Technology Transformation
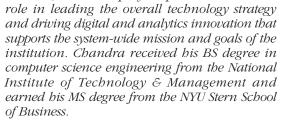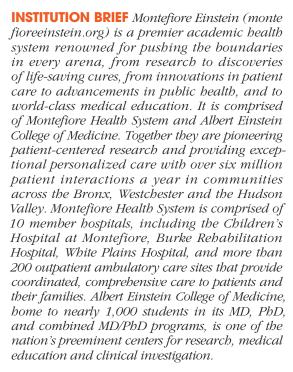
An Interview with Deepesh Chandra, Senior Vice President and Chief Digital and Information Officer, Montefiore Einstein

EDITORS' NOTE *Deepesh Chandra is a seasoned healthcare technology executive with experience leading digital and analytics transformations and healthcare IT modernization. His career spans over 20 years in healthcare leading various aspects of technology for large organizations, with a demonstrated commitment to excellence driving transformative change, enhancing operational efficiency, and creating diversified growth. In his role at Montefiore Einstein, Chandra plays a pivotal role in leading the overall technology strategy and driving digital and analytics innovation that supports the system-wide mission and goals of the institution. Chandra received his BS degree in computer science engineering from the National Institute of Technology & Management and earned his MS degree from the NYU Stern School of Business.*

Deepesh Chandra

INSTITUTION BRIEF *Montefiore Einstein (monte fioreeinstein.org) is a premier academic health system renowned for pushing the boundaries in every arena, from research to discoveries of life-saving cures, from innovations in patient care to advancements in public health, and to world-class medical education. It is comprised of Montefiore Health System and Albert Einstein College of Medicine. Together they are pioneering patient-centered research and providing exceptional personalized care with over six million patient interactions a year in communities across the Bronx, Westchester and the Hudson Valley. Montefiore Health System is comprised of 10 member hospitals, including the Children's Hospital at Montefiore, Burke Rehabilitation Hospital, White Plains Hospital, and more than 200 outpatient ambulatory care sites that provide coordinated, comprehensive care to patients and their families. Albert Einstein College of Medicine, home to nearly 1,000 students in its MD, PhD, and combined MD/PhD programs, is one of the nation's preeminent centers for research, medical education and clinical investigation.*

How do you describe Montefiore Einstein's mission?

Montefiore Einstein's mission is to heal, teach, discover, and advance the health of the communities we serve. Our physicians, nurses, and other clinical and support staff care with compassion and a people-first attitude, which is a quality that began more than 125 years ago when Montefiore was established to care for people with debilitating and chronic illnesses. With Albert Einstein College of Medicine, we combine clinical care with research to deliver the best academic medicine has to offer. We're looking to push boundaries and holistically support our patients and their families.

Will you provide an overview of your role and areas of focus, and how these efforts reflect Montefiore Einstein's mission and leadership?

I am honored and humbled to be Montefiore Einstein's Senior Vice President and Chief Digital and Information Officer. I work with our clinical and operational leadership to drive technology-enabled transformations to help our healthcare system evolve how we deliver consistent and excellent patient care. Our team of experts in Montefiore technology work together within and across cloud, cybersecurity, digital, data and analytics, artificial intelligence, and our electronic health records system. Our goal is to create an efficient, easy, and accessible health system.

What are Montefiore Einstein's pillars for supporting healthcare technology transformation?

Our pillars at Montefiore Einstein are to support healthcare technology transformation by empowering, unlocking, giving, and enabling. We execute these efforts through meticulous exploration, review, integration, and continuous improvements within our technical focus areas based on our technical transformation strategy. Ultimately, we want to ensure we're at the forefront in thinking about what our providers expect and how to leverage technology to help our care teams accomplish their goals. We want to empower our clinicians across our healthcare system to access data and information through a "single pane of glass" for all their needs. To drive collaboration across all locations, care settings, and specialties, we must unlock the capacity for everyone to obtain the information and resources they need to support our patients and broader community.

We also focus on giving clinicians time back by providing digital tools that help them deliver care more effectively. We've been incorporating

Montefiore Health System's Henry & Lucy Moses Division

digital assets like automation and ambient listening technology into our healthcare system to reduce burden with AI-based note creation.

Operationally, the technology transformation enables us to improve resiliency, improve productivity, and positively impact patient care.

Will you describe a few initiatives that you are proud of and that support Montefiore Einstein's priorities?

There are multiple technology initiatives we've been working on to support Montefiore Einstein's priorities. A few we are proud of are:

Our recent work with Amazon One Medical to expand access to high-quality coordinated and specialty care in New York where Amazon One Medical works with us to enable increased access to coordinated care.

We recently kicked off a cloud transformation across Montefiore Health System in partnership with Amazon Web Services. This effort will help us automate and scale our infrastructure to better deliver technology resources to our clinicians and protect our business while improving the resiliency of our information.

Also, we're improving our cybersecurity maturity across Montefiore through multiple initiatives that include identity management, business continuity, risk management, and attack surface reduction. These efforts will improve our visibility into potential vulnerabilities so we can mitigate them faster and effectively.

Through digital enhancement projects, we are re-imagining the patient experience via an upgraded, centralized provider directory. This will enhance online scheduling and access from searching and booking, to preparing for a visit and checking-in. We want our patients to have the best experience with our health system. That often starts with an online search, and we want to ensure their engagement is guided, intuitive, and supports a range of needs.

There's an extensive list of additional projects we are working on across all technology domains to improve our artificial intelligence, data, digital, and asset/software management capabilities. We're right in the middle of a major transformation for Montefiore technology.

I'm thankful every day for the team of technology experts that have been working so hard, specifically over the past almost two years that I've been at Montefiore. The level of dedication to get these projects executed to support Montefiore's priorities is very high. They have been stepping up the plate to implement, scale, adjust, and align to make not only our technology organization stronger, but also improve Montefiore's ability to support our clinicians and our patients.

How is artificial intelligence driving further innovation and patient care enhancements?

We have a culture of innovation dating back decades – this includes the early use of artificial intelligence. Before AI was a household term, we were using AI tools for stroke detection, using machine learning models for sepsis detection in patients, calculating personalized risk scores for assessing a patient's readiness and tolerance for surgery and potential for complications, assessing risk of respiratory failure and prolonged mechanical ventilation, and using ambient voice AI to reduce the burden of documentation for our clinical teams, to name a few. We are doubling down on AI by surrounding our past efforts with a strong governance framework that engages directly with our clinical and operational teams. By separating the hype from the practical, we have an emphasis on results, and are engaging with industry partners, while managing risks to our patients and organization.

> **"Montefiore Einstein has a long, trusted reputation in our communities. As with new care innovations, technology cannot occur in silos – our patients are key stakeholders."**

Our AI work supports clinical, research, and operational efforts across Montefiore. Some of the initiatives we are pursuing are focused on early breast cancer detection, enhanced management of prostate cancer patients, and predicting likelihood of patients in our emergency departments who may need to be admitted to the hospital. We are also evaluating tools for chart abstraction to submit select information to patient and professional society registries aimed at enhancing care. Lastly, we are initiating the development of Agentic AI use cases and see a lot of potential for "AI Agents" to support our clinical and operational teams.

At a strategic level, we want our artificial intelligence and automation efforts to be powered by a strong data platform as well as robust tools that allow us to build and monitor the performance of these initiatives.

How do you balance the use of technology with making sure not to lose the personal touch that Montefiore Einstein is known for?

That's a great question. Montefiore Einstein has a long, trusted reputation in our communities. As with new care innovations, technology cannot occur in silos – our patients are key stakeholders. When evaluating how to modernize and simplify care through technology, clinicians are also often involved from day one. We work directly with our patients and clinicians through iterative processes to integrate patient care priorities into our technological solutions. We recently asked for end-user feedback regarding MyChart features to ensure the proposed changes met their needs and improved their experience. These changes are now live, and we are seeing improvements in expected outcomes.

Similarly, we had a Patient Ambassador program where we asked individuals to help patients with MyChart questions, including sign-up and opt-in for text messaging. These Ambassadors identified feedback on certain areas to improve, even before we discovered those same areas through parallel discovery processes.

What has made the field of healthcare technology so special for you?

I've been working at the intersection of healthcare and technology for more than 20 years. For those of us who focus on technology, we don't get to necessarily see the impact we make on patient care on a daily basis. Sometimes, it is bringing a new service into our clinical environment to better manage NICU monitoring or transplant resource organization within our electronic health records. But for me, it is special to know that everything we are doing is aimed at helping people at their most vulnerable moments. I don't take that lightly. People working in healthcare, including in technology, want to do all we can to make the experience for patients and their families run smoother and more effectively.

In healthcare, we also have the opportunity to look at other service industries to see how they are incorporating technology to make things easier for their customers. There are certainly parallels we can learn from and share our best practices with others. It is empowering to think how evolving technology can help aid a person's overall care experience. It all comes back to having a sharp focus on helping people in their most vulnerable points in life and feeling confident we have done everything possible to support them.

What advice do you give to young people beginning their careers?

I would encourage young people, particularly in healthcare careers, to find and create opportunities to really learn about what patients' needs are and what clinicians need to support them. A new technology might sound like it could save a life, or a specific problem – but it might not, depending on how it relates to "real people" benefiting from it and being able to utilize it. Our technology is only as good as its usefulness.

Invest the time and energy to learn about our industry's complexities and nuances. In healthcare, it is imperative to understand how technology plays a role, not just from the patient's perspective, but from a caregiver's point of view. We are living in a time where technology is moving fast. It is changing healthcare at a rapid pace, and we need to understand how technology can help, not hinder. That perspective helps identify how to make a meaningful impact in our communities. It's an exciting time for technology-focused healthcare careers – and we're all patients at some point – keep that perspective at the forefront. With that in mind, think about how much opportunity is out there. ●