

What's next



Documentation Capture, Healthcare, Healthcare AI

How Vanderbilt is improving the physician and patient experience with virtual assistant technology

Dr. Yaa Kumah-Crystal from Vanderbilt University Medical Center recently talked to us about how she and her colleagues are using Dragon Medical Virtual Assistant for Hey Epic! to automate frequent workflows, access electronic health record information quickly and focus on improving the patient experience. Here are just a few of the highlights of what she had to say.

Mary Varghese Presti

Posted March 2, 2022



Dr. Yaa Kumah-Crystal is a researcher who uses the Dragon Medical Virtual Assistant for Hey Epic! daily in her role as clinical director of Health IT and assistant professor of biomedical informatics and pediatric endocrinology at [Vanderbilt University Medical Center](#) (VUMC).

I use the Hey Epic! voice assistant after my clinic time when I m trying to find pieces of information and put things together, or when I m documenting and I want to ask a question

about a lab or the next follow-up visit. It's easy just to make those requests out loud and get the information you need, as opposed to having to leave your workspace to go somewhere else to find that information.

Dr. Yaa Kumah-Crystal, clinical director, Health IT and assistant professor of biomedical informatics and pediatric endocrinology, Vanderbilt University Medical Center (VUMC).

Clinicians like Dr. Kumah-Crystal are realizing a significant time savings throughout their day, leaving more time to focus on patients rather than spending it in the EHR.

VUMC is one of the largest academic medical centers in the southeastern United States, managing more than 2 million patient visits every year. It's also an important postgraduate learning hub, with more than 1,000 residents and fellows training in more than 100 specialties. The HealthIT team at VUMC is committed to improving and personalizing patient care through the use of innovative technologies — including our voice-enabled [medical virtual assistant](#). Nuance's Dragon Medical Virtual Assistant embedded in [Epic Hyperspace](#) is the latest technology to come from [our partnership with Epic](#). This time-saving tool, deployed through Dragon Medical One, allows physicians to interact with Epic Hyperspace through voice instead of a keyboard and mouse, allowing them to easily find information buried in the patient chart.

Dr. Kumah-Crystal oversees the rollout of Hey Epic! to clinical staff. She's working with Nuance and Epic to improve the product by suggesting new commands to implement and workflows to automate. As a physician champion for [voice-based clinical workflows](#), Dr. Kumah-Crystal is proof that using conversational AI in healthcare can and does improve their everyday workflow.

Putting patients at the center

Our new voice assistant allows physicians to interact with the electronic health record in a natural, conversational way, streamlining common workflows and lightening the documentation workload. Physicians get faster access to relevant information during patient visits, and they can even send messages and order tests and prescriptions just by using their voice.

"I'm so excited about having a dialogue and making eye contact, figuring out what's going on, and helping them to understand their problems without the computer being this intrusive third party," Dr. Kumah-Crystal says. "Instead, the computer is augmenting the work we do and capturing information in the background, making it visible when it's necessary and then taking care of stuff in the back-end when it doesn't have to be presented right away."

Virtual assistant technology also [improves the patient experience](#). In fact, some of Dr. Kumah-Crystal's patients are inspiring the next wave of advanced functionality.

"One of the fun parts about being a pediatrician is that you can get kids really excited about some of that stuff you do with technology," she explains. "Sometimes my patients have ideas

of what would be interesting things for me to ask the voice assistant. It's interesting to think outside of the provider workflow and look at how this could make the interaction far more inclusive of the patient, empowering patients to find out information about themselves."

Conversational AI supports the next evolution of healthcare

Dr. Kumah-Crystal is excited about the potential for Hey Epic! to truly revolutionize how she and her colleagues deliver care.

"This could be a great resource to help the provider find the information they need to deliver care. And along the way, it could even learn the provider's routines and habits, and know how to cue up information," she says.

"I think we're moving towards having a voice assistant that not only understands the things you're saying and requesting but is smart enough to give you information proactively. We're on the first steps to what's going to be a monumental change in how we take care of patients and how we interact with technology. Voice is the next evolution of where we're going, where instead of having to understand how to use a computer to interact with it, the computer understands you and helps you."

Virtual assistant technologies are the future


With expanded Dragon Medical Virtual Assistant skills in Hey Epic!, clinicians will be able to work more productively and focus on engaging with patients.

It's also heartening to hear that healthcare providers like Dr. Kumah-Crystal are just as excited about the future of virtual assistant technologies as we are here at Nuance. It's through our partnerships with leaders in healthcare innovation — like VUMC and Epic — that we'll create new technologies that harness the power of [AI to transform healthcare journeys](#) in service of improved patient outcomes.

To learn more about the Vanderbilt and Hey Epic! watch this [video](#).

Tags: [Clinical Workflows](#), [Customer Stories](#), [Dragon Medical Virtual Assistant](#), [Hey Epic!](#), [Patient Experience](#), [Physician Experience](#)

More Information

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|  | <p>Discover Nuance + Hey Epic!</p> <p>Hear directly from Dr. Kumah-Crystal as she explains how adding Dragon Medical Virtual Assistant capabilities to Hey Epic! helps streamline workflows and improve patient experiences.</p> <p>Learn more</p> |
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About Mary Varghese Presti

Mary has more than 25 years' experience at the intersections of healthcare, technology and innovation. In her role leading Nuance's Dragon Medical franchise, Mary is responsible for overseeing and growing the market leader in cloud-based speech recognition for clinicians — the largest business area in the company's Healthcare division. Prior to Nuance, Mary served as the global vice president of Life Science at IBM Watson Health, where she led a team of more than 200 people and managed a portfolio of SaaS solutions, real-world data assets and research consulting services focused on accelerating breakthroughs in drug development. Mary began her career as a pediatric nurse at John Hopkins Hospital. She then moved into consulting, working in healthcare advisory services for KPMG and then management consulting with Booz Allen Hamilton. Ten years later, Mary joined Pfizer, where she served in a number of global strategy and innovation roles helping big pharma navigate significant changes in the healthcare landscape, including the broadscale adoption of health IT and health reform. Mary also served as general manager of athenahealth, where she tested and incubated new business lines for the pioneer in cloud-based electronic health records. Mary earned a B.S. in nursing from the University of Pennsylvania and a Master of Public Health in health policy and management from The Johns Hopkins University. She has also completed executive education coursework in designing and leading innovation at Harvard University.

[View all posts by Mary Varghese Presti](#)