



Testimony before the Pennsylvania House Health Committee
Regarding Treatment Options and Advancements for COVID-19
September 30, 2020

Honorable Members of the House Health Committee, thank you for inviting me to speak today. My name is Dr. Neil Rellosa, and I am a Pediatric Infectious Disease physician at Nemours/Alfred I. DuPont Hospital for Children. I am pleased to offer testimony on COVID-19 treatment and advancements as it pertains to children.

Nemours Children's Health System is proud to provide care in the Delaware Valley, including an expanding presence in Southeast Pennsylvania. Satellite specialty, primary care offices, and hospital partnerships throughout Pennsylvania help us extend our world-class, family-centered care to children across the region. We are the pediatric provider for Thomas Jefferson University Health System and Mainline Health. Nemours sees well over 90,000 Pennsylvania children annually, and that number is increasing as our telehealth has expanded exponentially in the state as a result of COVID-19. I personally provide inpatient consultation pediatric care to our partnership hospital in Pennsylvania and have two outpatient infectious diseases clinics in the state. Additionally, I am a resident of Pennsylvania and grew up in the Philadelphia area.

Like many healthcare systems across not only Pennsylvania but across the country and worldwide, Nemours has had to learn on the fly how best to care and treat the patients we serve during this pandemic, and we have come a long way in a relative short period of time. Nemours has strived to be in the forefront of treating pediatric and adolescent patients affected by COVID-19, and we continue to try and stay ahead of the curve as this pandemic continues by utilizing the most up-to-date information, advancements and technology. While the impact on children has not been as severe as seen in adults, Nemours has seen its share of children of all ages and backgrounds affected by this disease. I am happy to share our experience at Nemours with you today.

Treatment always starts with identifying those affected and making a timely diagnosis. At the beginning of the pandemic, Nemours quickly obtained COVID-19 testing, including securing multiple methods of testing and testing that not only provides rapid results, as quickly as 1 hour, but also accurate results. We were one of the only healthcare institutions in our area to set up mobile testing centers to offer testing for children of all ages in a safe and quick manner. We are able to test every child admitted to our hospital for whatever reason and provide testing to all patients prior to surgical procedures. As we move forward into the fall and winter seasons when we usually see many other respiratory viral illnesses, Nemours has obtained the latest testing technology that will allow us to test simultaneously for other seasonal viral infections such as influenza, which will allow us to identify patients who need treatment for COVID or treatment for other infections.

Fortunately, while we have identified hundreds of children infected by COVID-19, most have not required hospitalization. However, for some of the children who required admission, they have required intensive care and aggressive treatment. Again, at the beginning of the pandemic, our hospital quickly mobilized resources to form a cohort unit to care for all COVID-positive patients in one designated location in our hospital. This unit is highly trained in the proper isolation practices and treatments in order not only to provide the most optimal care for patients, but also ensure the safety of their families, non-infected patients and our staff.

Drawing on the expertise of many of our multiple, highly-trained specialists in Emergency Medicine, Intensive Care and Infectious Diseases, Nemours developed treatment protocols for COVID-infected patients, making sure we were giving the latest established therapies to care for these children. We worked with our local health departments and the FDA to obtain the antiviral medication, remdesivir, which has been shown to be the most effective in treatment of severely affected people. We have used remdesivir and other therapies, such as convalescent plasma and anti-inflammatory medications, for our most severely affected and have been very successful in terms of recovery and with no deaths. We continue to stay informed on the latest treatment options and are participating in research to contribute to the field of Pediatric medicine to know how best to treat infected patients moving forward.

A unique area of the COVID-19 pandemic in the field of Pediatrics has been the identification of an entirely new disease entity associated with COVID infection called Multisystem Inflammatory Syndrome in Children or MIS-C. MIS-C is believed to be a post-infectious inflammatory condition that can affect children weeks after their acute infection and can severely affect multiple areas of the body, including the heart. It can cause children to become critically ill. While MIS-C is still relatively rare, Nemours has seen several of these patients, mostly older children and adolescents. We have also taken a multidisciplinary approach to treating these patients, utilizing the expertise of our physicians in Emergency Medicine, Cardiology, Rheumatology, Critical Care Medicine, Hematology and Infectious Diseases to devise protocols to diagnosis and treat these patients. We have used a combination of therapies to treat children with MIS-C, including use of a medication called intravenous immunoglobulin – or IVIG – which is currently in short supply in this country, along with steroids and other anti-inflammatory medications. Again, we have been successful in getting these patients better relatively quickly and without mortality, and we continue to research and study these patients in order to become even more adept with our care for these children.

Although we at Nemours have learned a lot and have been successful, there is still much we do not know, especially in terms of long-term effects of both COVID-19 infection and MIS-C in children. We continue to be concerned about the long-term effects on these patients' hearts. Thus, the care of these patients continues even after they are discharged from the hospital. Most of the patients will continue to have follow-up long-term care with our Cardiologists to monitor for lasting and chronic problems of the heart.

For those children infected with COVID-19 not requiring hospitalization, Nemours has trained our primary care physicians and front-line providers to educate patients and their families on supportive care at home and advise them on how best to re-engage in social activities and how best to prevent the spread of the disease in accordance with the latest scientific-based knowledge and current recommendations from our local and national health institutions.

Nemours has been vigilant in monitoring and acting quickly to treat our most vulnerable children who may be at greater risk of COVID infections, such as our cancer patients and children with chronic problems with their heart, lungs or immune system. Additionally, although transmission of COVID-19 from mother to baby is uncertain or at least very rare, we have worked with our local birthing hospitals and birthing centers to ensure the safety and optimal care of babies born to COVID-infected mothers. Lastly, similar to what has been observed in adult infected patients, we have seen a disproportionate number of lower socioeconomic children and children of color affected by COVID, such as our Black/African American and Latino patients, and we at Nemours continue to search for ways to bridge that gap to ensure high-quality care for all of our community's children.

Thank you for the opportunity to share with you Nemours Children's Health System's experience during this unfortunate and troubling time. While we at Nemours are uncertain of when this pandemic will end, we are certain the work we are doing is helping. We hope we can count on Pennsylvania for continued support and future assistance with resources to allow us to continue to treat and care for the children and families of Pennsylvania.