Removing health care inefficiencies one link at a time

Blockchain is a term that describes a system in which data are maintained and shared across a peer-to-peer network, rather than by a single authority. It’s most known as the technology underpinning cryptocurrencies like Bitcoin, but it’s beginning to be used to improve significant inefficiencies in health care.

“[Blockchain] is all about co-opetition,” said Radhika lyengar-Emens, founding partner at StarChain Ventures, who moderated a panel discussion at the recent HLTH conference on the technology. Traditional competitors can improve efficiency and drive data insights through blockchain, but they first must determine what specific data they will share, or decentralize, she explained.

So, how are competitors coming together to share data via blockchain? Here are some of the more common use cases for the technology, as discussed by the panel:

- **Provider directories and credentialing.** Provider credentialing costs an estimated $2.1 billion annually and is highly inefficient. Each payer has hundreds if not thousands of staff calling providers to confirm license information, office address and hours, etc. And on the
provider side, staff answer the same questions by multiple payers. Synaptic Health Alliance — a consortium of partners including Optum, UnitedHealthcare, Aetna, Humana and others — is collaborating to create a provider data exchange using blockchain technology. Although the alliance comprises payers, it soon plans to welcome provider organizations, said a panelist representing the alliance.

- **Drug distribution tracking.** In July, the Food and Drug Administration launched pilots — including a collaboration among IBM, KPMG, Merck and Walmart — to explore the use of blockchain to help track pharmaceutical distribution and ensure safety and security across the supply chain.

- **Revenue-cycle management.** A number of newer companies are exploring the use of blockchain for real-time exchange of information on claim submissions, insurer payment, patient responsibility and patient billing and payment status. In February, Providence St. Joseph Health acquired one such company, Lumedic, which aims to drive interoperability as it relates to claims processing between providers and payers.

- **Clinical trial data management.** Blockchain is well positioned today to manage the administrative end of clinical trials, such as consent management, said the panelists. In the future, many believe blockchain technology could revolutionize how patients are identified and recruited for trials. In theory, patients could share their data, opting in to be contacted by clinical trial recruiters if they qualify for new trials. Last year, drugmakers Pfizer, Amgen, and Sanofi entered “frenemy” territory, announcing they’d partner to explore ways to work together on blockchain solutions to improve the efficiency of clinical trials, while continuing to compete in many other ways.

While most near-term use cases for blockchain in health care do not involve protected health information, efforts to use blockchain to store and manage PHI are certainly underway. Various consortia of partners are exploring how blockchain can be used to exchange individual medical records; health data from wearables and other devices; medical claims data; and genomic data.

So, what's the big takeaway? These are early days for blockchain in health care, but it certainly holds promise for helping organizations across the health care ecosystem share large volumes of diverse data that today may be locked within individual organizations. Many opportunities for new discoveries and improved outcomes are contained within these data, but partners first must overcome the governance challenges that surround shared data networks.

**AHA DIGITAL PULSE PILOT WILL HELP HOSPITALS BENCHMARK PERFORMANCE**

Consumers increasingly are choosing providers who offer digital capabilities to make access to care and personal health information more convenient. So, where is your organization in its digital health journey? The AHA is developing an online assessment tool that enables providers to better understand their digital capabilities for consumers and to benchmark against their peers.
AHA members can take part in a free pilot program to gain insights into their organization’s performance and to help the AHA shape and refine the assessment tool.

AHA members can learn more about this new tool and how they can test it by participating in a 45-minute webinar that will be offered from Nov. 20 and 27, Dec. 4, 11 and 18. Pick the date that works best for you and you’ll learn how to:

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- Generate a baseline and benchmark data to prioritize digital investments to further improve consumer engagement and clinical outcomes for your hospital.
- Review potential technology opportunities for future consideration.
- Assist in building out your investment road map.

For more information about joining the pilot, contact Alex Rozenbaum, arozenbaum@aha.org, AHA director of product development.

NOTE:

Due to the upcoming Thanksgiving holiday, Market Scan will not publish on Nov. 26. The next edition of Market Scan will be sent Dec. 3.

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