Building an AI-prepared workforce

Mandatory education is designed to take away fears

Melissa Knuth (pronounced kuh-NOOTH) predicts a year from now, many Mission Partners (employees) at OSF HealthCare and elsewhere will be asking how they did their job without using generative artificial intelligence. Generative AI is a type of machine learning that uses artificial intelligence to create new content, including text, images, videos, code and simulations based on existing information.

OSF HealthCare, a 16-hospital system headquartered in Peoria, Illinois, has a vision that includes harnessing the power of generative AI to advance the exploration, use and adoption to optimize health care delivery, empower health care professionals and improve patient experiences across the health care system.

Knuth led a multidisciplinary team tasked with creating mandatory, on-going education to help more than 24,000 Mission Partners (employees) – from the CEO to cafeteria workers – learn about generative AI and how OSF HealthCare sees the benefits of using it. The education initiative is in place because Knuth and leaders believe that to take advantage of generative AI, everyone must understand how it works and the best practices for deploying it.

"Unless we really have the power of our entire workforce, pushing on the same side of the rock, it will be even more difficult to reap the benefits this technology presents and so it's really critical that everybody understands generative AI and the rewards we are seeking," Knuth stresses.

Education is also designed to dispel fears the technology could replace employees.

"We're really trying to put their minds at ease to let them know that we're trying to use generative AI here in a way that really enables them and allows them to get back to some of the work that is more meaningful for them."

With only six weeks to create the first lessons, Knuth tapped the Medical Visualization team at OSF Innovation to take their approach from social media content and use generative AI to create education about the technology.

"We also used mixed media, so it was a mix of video. Some interactive content, and text to continually sort of change through the course to keep somebody's attention. So, it was like small vignettes of content that we had created for them."

Mitigating risks from generative AI

OSF HealthCare was one of several organizations last year to sign the president's voluntary commitments to keeping AI safe, secure and trustworthy. Oversight of research and implementation starts at the top and includes C-suite leaders at OSF, but all levels of leadership are engaged including those from legal, compliance, ethics, policy, process, clinical and non-clinical areas.

Tyler Fitch, MD, director of Medical Informatics co-chairs the OSF generative AI exploration and planning committee. Dr. Fitch says any new use of AI or generative AI will be evaluated using an approach known as FAVES or evaluating whether the technology is fair, appropriate, valid, effective and safe.

"We wanted to ensure that we're applying all those FAVES to anything that we would release and endorse from OSF. So, thinking of things as (for example) fair. We want to make sure that it treats different groups of people similarly and that it doesn't advantage or disadvantage, certain groups."

The governance structure at OSF HealthCare ensures the appropriate use of AI. It helps clinicians use the right tool at the right time. This process involves validating results through testing to meet researchers' expectations. The goal is to ensure that AI effectively generates better outcomes and experiences. Lastly, the technology also must be secure, so it doesn't open the health system to cyber security risks.

Transparency with patients will be important for building trust with how OSF is using generative AI.

Dr. Fitch emphasizes, "If we're talking about a physician-patient interaction, for example, and something that might help a physician write a note, we're going to be letting the patient know that we're using that tool. Across the board we want transparency where the tools are being used."

OSF is part of a pilot project with Epic, the medical records system, that will test the use of Nuance DAX Copilot which can use ambient listening to help medical providers communicate better with patients during their exams. Instead of being distracted with the task of writing the note while talking to their patient, the provider will have a completed note at the end of the visit. A few medical group offices are part of the trial.

Dr. Fitch says it has been an easy sell getting providers to embrace technology that should make their jobs easier.

"I'm also hearing from our physician recruiting department that we're getting asked about what kind of tools we have here. So, this is really an area that people are seeking out and they want and so from a physician standpoint, the change management is going to be a little bit easier than some of the some of the other things we've done in the technology area."

Microsoft Copilot will be built into tools already used daily by OSF HealthCare Mission Partners. Knuth says it will include an app, called Prompt Buddy, developed internally, which will allow employees to share the best prompts to help them simplify work.

"We've developed internally a crowd sourcing app so when somebody has written a prompt, or discovered a prompt they have really found beneficial, they can share that."

Dr. Fitch believes OSF HealthCare is among leaders in developing governance and education and is farther ahead than many health systems trying to navigate the benefits and develop guardrails at this inflection point for generative AI. Strong partnerships with academic institutions and technology companies will also aid in creating learning opportunities to test the benefits and pitfalls while always keeping patients at the center of every effort.

Knuth is preparing more education for OSF Mission Partners to address generative AI which she says has created a transformative moment in business and health care.