



Nemours Children's Health System is one of the largest integrated pediatric health systems in the United States, serving children in the Delaware Valley, Florida and Georgia, and, for select specialties, children from across the nation and around the world. Nemours is dedicated to our promise of treating all children as if they were our own by doing everything within our power to help children grow up to be healthy and reach their full potential.

In the Delaware Valley, Nemours provides comprehensive pediatric care at our nationally ranked, newly expanded hospital, Nemours/Alfred I. duPont Hospital for Children. Through Nemours duPont Pediatrics, we offer families access to primary and specialty care in Delaware, Pennsylvania and New Jersey. In 2018, we provided nearly 660,000 outpatient visits in these locations. As Delaware's only Level 1 Pediatric Trauma Center, we have reduced child deaths from injuries and contributed to statewide injury prevention initiatives.

The mission of Nemours is to provide leadership, institutions and services to restore and improve the health of children through care and programs not readily available, with one high standard of quality and distinction regardless of the recipient's financial status. Nemours is committed to providing patient- and family-centered health

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Once every three years, Nemours conducts a CHNA to comply with requirements in the Patient Protection and Affordable Care Act. The CHNA allows Nemours to obtain a comprehensive data set on the health status, behaviors and needs of children in our CHNA five-county total service area (TSA), which includes the three counties in the state of Delaware (New Castle, Kent and Sussex), as well as Chester and Delaware counties in Pennsylvania. This data set then allows us to develop a focused plan to address community health needs. We began this process in 2012–2013 and continued with a new CHNA in 2016. The report that follows reflects the progress made on the priorities set forth in the 2016 CHNA Implementation Plan in 2018.

Nemours engaged Professional Research Consultants, Inc., to conduct our needs assessment, which was composed of both qualitative and quantitative data, including a customized local child and adolescent health survey, key informant online survey, public health data, vital statistics data and other benchmark data on the health of children in the Delaware Valley. Analysis of the 2016 CHNA data resulted in the following eight areas of opportunity, which represent the significant health needs of children in our TSA:

- access to health care services
- mental health
- asthma and other respiratory conditions
- infant & child health

Our 2016 CHNA also included a prioritization process, in which we asked 152 community members, representing each county in our TSA, to rank the areas identified in the needs assessment in order of importance for Nemours to address. Respondents were asked to complete the priority rankings with the following criteria in mind:

Magnitude — the number of children affected

Feasibility — the ability to reasonably affect the issue, given available resources

Consequences of Inaction — the risk of exacerbating the problem by not addressing at the earliest opportunity

Three top priorities emerged from this ranking process:

Nemours convened three work groups to develop the CHNA Implementation Plan to address each of these top priority areas. The remaining five issue areas (those not ranked as top concerns) continue to be important to Nemours, and we will work to improve these aspects of children's health through our patient care, research and population health management efforts.

This document identifies the activities and programs developed and executed during 2018 as a result of the implementation plan objectives and strategies developed from the 2016 Community Health Needs Assessment.

The 2016 CHNA revealed that parents in our TSA are much more likely than parents in the United States overall to report fair to poor mental health in their children. In 2016, 12.2 percent of parents in the TSA rated the mental health of their children as fair or poor — more than twice the national figure. Moreover, this figure has increased significantly in the past three years, from 5.6 percent in 2013 to 12.2 percent in 2016. An increase of this magnitude — more than double in percentage terms — is cause for concern. Not surprisingly, community members ranked mental health as the top priority for Nemours to address in its implementation plan.

The Nemours CHNA mental health work group, composed of experts in the field, focused on how to address the increased needs of children in the TSA in the most meaningful way. The following four points, which surfaced during meetings and subsequent research, shaped the Nemours CHNA interventions in this area:

Both the CHNA and national surveys identify a gap between the number of children in need of mental/behavioral health care and the number who actually receive treatment.

Parents are often not aware of behavioral health resources in their communities and finding the right provider for a given child and condition can be difficult.

General pediatricians, many of whom are the “first call” for help from parents (particularly parents who are not aware of other resources), may not be trained in current evidence-based treatment for children’s specific mental health issues.

Training in evidence-based practices for child and adolescent behavioral health concerns is also lacking in the broader behavioral health community.

These four points reflect a systemic problem, not unique to our TSA. The nationwide shortage of mental health professionals is well documented, and pediatric specialists are in especially short supply. Reversing this trend will require a long-term solution, and the rising number of children in need of care cannot wait. For Nemours to address the needs of children in our TSA rapidly and effectively, it is necessary for us to support local providers who can see children now, in their own communities.

Across the country, primary care providers are the sole source of behavioral/mental health care for slightly more than one-third of the children seeking treatment. With increased expertise, many Nemours pediatricians could address the needs of the children who present in their offices. Similarly, in Delaware and the two Pennsylvania counties in our TSA, established community agencies and independent providers could meet the needs of more children, if appropriate linkages to care were established for parents, and if providers were offered the support they need for pediatric cases.

With psychiatrists and psychologists grounded in state-of-the-art care for mental and behavioral health, Nemours is well positioned to strengthen community networks of behavioral health care. In this report, we share the 2018 progress toward our two initiatives with this aim, one focused on pediatric workforce development and one focused on raising awareness of community resources and establishing strong linkages to care in the community.

Links to Community-Based Care

To address the problem of identifying appropriate community providers and ensuring that families can access care,

Additional Investments in Behavioral Health

As part of our commitment to children with behavioral health needs in the region, Nemours offers or plans to offer:

The duPont Hospital for Children **Social Work team** provides professional support, intervention and referral for patients and families in a variety of situations, including children who are newly diagnosed with a serious health condition (autism, cancer, cystic fibrosis, cerebral palsy, sickle cell, transplant, etc.) or living with these conditions on a chronic basis; children with an acute mental health crisis (suicidal, aggressive behavior, substance abuse, overdose); and children suffering from trauma/critical injury or children and families facing death.

The Department of **Child Life** help patients and their families cope with medical experiences. Our team of certified Child Life specialists promotes the use of play, preparation, education and self-expression activities as a way to normalize the hospital experience.

Primary care providers are **screening adolescents ages 12+ for depression** at all well visits. Patients with a positive screen who are referred to psychology services are placed on a registry and receive follow-up from a care coordinator to ensure access to services.

Integrated care settings in Pennsylvania and Delaware are expanding. The model, in which a psychologist is embedded in the primary care clinic, is termed “integrated care.”

Also expanding are behavioral health services in Delaware that focus on **trauma-informed care** for children and adolescents with trauma, depression, anxiety and ADHD, as well as other issues.

A **telehealth program** is being developed, which will provide families with quick access to evaluation and treatment services.





Initiative

f Increase utilization of telehealth visits at all sites (non-Nemours and Nemours).

Goals

f Increase total telehealth visits (Nemours and non-Nemours sites) by 60 percent yearly.

f Increase availability of non-Nemours sites offering telehealth specialty visits by eight sites by 2019 year-end.

f Increase the number of clinicians completing telehealth visits by 50 percent yearly.

f Increase the number of clinicians utilizing telehealth in the specialties identified as having the greatest need — GI, weight management, developmental pediatrics and behavioral health.

In 2018:

f Increase the number of specialties utilizing telehealth by 20 percent yearly.

f Increase assessment of patient satisfaction with the telehealth platform.

Metrics

f # and % of providers completing telehealth visits

» In 2018, Nemours increased the number of clinicians completing telehealth visits by 59 percent, from 109 clinicians in 2017 to 173 clinicians in 2018.

f # and % of specialties completing telehealth visits

» In 2018, Nemours increased the number of specialties completing telehealth visits by 24 percent, from 25 specialties in 2017 to 31 specialties in 2018.

Metrics (continued)

Patient satisfaction survey

f% indicating telehealth application was easy to download and use

f% satisfied with the audio and video quality of appointment

f% indicating it was convenient to have the provider evaluate the patient at a place of the family's choosing

f% indicating interest in having future telehealth visits

f% indicating they would recommend the use of the telehealth platform

Other Access Initiatives

Nemours focuses on continually improving access to care as part of our routine operations. We work to ensure that families receive exactly the care they need and want, when and where they need and want it. Listed below are several of Nemours' ongoing initiatives that enhance access to care:

Many initiatives have been implemented to [enhance access to care](#). These range from making care more convenient in new locations for outpatient services (including specialty care, imaging, therapy services and, recently, urgent care); expanding the number of Nemours primary care pediatricians in the community; making it easier to make appointments by offering online scheduling and appointments within three days for new patients; providing secure online access to patient information via the MyNemours portal; and making a nurse navigator available for patients who require multiple appointments in hopes of coordinating appointments on the same day. These access initiatives are constantly evaluated and expanded when possible to meet the needs of more families.

[NemoursLink](#) makes it easier for school nurses who work in Delaware public schools to be a part of the child's care team. School nurses can log on to NemoursLink, a web-based portal, to see a child's plan of care and information about almost every visit to Nemours/Alfred I. duPont Hospital for Children or a Nemours primary care office in Delaware. School nurses can only view a child's records if a parent or guardian has signed a patient authorization form in advance. This program promotes a partnership between Nemours primary and specialty care providers, the school nurse and Nemours' patients and families. The goal is to better serve Nemours' patients through enhanced continuity of care across the care team.

[Nemours duPont Pediatrics, Dover location](#), allows for the provision of clinical care that is sensitive to the needs of this community, including the evaluation and treatment of complex conditions. The space, which opened in 2017, features a separate waiting room, four exam rooms and a consult room, as well as provider offices. Two Nemours consultative pediatricians are seeing patients in the new Dover location. They have received special training in cooperation with the Clinic for Special Children in Strasburg, Pa., which has a long-standing tradition of caring for the Amish and Mennonite communities. Nemours has also established a Family Advisory Committee that meets twice a year and includes members of the Plain community.

To further improve access, Nemours will bring the most needed [specialty care](#) with the approved project on Bayhealth's new Sussex Campus in Milford. Nemours services will include specialty care (e.g., allergy, behavioral health, cardiology, neurology, orthopedics and weight management), therapy services (physical, occupational and speech therapy) and imaging (X-ray and ultrasound) with an anticipated opening in early 2020.

Infant and Child Health

Infant mortality — the number of babies born alive who die before their first birthday — is an important measure of population health and was a top concern of respondents to the Nemours CHNA. Delaware, where three of our TSA counties are located, has seen a 12.9 percent reduction in infant mortality since 2000. But at 8.1 deaths per 1,000 live births, Delaware's rate still far exceeds the national rate of 6.4 deaths per 1,000 live births and the Healthy People 2020 goal of 6.0. Our TSA overall has slightly better rates, but these vary significantly by county, with New Castle County in Delaware and Chester County in Pennsylvania having the highest rates. Notably, the infant mortality rate overall is more than two times higher among births to black mothers than among births to white or Hispanic mothers.

The Nemours work group on infant and child health researched not only the literature on improving low birth weight and infant mortality, but also the activities of other health and social service organizations in the TSA to determine where we might best contribute. Infant mortality is closely linked to low birth weight, which, in turn, is related to maternal health indicators, such as smoking, substance use, obesity and other issues, as well as to the age of the mother. Births to mothers at either end of the reproductive age span are more likely to be at a low birth weight. Parenting strategies, such as ensuring that babies sleep on their backs, are also important in reducing infant mortality.

Two interventions stood out in our review both for their potential impact on the problem and the opportunities for collaboration. The first, a primary care-focused initiative to reduce unintended pregnancy, builds upon the current efforts of the State of Delaware to address the highest unintended pregnancy rate in the nation. This approach may, if successful, also reduce the prevalence of low birth weight and infant mortality. As described below, this CHNA intervention will expand beyond Delaware to address the same issue in primary care sites in our two Pennsylvania TSA counties. The second intervention, a collaboration with Delaware's home visiting programs, will link mothers enrolled in Medicaid to well-researched, evidence-based programs for educating and supporting new parents and improving infant health.

Reducing Unintended Pregnancy

In 2010, in Delaware, 57 percent of all pregnancies were unintended, the highest rate in the nation. Some 95 percent of pregnancies to young women under age 15 are unintended. Most unintended pregnancies occur when women are using a form of contraception that is not effective. The most effective contraceptives, intrauterine devices (IUDs) and implants, are often not well understood and can be difficult for adolescents to access. If young women encounter barriers — including the need for more than one appointment — they are not likely to access the contraception.

Nemours primary care practices are committed to eliminating barriers and providing same-day access to the most effective contraceptives for adolescents. To do so will require changes in training, credentialing and scheduling. We will undertake this work in partnership with Upstream USA/Delaware CAN, a public/private partnership designed to reduce unintended pregnancy in the state of Delaware. Our goal, which draws from and parallels the goals of Upstream/Delaware CAN, is to ensure that young women become pregnant only when they want to, and that the adolescents presenting in Nemours practices are offered the full range of contraceptive methods and provided the method of their choice in a single appointment. Upstream/Delaware CAN is conducting a rigorous evaluation of the statewide effort. Nemours will also collect data on our own providers, practices and patients, as outlined in the table below.

Healthy Families America/Smart Start builds upon attachment and bio-ecological systems theories and the tenets of trauma-informed care. The interactions between direct service providers and families are relationship-based, designed to promote positive parent-child relationships and healthy attachments that are strengths-based, family-centered and culturally sensitive. Studies have shown the interventions to be effective in reducing child maltreatment, in improving parent-child interactions and children's social-emotional well-being, and in promoting children's school readiness. Visits begin prenatally or within the first three months after a child's birth and continue until children are between 3 and 5 years old.

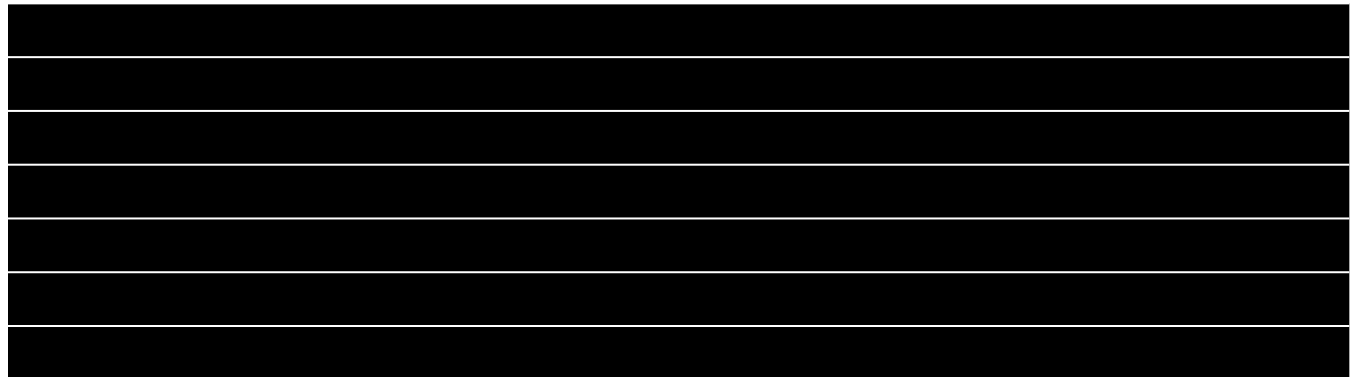
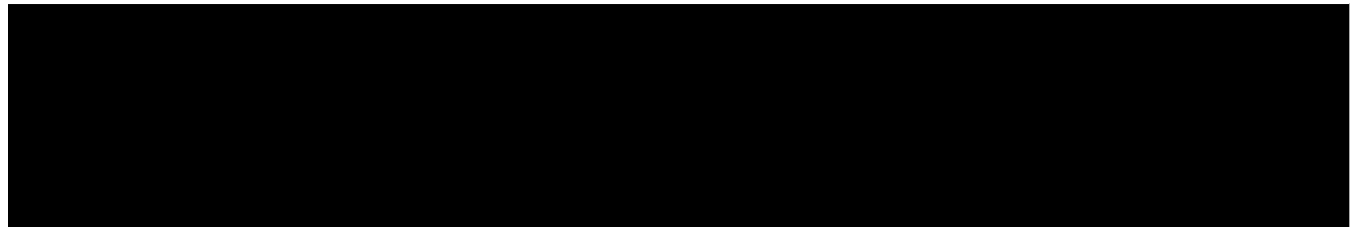
To ensure that linkages to these services are real, Nemours will train primary care providers and staff in primary care offices about the benefits of home visiting for at-risk parents and their children. The goal is to increase the number of eligible families enrolling in home visiting programs each year, and thereby comprehensively address as many issues related to child and family well-being as a family may need. All practices will also be provided with up-to-date referral information and will be asked to track every referral to home visiting. Through mandated data collection conducted by the Division of Public Health, Nemours will also receive and monitor specific measures related to maternal and child health, such as the percentages of infants placed to sleep on their backs and mothers/primary caregivers referred to smoking cessation programs.

Initiative

f Increase Nemours provider referrals to a home visiting program for Medicaid-eligible families.

Goals

f Increase # and % of children referred by Nemours providers to a home visiting program.



Other Initiatives in Infant and Child Health

