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Community Health Needs Assessment 2018 Progress Report

About Nemours

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 care; educating the next generation of health care providers through a variety of education affiliations; offering extensive online and in-person continuing medical education; providing health and wellness information for kids, teens, parents and educators via KidsHealth.org; and offering families 24/7 access to virtual consults with Nemours pediatricians via computers or mobile devices.

Nemours has been recognized as a model of, and an advocate for, transforming the pediatric health care system from a focus on sickness to a focus on wellness, often in collaboration with community and health care partners. Nemours leaders and Associates serve on numerous boards of organizations addressing health and children’s issues, and a wide range of community organizations also receive sponsorship support from Nemours as part of our commitment to support those who support children. Nemours is also focused on bringing our standard of care — and better health — into local communities, and does so not only by providing both primary and specialty care in sites throughout the region, but also by continuously seeking answers to the most vexing problems in children’s health.

Our researchers look for and find novel treatments for complex childhood conditions, and our population health and prevention specialists work to reverse long-standing patterns of unhealthy behavior across our communities. Our Community Health Needs Assessment (CHNA), conducted every three years, provides us an opportunity to survey community members and systematically address their concerns. This report details the strategies we employed in 2018 to address the top concerns identified, as well as the ongoing work conducted in these areas.
Community Health Needs Assessment 2018 Progress Report

During 2016, Nemours embarked on a journey to identify the child and adolescent health needs of the communities near Nemours Children's Hospital (NCH) in Central Florida. Nemours engaged Professional Research Consultants, Inc. to assist in determining the health status, behaviors and needs of children and adolescents in our immediate service area which has been defined as households with children in Brevard, Orange, Osceola and Seminole counties in Florida.

The assessment was comprised of both qualitative and quantitative data including a customized child and adolescent health survey, focus groups, public health data, vital statistical data and other benchmark data on the health of children in Central Florida. To ensure the ever-changing needs of the community are continuously captured, the CHNA is conducted every three years using the same methodology. The 2016 administration of the CHNA resulted in the following areas of opportunity representing the significant health needs of children and adolescents in the community.

Areas of Opportunity

- Access to Health Services
- Prenatal, Infant, & Child Health
- Injury & Safety
- Nutrition, Physical Activity & Weight

After reviewing this Community Health Needs Assessment report, Nemours' Central Florida leadership team met to evaluate and prioritize the top health needs for children in the community. Data for the community were examined, and attendees were asked to evaluate each significant health issue (see Areas of Opportunity above) along the following criteria:

- Magnitude — the number of children affected, as well as differences from state/national data or Healthy People 2020 objectives
- Seriousness — the degree to which a health issue leads to death, disability or loss of quality of life
- Impact — the degree to which it affects/exacerbates other health issues
- Feasibility — the ability to reasonably impact the issue, given available resources
- Consequences of Inaction — the risk of exacerbating the problem by not addressing at the earliest opportunity

This process yielded the following top priorities for NCH to address in improving the health of the community's children:

- Access to Health Services

Our immediate focus will be on these top three priorities identified through the evaluation process. However, Nemours believes that we have a responsibility to our communities to address all health concerns identified by this study. Through direct services, or partnership with other health care or community leaders in the area, we are committed to addressing the health and wellness needs identified for children in Central Florida.

Access to Health Services

According to the needs assessment, 6.9 percent of children in the Total Service Area (TSA) lack healthcare insurance coverage, comparable to the national benchmark. However, this percentage increases significantly among children...
Community Health Needs Assessment (CHNA)

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
- substance abuse
- asthma and other respiratory conditions
- nutrition, physical activity and weight
- vision, hearing and speech conditions
- infant & child health
- potentially disabling conditions

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:

- mental health
- access to health care services
- infant and child health

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.
Mental Health
Mental Health

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.
**Workforce Development**

Specific goals for workforce development will target community-based mental health providers and Nemours primary care providers. Up to 150 mental health providers are being enrolled, at no charge, in workshops providing evidence-based behavioral health treatment for children and adolescents. Nemours is also providing, free of charge, a follow-up consultation program for these providers, offering monthly case reviews for six months. Specific metrics, listed below, will track the success of this initiative, which we expect will significantly bolster the availability of evidence-based pediatric mental health care in the communities in the TSA.

During the same period, up to 10 Nemours primary care physicians will be enrolled in the Resource for Advancing Children’s Health (REACH) Institute’s Patient-Centered Mental Health in Pediatric Primary Care mini-fellowship program. Led by national leaders in child psychiatry, psychology and pediatrics, REACH trains pediatricians (as well as other professionals, advocates and parents) in the most effective therapies, from psychotherapy to pharmacology. The mini-fellowship will be a three-day program with a six-month, case-based distance learning follow-up. The metrics to measure success in this work are in the table below.

**Initiative**

- Enhance workforce development by increasing provider knowledge of evidence-based diagnosis and treatment, including medication protocols.

**Goals**

- Hold two free workshops for community mental health providers (75 for each workshop) in the five-county area.
  - Two free workshops were held; 70 providers were registered for the first workshop and 57 attended; 90 providers were registered for the second workshop and 71 attended; for a total of 128 providers trained.

- Develop follow-up consultation program for providers to complete monthly consultations for six months post-workshop. (REACH)
  - Two monthly consultation calls have taken place since September 2018 and will continue through June 2019.

- Sponsor 10 Nemours primary care providers in the REACH Institute Patient-Centered Mental Health in Pediatric Primary Care mini-fellowship program (three-day program with six-month, case-based distance learning follow-up).
  - We have experienced challenges with REACH due to lack of availability. We are currently exploring other avenues for training.

- Support REACH fellowship graduates as they complete behavioral health-focused appointments within the primary care setting by the end of 2019.
  - Progress toward this goal will be reported on in 2019, depending on the training delivered.

**Metrics**

- # of providers attending each workshop
  - A total of 128 providers were trained, 57 and 71 in each workshop respectively. There was a high no-show rate, with 160 providers having registered for the trainings, 70 and 90 in each workshop respectively.

- Pre- and post-skills/knowledge evaluation of workshop
  - Knowledge evaluation scores increased from 24 percent to 77 percent of attendees scoring 80 percent or higher in the first workshop, and from 29 percent to 59 percent in the second workshop.

- # of providers participating in and completing the six-month consultations (REACH)
  - Two monthly consultation calls have taken place since September 2018 and will continue through June 2019.

- One-year follow-up survey regarding utilization of specific treatment modality for workshop providers
  - Workshops were held in 2018 and survey results will be reported on in 2019.

**NEW METRIC:** Pre- and post- experience comfort level of enhanced behavioral health-focused visits

- We are connecting with REACH to see if they have an existing survey.
**Links to Community-Based Care**

To address the problem of identifying appropriate community providers and ensuring that families can access care, Nemours will dedicate a staff member to the work of collaborating with existing agencies and individual providers throughout the TSA. This Nemours Associate will establish a seamless referral process and will also develop a formal feedback loop between community providers and Nemours. An online, continuously updated directory of services for each county in the TSA was initially slated to be developed. However, this evolved to a webpage that will be available to all community primary care providers, in order to assist with referrals.

<table>
<thead>
<tr>
<th>Initiative</th>
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<tbody>
<tr>
<td>Collaborate with existing community providers and agencies to improve access to mental health services.</td>
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<th>Goals</th>
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<tr>
<td>Assign staff member to serve as Resource Coordinator.</td>
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<tr>
<td>» A Resource Coordinator was hired in September 2017.</td>
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<tr>
<td>Develop resource manual for each county for use within Nemours. Make available to all non-Nemours primary care practices.</td>
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<tr>
<td>» The resource manual has evolved into a webpage and is currently under development.</td>
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<tr>
<td>Develop at least one community organization partnership in each county to establish a seamless referral process and a formal feedback loop between community providers and Nemours.</td>
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<tr>
<td>» The website has a formal feedback tool and the resource coordinator has ongoing community meetings to gather feedback from community agencies and referral sources.</td>
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<th>Metrics</th>
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<tr>
<td># of calls/month to the Resource Coordinator for families seeking service providers</td>
</tr>
<tr>
<td>» Metrics will be tracked once the webpage is live, as the website will drive these numbers.</td>
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<table>
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<tr>
<th>NEW METRIC: # of webpage hits</th>
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<tbody>
<tr>
<td>» Metrics will be tracked once the webpage is live.</td>
</tr>
<tr>
<td>» # of referrals made by a Nemours provider by county</td>
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<tr>
<td>– Metrics will be tracked once the webpage is live, as the website will drive these numbers.</td>
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<tr>
<td>» Feedback via website and phone calls</td>
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<tr>
<td>– Metrics will be tracked once the webpage is live, as the website will drive these numbers.</td>
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<tr>
<td>» Patient demographics (gender, age, race, ethnicity, insurance status)</td>
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<tr>
<td>– Metrics will be tracked once the webpage is live, as the website will drive these numbers.</td>
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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 Creative Arts Therapy & School Programs 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.

- Behavioral health services in primary 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 evidence-based care for children and adolescents with trauma, depression, anxiety and ADHD, as well as other issues.

- A Center for Autism is being developed, which will provide families with quick access to evaluation and treatment services.
Access to Health Care Services
Access to Health Care Services

The 2011 National Healthcare Quality Report, released by the Agency for Healthcare Research and Quality, lists three components of access to care:

- gaining entry into the health care system
- getting access to sites of care where patients can receive needed services
- finding providers who meet the needs of individual patients and with whom patients can develop a relationship based on mutual communication and trust (AHRQ)

The first and third of these components are not major problems for children in our TSA. Insurance coverage largely provides for entry into the health care system for children in the area. The vast majority of children in the Nemours TSA have health insurance. Some experience gaps in coverage due to changes in their parents’ life circumstances, but they are likely to be eligible for coverage again, either from public or employer sources. The third component, trusting relationships with families, is the Nemours promise. Our family-centered care ranks in the top 20 percent in key patient satisfaction areas, pointing to our ability to meet the needs of patients and establish trusting relationships.

The second component, getting access to sites of care, however, remains a problem for too many children in our TSA. CHNA results show that 26.9 percent of families in our TSA experienced difficulties in obtaining medical care in the past year. Specialty care is a particular issue, with 38.8 percent of children in the TSA reported as needing to see a specialist at some point in the past year. This is well above the national average of 24.2 percent. It is also a statistically significant increase from the 2013 CHNA, in which 32.6 percent of children were reported to have this need.

As one of the most respected children’s health systems in the nation, Nemours offers specialty care that can meet the needs of most children in the TSA. The Access to Care Work Group realized that our CHNA results indicated a need to make this care more accessible to more children. While Nemours has already developed systems to facilitate easy scheduling and ensure care coordination, families still face difficulties in getting their children in for care. Families with limited income and families whose children have multiple and/or complex conditions were our major concern as we investigated strategies to improve access.

We determined that the most family-centered approach — access to specialists via telehealth technology — is already in use at Nemours but in need of expansion. In recent years, Nemours has sought to help families in need of specialty care by bringing that care as close to home as possible, even into the local primary care office. With on-site assistance from a professional or paraprofessional, many Nemours specialists are able to “beam into” a local medical office with high-quality, privacy-protected audio and visual technology. Families report that this convenience makes access much easier.

From 2017–2019, Nemours is focusing its CHNA efforts on significantly expanding the specialties and clinicians that offer telehealth services, and the number of local sites in which these services can be accessed. We are increasing not only the number of Nemours facilities offering this convenience, but also the number of other medical offices in which Nemours specialty care is available by telehealth. Certain specialties are often top of mind when telehealth is mentioned — for example, behavioral health. But our offerings will also include care, especially follow-up care, in areas such as orthopedics, where studies have shown that Nemours has been able to make substantial reductions in the amount of time families spend dealing with follow-up visits.

We expect that the result of this effort will be a marked decrease in the number of families in our TSA who have difficulty accessing specialty care. Access should improve for families in every county in the TSA, and we anticipate very high levels of satisfaction with these visits. The current high level of quality and satisfaction are an excellent point from which to launch this initiative. But, as with any evolving technology, we will improve the service as new tools become available. Families juggling multiple appointments, school, employment and often limited transportation budgets will benefit immensely from the Nemours specialists soon to be available in their local communities. We will track indicators of access and satisfaction, as displayed in the table below, and course-correct whenever necessary to ensure that the access goal is met.
**Initiative**

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

**Goals**

- Increase total telehealth visits (Nemours and non-Nemours sites) by 60 percent yearly.
  - In 2018, Nemours increased total specialty telehealth visits by 70 percent, from 1,640 visits in 2017 to 2,784 visits in 2018.
  - In 2018, Nemours increased total direct-to-consumer and urgent care telehealth visits by 363 percent, from 409 visits in 2017 to 1,893 in 2018.

- Increase availability of non-Nemours sites offering telehealth specialty visits by eight sites by 2019 year-end.
  - In 2018, Nemours increased the availability of non-Nemours sites offering telehealth specialty visits by two sites, for a total increase of five sites (three in 2017 and two in 2018).

- Increase the number of clinicians completing telehealth visits by 50 percent yearly.
  - In 2018, Nemours increased the number of clinicians completing telehealth visits by 59 percent, from 109 clinicians in 2017 to 173 clinicians in 2018.

- 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:
    - Three clinicians were utilizing telehealth in GI, an increase of 50 percent from two clinicians in 2017.
    - Nine clinicians were utilizing telehealth in weight management, an increase of 125 percent from four clinicians in 2017.
    - One clinician was utilizing telehealth in developmental pediatrics, unchanged from one clinician in 2017.
    - Forty-eight clinicians were utilizing telehealth in behavioral health, an increase of 167 percent from 18 clinicians in 2017.

- Increase the number of specialties utilizing telehealth by 20 percent yearly.
  - In 2018, Nemours increased the number of specialties that were actively utilizing telehealth by 24 percent, from 25 specialties in 2017 to 31 specialties in 2018.

- Increase assessment of patient satisfaction with the telehealth platform.

**Metrics**

- # 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.

- # 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

- % indicating telehealth application was easy to download and use
  » A patient satisfaction survey was not conducted in 2018. A new survey will be utilized in 2019.

- % satisfied with the audio and video quality of appointment
  » A patient satisfaction survey was not conducted in 2018. A new survey will be utilized in 2019.

- % indicating it was convenient to have the provider evaluate the patient at a place of the family’s choosing
  » A patient satisfaction survey was not conducted in 2018. A new survey will be utilized in 2019.

- % indicating interest in having future telehealth visits
  » A patient satisfaction survey was not conducted in 2018. A new survey will be utilized in 2019.

- % indicating they would recommend the use of the telehealth platform to other patients
  » A patient satisfaction survey was not conducted in 2018. A new survey will be utilized in 2019.

Patient demographics (gender, race, ethnicity, insurance status)

- Gender
  » Male: 56%
  » Female: 44%

- Ethnicity/Race
  » Caucasian: 54%
  » Black: 17%
  » Hispanic: 22%
  » Asian: 2%
  » Other: 5%

- Insurance Status:
  » 95.9% Insured
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 assist families in accessing needed health services. 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.

The Nemours Student Health Collaboration 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.

Dedicated space for the Plain community within the new 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 services to families of Southern Delaware 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.
Initiative

- Increase access to the most effective forms of birth control for our adolescent population throughout our Delaware primary care offices.

Goals

- Increase the # and % of providers able to offer long-acting reversible contraception (LARC) for female patients of reproductive age.
- Increase the # and % of female patients of reproductive age choosing LARCs as their contraceptive method.

Metrics

- # and % of providers and practices trained
  » In 2018, 63 providers (100 percent) and 13 practices (100 percent) were trained in LARC placement. Out of 13 practices, we project that only 11 will offer LARCs.

- # and % of providers and practices completing preceptor training
  » In 2018, 17 providers (33 percent) and seven practices (63 percent) completed preceptor training.

- # and % of providers and practices credentialed
  » In 2018, 17 providers (33 percent) and seven practices (63 percent) were credentialed.

- # and % of providers and practices actively placing LARCs
  » In 2018, 17 providers (33 percent) and seven practices (63 percent) were actively placing LARCs.

- # and % of LARCs placed [Metric removed due to duplicative metrics — this is captured under female patients of reproductive age initiating a LARC method.]

- Total # and % of female patients of reproductive age initiating a method of contraception
  » In 2018, 799 female patients (7.5 percent) of reproductive age were initiating a method of contraception. This was an increase of 55 percent over 2017.

- Total # and % of female patients of reproductive age initiating a LARC method
  » In 2018, of the 799 female patients of reproductive age who initiated a method of contraception, 331 (41 percent) initiated a LARC method. This was an increase of 47 percent over 2017.

Breakdown of LARCs placed

- # Nexplanon placed
  » In 2018, 213 implants were placed.

- # IUD and type (Mirena, Skyla, Paragard, Liletta, unknown type) [Type will not be measured because it provides no actionable data for quality improvement or evaluation.]
  » In 2018, 118 IUDs were placed.

- # of other contraceptive methods initiated (Depo, pill, patch, ring, condoms, etc.)
  » In 2018, 468 other contraceptive methods were initiated.

Increasing Receipt of Nurse Home Visiting Services

The U.S. Department of Health and Human Services (HHS) reviews the evidence of effectiveness for specific home visiting models, programs in which at-risk families receive supportive services in their homes. With funding from the Delaware Division of Public Health, Medicaid-eligible pregnant women and mothers of infants can receive services from the Healthy Families America/Smart Start program, which addresses the underlying issues surrounding infant mortality as well as other issues affecting maternal and child health. This program meets HHS effectiveness criteria and is not currently oversubscribed. Referrals from Nemours practices would be able to be served immediately — with the result that many more families could be assisted in the coming years.
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
- Increase Nemours provider referrals to a home visiting program for Medicaid-eligible families.
  - We have determined a feasible area of focus for this referral: Nemours patients ages birth through 12 months who have public insurance. We estimate this to be approximately 3,203 patients annually.

### Goals
- Increase # and % of children referred by Nemours providers to a home visiting program. (Baseline = 0, Progress = 0, goal = 2,402 children (75%))
- Increase # and % of eligible families enrolling in a home visiting program (out of referrals). (Baseline = 0, Progress = 0, goal = 1,201 children (50%))

### Progress
- During 2018, opportunities to implement a closed-loop referral system were explored. The current electronic health record (EHR) system does not enable user-friendly referral status and two-way communication with external service providers. This is required for a closed-loop referral system that best supports patients and families and identifies care gaps. Nemours has upgraded our EHR system, as well as begun implementation of Healthy Planet, a population health management solution that will enable better tracking and management of referrals and follow-up. The referral form to the Home Visiting program has been built into the EHR. The metrics below will be reported on in 2019.

### Metrics From Nemours Data
- # and % of eligible referrals made to home visiting program by a Nemours provider
- # and % of completed enrollments into the home visiting program

### Metrics From Delaware Division of Public Health Home Visiting Programs Data
- % of caregivers enrolled in home visiting program who are screened for depression
- % of caregivers enrolled for positive depression screens who received one or more service contacts
- % of children enrolled in home visiting who received the last recommended visit based on AAP schedule
- % of mothers enrolled in home visiting who received postpartum visits within eight weeks of delivery
- % of primary caregivers enrolled in home visiting who were referred to tobacco cessation counseling or services
- % of infants enrolled in home visiting who are always placed to sleep on their backs, without bed-sharing or soft bedding
- Patient demographics (gender, age, race, ethnicity, insurance status)
Other Initiatives in Infant and Child Health

Nemours focuses on the needs of infants through a wide variety of clinical, research and prevention activities. Listed below are several that are important to note in this plan, as they intersect with our CHNA activities:

- **The Safe Sleep Initiative:** This work is focused on ensuring that parents are able to provide the safest sleep environment for their young child, and that the public health message about the need for babies to sleep on their backs, in a crib with a firm mattress, is widely disseminated. These messages will be reinforced in home visiting initiatives.

- **Breastfeeding support in the Women, Infants and Children (WIC) program:** Trained peer counselors encourage and support breastfeeding at WIC sites, which are located in three Nemours primary care offices in Wilmington. Home visiting can also provide breastfeeding support.

- **The Delaware Healthy Mothers and Infants Consortium:** Nemours has a long-standing membership on the Delaware Healthy Mothers and Infants Consortium, where we partner with other organizations in Delaware on collaborative efforts to improve the health of mothers and infants.

Progress reports will be posted annually. We welcome your questions, comments and feedback. Please address your questions to Nemours/Alfred I. duPont Hospital for Children at CommunityNeedsDE@nemours.org.