

Creating A Healthier Future For All

An Interview with Dr. Peter M. Fleischut, Senior Vice President and Chief Information and Transformation Officer, NewYork-Presbyterian

EDITORS' NOTE Dr. Peter Fleischut is Senior Vice President and Chief Information and Transformation Officer at NewYork-Presbyterian. Most recently, Fleischut served as NewYork-Presbyterian's Chief Innovation Officer, where he led the development of NYP OnDemand, NewYork-Presbyterian's comprehensive digital health program that offers a suite of services including Second Opinion, Urgent Care and Express Care. Fleischut joined NewYork-Presbyterian/Weill Cornell Medical Center in 2006



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and has held many roles since then, including: Medical Director of the Operating Rooms, Deputy Quality Patient Safety Officer, Founding Director of the Center for Perioperative Outcomes, Chief Medical Information Officer, Chief Medical Operating Officer, and Vice Chairman of the Department of Anesthesiology at Weill Cornell Medicine. Fleischut retains his appointment as Associate Professor of Anesthesiology at Weill Cornell Medicine. He has received numerous awards and honors, including NewYork-Presbyterian's Physician of the Year, the David A. Leach Award for Innovation in Quality from the Accreditation Council on Graduate Medical Education, and the Weill Cornell Medical College (now Weill Cornell Medicine) Healthcare Leadership Award. In 2016 and 2017, he led NewYork-Presbyterian to CIO100 recognition, the InformationWeek Elite 100 and the President's Award from the American Telehealth Association for healthcare redesign for the release of NYP OnDemand. A graduate of Jefferson Medical College and the Wharton School at the University of Pennsylvania, Fleischut completed his residency training in anesthesiology at NewYork-Presbyterian/Weill Cornell Medical Center. He distinguished himself by becoming one of the founding members formed to improve patient care and safety by creating a culture that promotes greater house staff participation, and served as resident quality and patient safety officer for NewYork-Presbyterian.

INSTITUTION BRIEF Located in New York City, NewYork-Presbyterian (NYP.org) is affiliated with two of the nation's leading medical colleges, Weill Cornell Medicine and Columbia University Vagelos College of Physicians and Surgeons. NewYork-Presbyterian provides state-of-the-art inpatient, ambulatory, and preventive care in all areas of medicine, and is committed to excellence

in patient care, education, research, and community service at ten hospital campuses: NewYork-Presbyterian/Weill Cornell Medical Center, NewYork-Presbyterian/Columbia University Irving Medical Center, NewYork-Presbyterian Morgan Stanley Children's Hospital, NewYork-Presbyterian Allen Hospital, NewYork-Presbyterian Westchester Behavioral Health Center, NewYork-Presbyterian Lower Manhattan Hospital, NewYork-Presbyterian Westchester in Bronxville, NewYork-Presbyterian Brooklyn Methodist Hospital, NewYork-Presbyterian Hudson Valley Hospital, and NewYork-Presbyterian Queens.

How do you describe NewYork-Presbyterian's culture and values?

At NewYork-Presbyterian, our culture and values are shaped by the diverse communities we serve. We are deeply committed to representing, understanding and serving the needs of the community and keeping people healthy through convenient, accessible, and equitable patient care. As a nonprofit institution, we exist for the public good – and the public good is a single standard of care for every patient who walks through our doors.

We also have a strong culture of innovation at NewYork-Presbyterian. Our purpose is deeply engrained in nurturing and growing our team of world-class medical experts, investing in cutting-edge research and innovation, and prioritizing health justice.

Our values of respect, integrity, empathy, teamwork and innovation guide our decisions as we do our work to advance medicine, research and education to create a healthier future for all.

What have been the keys to NewYork-Presbyterian's industry leadership?

NewYork-Presbyterian is one of the only integrated academic healthcare systems in the country affiliated with two world-class medical schools – Columbia University Vagelos College of Physicians and Surgeons and Weill Cornell Medicine. This collaboration means patients have access to the country's leading clinical experts, the most advanced, innovative treatments, and the latest clinical trials. We have a long legacy of medical breakthroughs and innovation that advance medicine to continue helping patients live amazing lives.

An area I'm most passionate about is our use of data, technology, and innovation to deliver a more modern, seamless, and empathetic patient experience to each of our patients. We have a team that is devoted to uncovering new disease areas in which technology and AI can help identify devastating conditions in patients sooner. In fact, we have around 120 AI initiatives underway across clinical and non-clinical use cases.

We are steadfast in our journey to activate a wide range of AI programs to reduce the burden of disease through diagnosis and treatment. One example is the groundbreaking work our cardiologists are doing with data scientists to develop an algorithm that can help diagnose heart conditions such as structural heart disease during a routine, inexpensive EKG. A cardiologist cannot identify structural heart disease by reading an EKG alone, but by running the EKG through the AI model, the model can indicate to the cardiologist to consider ordering an echocardiogram for further evaluation. Early detection and intervention are critical to improve patients' lives and outcomes.

The ability to apply breakthrough AI innovations to diagnose structural heart disease within minutes, and then extend the science to other disciplines such as oncology and neurology, will be game-changing.

Academic medical centers like NewYork-Presbyterian also play a critical role in training the top clinicians of the future. The depth, breadth and talent within our training programs is unparalleled – in fact it's one of the largest training programs in the country, training nearly one in 70 physicians.

Will you provide an overview of your role and areas of focus?

On paper, my role as Chief Information and Transformation Officer is to oversee the strategic vision and management of enterprise information technology, lab operations, pharmacy operations, innovation, data and analytics, artificial intelligence, telemedicine, and cybersecurity. But this doesn't scratch the surface of what I do day-to-day.

There are the tech implementations that help our front lines – from robots delivering food and linens, to virtual pharmacists, to the integration of a single Epic EHR instance across our 10 hospitals. In the short term, if we can reduce friction, it's impactful for our front lines, making it easier for them to do their jobs and



NewYork-Presbyterian/Weill Cornell Medical Center

spend more time with patients. And in the long term, we want to reduce the burden of disease.

To do so, we need to highlight the problem we are trying to solve, and how technology is going to support solving that problem. As one example, I'm on a constant mission to discover new disease areas where AI can help identify devastating conditions in patients earlier as well as reduce friction for patients and providers along the care journey.

Will you discuss NewYork-Presbyterian's investment and leadership in technology?

At NewYork-Presbyterian, we are eager for faster adoption of AI and want to lead the country in reducing the burden of disease. Closer collaboration between data scientists and physicians will help us crack the code on some of the unsolvable questions the healthcare industry is currently grappling with – whether it's what causes cardiac death, how can we predict a pregnant woman's risk of developing postpartum depression, or detecting neonatal hypoxia to improve outcomes.

The hospital is also investing heavily in robotics. We have a growing specialty pharmacy business to both support our pharmacy operations and enhance patient safety, which leverages state-of-the-art automated systems. We've implemented 24/7 robots that pick up every pill, ointment and cream in real time and then put them into packets that are either manually delivered to a floor, or delivered via robots to the bedside of the patient.

It's just another example of reducing friction for our employees, since now we can have more people spending time at the bedside with the patients as opposed to picking up pills. Nurses love it, patients love it, and our pharmacists love it – it's a win-win across the board. We really strive to make sure that technology is not interfering with the bedside relationship, and instead enhancing it.

We aim to be not just high tech, but also provide compassionate care. Our medical and technological innovations are guided by the needs and experiences of the doctors and patients using them. And the power of this technology is only as strong as the talent, expertise and data infrastructure behind it. We are always working to build the best culture behind the technology – which is driven by our people.

Will you highlight NewYork-Presbyterian's award-winning digital health services?

NewYork-Presbyterian's award-winning digital health team is redefining the intersection of technology and healthcare. We use the latest technology to provide the very best care, achieve optimal treatment outcomes for our patients – both in-person and virtually – and offer seamless peer-to-peer access for our physicians across the entire enterprise. These advances allow us to extend care beyond our walls and set a new standard for what hospitals can do.

For example, to help address the health-related social needs that affect patient health outcomes, NewYork-Presbyterian implemented the Epic Social Determinants of Health (SDoH) screening in departments and practices across our organization. Health-related social needs, such as food insecurity, unstable housing, lack of transportation, and inability to pay for utilities, increase the risk of developing chronic conditions and reduce individuals' ability to manage these conditions. These conditions are associated with increased emergency department visits and inpatient hospital admissions. At NewYork-Presbyterian, our teams are screening for SDoH in all of our inpatient settings, in seven emergency departments, as well as in several outpatient clinics, screening more

than 23,000 patients per month. When SDoH needs are identified, NYP team members can help connect patients with resources in the community. For example, in our Emergency Departments, physicians refer patients who are not well connected to care to our Patient Navigators, who offer culturally sensitive education and support, connect patients to financial resources and follow-up appointments, and connect patients with identified social needs to resources to address those needs.

How will new technology, data analytics, and AI impact the way hospitals operate in the future?

The hospital of the future blends forward-looking research and cutting-edge technology with innovation in how care is delivered to all communities, including the most vulnerable and underserved. We're essentially using AI to try to detect disease earlier and make a dent in the burden of human disease.

As the pace of implementation in the healthcare industry accelerates, a big focus will be on preventing AI from worsening disparities. This is done by designing algorithms that are fair, equitable, and reflect the diversity of the patients who will benefit most – as there are many underdiagnosed diseases that AI can help predict before they become life-threatening.

My goal is to make NewYork-Presbyterian the most accessible of any health system in the country. I'd like us to rethink the care model platform so disease can be identified earlier, faster, and in the best way possible for quaternary care.

You joined NewYork-Presbyterian over 18 years ago. What has made the experience so special for you?

To me, NewYork-Presbyterian's commitment to our mission of providing excellent care to all the communities we serve has made coming to work each day special.

At its core, healthcare is very complex, and as leaders we have an incredible commitment to our patients and employees. It's truly exciting, with some of the advancements that are out there from a technology perspective – but it's not the only thing. You need to really have solid governance and communication, and an extremely strong team in order to achieve the goals that we're trying to achieve. A former leader of mine used to say it's 80 percent people, 15 percent process, and 5 percent technology.

What advice do you offer to young people interested in pursuing a career in medicine?

Medicine is constantly changing. The healthcare industry today is far different than what I experienced when I began my career. And it will only continue to evolve and advance in the years to come.

My biggest piece of advice to anyone pursuing medicine is to remain curious and never stop learning. And most important, find an institution that will not only embrace change, but lead it. ●