

Artificial Intelligence: Insights from the Northern Virginia Health Policy Forum

Applied Policy, a leading authority in health policy and regulation, proudly sponsors the Northern Virginia Health Policy Forum. The Forum brings together key thought leaders, government officials, and industry experts to discuss critical trends in American healthcare.

On March 20, 2024, the Forum hosted Roberta Schwartz, PhD, MHS, Executive Vice President and Chief Innovation Officer at Houston Methodist Hospital. The system, which includes a physician practice and academic medical center, serves seven million people in urban, rural, and suburban communities around Houston, Texas. Dr. Schwartz leads the Center for Innovation's Digital Innovation Obsessed People team, which consists of health and technology professionals. With her front-line view, she shared insights on the implementation of artificial intelligence (AI) at Houston Methodist and the broader healthcare system. Carl Mallory, Vice President of Healthcare Services at Applied Policy, led the conversation.

HOUSTON METHODIST'S CENTER FOR INNOVATION

Houston Methodist launched the Center for Innovation in 2021, driven by Dr. Schwartz's observation that "we can either lead the change, or the change is going to happen to us." This initiative quickly garnered support from several colleagues eager to contribute. It has since evolved into a dedicated team of five full-time staff members working alongside others who balance their primary roles with contributions to innovation.

Dr. Schwartz said that, in its simplest definition, AI is "a generic term that applies to any computer function, sequence, or capability that takes the place of a human having to do that function." However, she dislikes using the term "AI" in her work, pointing out that people read into it "what they want to hear." She said that any conversation about AI needs to consider the mindset of the participants and begin from their level of understanding.

The Center partners with external companies to tailor innovative products to Houston Methodist's needs. Noting that failure is an inherent part of the process, Dr. Schwartz said companies are given one year to demonstrate the efficacy of their products in the Houston Methodist environment. Innovations that successfully improve patient care, quality of care, and staff's lives are selected for wider rollout.

SUCCESSFUL INNOVATIONS AT HOUSTON METHODIST

Dr. Schwartz described several innovations that have increased efficiencies and improved the quality of care at Houston Methodist. She acknowledged that some have been met with optimism, while others have faced skepticism or resistance.

Houston Methodist has successfully implemented technology to improve communication with patients. The health system employs text messaging, shown to be patients' preferred mode of communication, in advance of appointments. Patients receive texts with appointment reminders, prompts to complete necessary paperwork, expectations, and follow-ups after their visits. They can also text specific details about their condition, such as temperatures before scheduled surgeries. The innovation can streamline cancellations for patients with elevated temperatures, avoiding the need for a phone call, fasting, and commuting to the hospital.

Houston Methodist has additionally placed cameras in various locations around operating rooms to follow the progress of surgeries, help predict the availability of resources, and schedule staff. While some providers were excited about the enhanced efficiency and predictive capabilities of this technology, some staff and patients raised privacy concerns. After proving that this technology increased surgical volume and improved the quality of surgical services, Houston Methodist has since expanded the program across all operating rooms and anesthesia locations in its system.

Dr. Schwartz discussed Houston Methodist's adoption of the BioButton, a compact, wearable device that continuously collects, analyzes, and summarizes patients' vital signs. Capable of summarizing 160 data points per hour, BioButtons eliminate the need for routine, manual vital sign collection. Nursing staff originally expressed apprehension that the technology could jeopardize their job security by reducing the need for their hands-on expertise. Instead, nurses found that it offered them more time for other patient care activities. The BioButtons have since enabled early detection of internal bleeds, hyperglycemic events, and episodes of atrial fibrillation. As nurses recognized the BioButton's potential to improve patient outcomes, they not only accepted the technology, but they also became champions for their use.

THE FUTURE OF INNOVATION

Dr. Schwartz stressed that the "change management process is hard and not for the faint of heart." However, she believes that confronting change is essential to shaping the future. "Change never ends ... It's hard work and it's uncomfortable, but . . . avoiding it will only slow down what needs to happen. And I do believe the future is very bright." While acknowledging that we are far from perfect, Dr. Schwartz pointed out that these changes are still making patients healthier and leaving them in better health.

This extract was prepared by Applied Policy®. The entire program can be found on our [YouTube page](#).