendez

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<sup>i</sup> Harvard Center on the Developing Child. "The Foundation of Lifelong Health Are Built in Early Childhood." <http://46y5eh11fhgw3ve3ytpwxt9r.wpengine.netdna-cdn.com/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>

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<sup>xi</sup> Newborn Health: Federal Action Needed to Address Neonatal Abstinence Syndrome. (2017, October 4). Retrieved October 4, 2017, from The Government Accountability Office website: <http://www.gao.gov/assets/690/687581.pdf>

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