

Transplant Care

An Interview with Nabil N. Dagher, MD, FACS,
Vice President and Director of the Northwell Health Transplant Center at North Shore University Hospital (NSUH)

EDITORS' NOTE *Dr. Nabil Dagher oversees NSUH's liver and kidney transplantation programs and serves as both surgical director of the liver transplant program and co-director of the Center for Advanced Liver Disease and Transplantation. A nationally recognized hepatobiliary and abdominal organ transplant surgeon, Dr. Dagher most recently led NYU Langone's abdominal transplant surgery program and was surgical director of its liver transplant program. Prior to joining the NYU Transplant Institute, Dr. Dagher spent eight years at Johns Hopkins Hospital in Baltimore, first as a fellow and later as director of its living donor liver and kidney transplant programs. Dr. Dagher earned his medical degree from the Medical College of Wisconsin in Milwaukee and his bachelor's degree from McGill University in Montreal. He completed his general surgery residency at the University of Texas Southwestern Medical Center at Dallas/Parkland Memorial Hospital, followed by a fellowship in multi-organ abdominal transplant surgery at Johns Hopkins.*



Dr. Nabil N. Dagher

Will you highlight the Northwell Health Transplant Center and how you define the Center's mission?

The Northwell Health Transplant Center performs heart, lung, liver, and kidney transplants. We care for patients at all stages of end organ failure, not just those who require a transplant. We are a very large healthcare system, and we serve a patient population that is extremely diverse. Our core purpose is to provide our patients with access to world-class transplant care. That doesn't just mean building a multidisciplinary team of expert transplant professionals and having great outcomes. It also requires a strong focus on educating and engaging with the communities we serve, promoting organ donation, and constantly striving for equity in how we deliver care. Research, innovation, and a commitment to train the next generation of transplant professionals are also key pillars of our center. We want to inspire the large number of trainees across our system to pursue a career in transplantation.

Will you discuss Northwell Health's transplant program and what have been the keys to the strength and leadership of the program?

Our transplant program has grown significantly over the past couple years with the rapid growth of our liver transplant program and initiation of a lung transplant program. Our kidney and heart programs continue to grow with excellent patient outcomes. Transplant surgeries occur at NSUH and with great collaboration with hospital leadership, we have built a strong infrastructure there to help support our complex patient population. With that said, we view our program as a system-wide effort and can provide care to patients across several

key hubs throughout the system.

I think the key to success of any program in healthcare is that the values and priorities of the program align completely with those of the system leadership. Leaders need to be trusted and allowed to lead at every level. If that is achieved, anything is possible. With the support of system leadership, we view every challenge and make every decision with a laser focus on what is best for the patient. Almost always, what is best for the patient and what is best for the organization are one and the same.

How critical has it been for Northwell Health to build a multidisciplinary care team of transplant professionals and do you feel this is a differentiator in the industry?

A strong multidisciplinary care team has become essential to any successful transplant program. It's easy enough to say, but to effectively implement that model is the challenge. That means having professionals from all the various medical and surgical specialties working side by side every day with the same mission, priorities, and focus. This in many ways goes against the traditional structure of medical care in the U.S., especially at large academic medical centers. We have broken down the rigid silos between specialties and are creating what I believe will be the gold standard of transplant care for the future.

What also differentiates us from many other successful programs is the size of our healthcare system. Although it can be challenging at times, this is a great benefit to our patients. Patients and providers want quality, access, and convenience. Gradually, we are expanding end stage organ failure and transplant services across the entire Northwell system which allows patients to access expert care close to home no matter where they live.

Will you discuss the innovation taking place in the field of transplants and how technology is impacting the entire transplant journey?

The field of transplantation is currently in a phase of significant transformation on all fronts. With a few exceptions, it has basically been business as usual for decades. The field is now finally embracing new technologies. For example, the use of AI and improved matching algorithms to more equitably allocate donor organs to recipients is on the horizon. GPS technology has been adopted to track hundreds of donor organs daily as they travel across the country to their intended recipients. Machine organ perfusion technology has also advanced significantly and now plays a major role in how we preserve and optimize organs for transplantation. There continues to be a severe donor organ shortage and these new technologies will help get us closer to making sure that every organ that can be transplanted, is transplanted.

Minimally invasive laparoscopic and robotic surgery is gradually making its way into the transplant field and this technology will hopefully continue to advance and improve recovery for both living donors and recipients.

Communication technology (online access, apps, etc.) is also now being adopted by transplant centers to better care for their patients before and after transplant. Keeping patients better connected to their providers and enabling them to access their lab work and medications will certainly enhance the care we provide and improve patient satisfaction.

What are some of the exciting developments taking place in the transplant field as you look to the future?

It's interesting that as we continue to advance and look to the future, we always go back to the main obstacle, essentially the Achilles heel of transplantation – the human immune system and its very keen ability to detect the presence of a donor organ that isn't inherently its own. This is despite great advances in immunosuppression medications. No matter how well matched, unless from an identical twin, transplanted organs suffer the gradual wear and tear of the recipient's immune system. Advances in tissue regeneration and gene editing may finally one day help overcome this barrier for good.

The transplant community for some time has known that there is inequity in transplant access and care based on gender, race, culture, and socioeconomic status. It's good to see renewed focus on this issue as we all strive for more equity in healthcare and in our society in general. ●