Take steps now or it could be a long wait to fulfill AI’s promise

More accurate diagnoses in less time. More effective treatments as the first option. Clinicians with the ability to practice at the top of their license and the time to connect meaningfully with patients. These are just a few of the benefits artificial intelligence could bring to health care. Yet, they’re not as close as you may think.

What’s holding us back — and how to overcome these barriers — was one of many topics explored at the recent Aspen Ideas Health, “where health care’s biggest challenges meet its biggest thinkers.” AHA members and leaders participated as speakers in a number of sessions over the course of the three-day festival, drawing more than 1,200 attendees from 22 countries.

Here’s what we learned about AI in health care:

**AI solutions solve mostly narrow problems.** AI in health care comprises many specific solutions for a variety of specific-use cases. For example, AI might be used to predict and identify patients most at risk for sepsis, or a COPD patient likely to readmit. While there’s value for each use case, it’s not exactly optimized for providers who are trying to integrate dozens, and perhaps hundreds, of specific solutions into care delivery.
What to do about it: Before bringing in your next AI solution, hospital leaders should prioritize the use cases with the highest impact, not just the loudest internal champion. Leaders also need to make sure the solution will integrate into the electronic health record system and existing workflows.

Health data are too fragmented. Health data live in many different IT systems, and not all systems talk to one another within a provider organization, let alone across organizations. In one session, experts agreed that AI is advanced enough today to guide differential diagnoses, which would particularly help patients with rare diseases that aren’t easily diagnosed. But, “data [are] not systematically accessible in a way where you can layer in [machine learning] effectively,” said Lizzie Dorfman of Google AI.

What to do about it: Experts say we can get to AI-informed diagnoses in the next decade (longer than we would have guessed), but a lot of data consolidation within organizations and data sharing across organizations must happen first. While giving patients control of their own data may move this process along, all organizations that touch the delivery system — from hospitals, to insurers to pharmaceutical companies — need to explore data sharing and partnerships in a way they haven’t before.

Fee-for-service payments. Certain existing AI use cases could reduce unnecessary care. For example, using image-recognition AI to identify what is likely cancerous could reduce the number of patients who need biopsies. But finding an organization to pilot this type of a solution was a challenge for one AI company. To find an organization that was excited about doing fewer biopsies, they needed an organization that was already at risk for a majority of its patients, and had mostly employed physicians.

What to do about it: Although the pace of the transition to value-based payment and taking on risk varies in hospitals across the country, all hospitals should continue to position themselves for success under value-based payment by implementing new care models that improve outcomes while reducing cost. A recent AHA Center for Health Innovation report, “Evolving Care Models: Aligning Care Delivery to Emerging Payment Models,” provides an overview of the successes and challenges providers have experienced in aligning care delivery models with emerging payment models.

AI VS. BUSINESS PROCESS AUTOMATION: DO YOU KNOW THE DIFFERENCE?

Although we track AI closely here at the AHA Center for Health Innovation, we appreciated this primer on AI overheard at Aspen Ideas Health.

Business process automation uses algorithms to automate routine processes being done by humans. Humans determine and program all rules and possible decision pathways.

With AI, computers perform tasks typically thought to be human, like understanding (image recognition), talking (voice recognition and speed) and motion planning (guided surgical systems, self-driving cars).
AI gets its “intelligence” through machine learning. Humans give the computer data about a situation and its outcomes. Doing so trains them to identify new rules and apply them.

It’s worth noting that just because business process automation isn’t as intelligent, it’s still valuable. Hospitals could focus on automation alone and reap significant efficiency benefits.

**PROVIDENCE ST. JOSEPH HEALTH BUYS INTO EHR INNOVATION**

Innovation isn’t always about building a new product. Huge opportunities exist in making a good product better or optimizing its capabilities and performance and helping others in the field do the same. As part of its transformation, the Renton, Wash.-based Providence St. Joseph Health system is building a rapidly growing business out of the latter by being a service organization to peers and helping them harness and improve the capabilities of their electronic health records platforms.

The health system’s latest move: buying Epic’s Bluetree consulting firm. The deal further advances Providence St. Joseph Health’s strategy to diversify revenue streams to support patient care across its 51-hospital system and beyond. The health system, which deploys Epic’s EHR platform across its hospitals, will operate Bluetree as an independent for-profit subsidiary.

The purchase brings Providence St. Joseph Health added scale in the EHR consulting field following its 2013 purchase of Meditech’s Engage consulting firm. The two deals are major building blocks in the health system’s transformation to becoming a services provider in addition to a care provider. These deals will also help the system achieve its goal of earning $1 billion from nonclinical revenue sources by 2023 as it drives to provide more affordable care. The combined subsidiaries of Bluetree, Epic Community Connect (which allows other hospitals to use Providence St. Joseph Health’s version of Epic) and Engage could be a $400 million organization, Modern Healthcare reports.

Rod Hochman, M.D., Providence St. Joseph Health’s president and CEO, says the Bluetree acquisition will further enable the system to provide services ranging from EHR installations to upgrading and optimizing existing systems for hospitals, health systems and physician groups.

“These latter functions are critical in maximizing the value of EHRs to hospitals, ambulatory facilities and medical groups,” Hochman says. “We are able to perform these services at an effective price for the customer and utilize our expertise from our own experience. … Optimization of the EHR will be critical to all of our success in the future.”

Earlier this year, the system established Ayin Health Solutions — a care management services company — to help other provider organizations, health plans and other risk-bearing entities and acquired Lumedic, a revenue cycle-management company based on block chain technology to help streamline data sharing and improve claims processing.

We want to hear from you! Please send your feedback to Bob Kehoe at rkehoe@aha.org.