

Health Information Compliance Alert

Trends: Consider These New Technologies to Boost Your Practice IT in 2019

Blockchain has the potential to transform healthcare, experts suggest.

Are you trying to improve your workflow or keep your IT cutting edge? Now is a good time to revisit your practice needs and investigate new and emerging technologies to streamline your health IT and prepare for the future.

Here's What's Hot

Whether you want to bump up patient engagement, harness data for better care outcomes, or just cut costs, there are a plethora of tools - some old, some new - that can help.

Take a look at these four options:

1. Remote Healthcare: Clinicians and hospitals can monitor patients with chronic diseases through mobile devices and wearables, answer questions and offer care via telehealth materials, and more. "From a security analyst's perspective, we're seeing an explosion of service providers offering ways for healthcare professionals to view and share patient information, and even treat them, remotely," says **Jen Stone, MSCIS, CISSP, QSA**, a security analyst with **Security Metrics** in Orem, Utah.

Stone continues, "Remote health care is critical for patients in areas with limited access to medical professionals, but it's also appealing to the same people who demand ease of communication in banking, bill-paying, entertainment and social interaction."

Bonus: Data collected from remote monitoring through wearables and mobile apps can be analyzed to provide more informed care.

2. Cloud Storage: Cloud service providers offer options for storing protected health information (PHI) and EHRs, and the cloud comes with a multitude of advantages. For example, with a client-server system, space is needed for the physical hardware. Plus, staff are often required to ensure the system runs smoothly, and the data is secure.

However, with a cloud storage system, practices offload most of those responsibilities to a vendor, who provides software and file storage from elsewhere, beyond the practice's walls. There are many advantages to a cloud system, including less expense, increased flexibility (access EHR at any moment from any location), and reduced risk of breach (no physical hardware to steal). And, vendors tend to upgrade systems overnight, so staff is never waiting for the go-ahead to resume work.

3. Artificial Intelligence: Artificial intelligence (AI) refers to computers acting as intelligent machines, and more importantly, performing human-like functions. The feds believe that the "increased availability of digital health data could allow for the use of AI in clinical practice, though issues regarding the quality of existing data must be addressed," cautions the Office of the National Coordinator for Health Information Technology (ONC).

Though the agency is hopeful and has engaged in several studies on how to integrate AI into improving healthcare, more research is necessary to ensure patients' safety and privacy, it maintains. "Though many of us already use our smartphones and other smart devices in our daily lives, through the availability of open application programming interfaces (APIs), there are still concerns about how health data can be integrated into new tools, as well as equitable distribution of these potentially powerful tools" the ONC relates.

4. Blockchain: As security breaches continue to wreak havoc on healthcare, blockchain may be the cure. Blockchain, with its time-stamping tech, is the "creation of a single storage location for all health data, tracking personalized data in real-time," explain **Laura A. Linn** and **Martha A. Koo, MD** in the ONC report, "Blockchain For Health Data and Its Potential Use in Health IT and Health Care Related Research." They add, blockchain offers "the security to set data access permissions at a granular level" and "would serve research as well as personalized medicine."

"Blockchain is an encouraging technology, which will overall improve the security posture of the industry," explains **Kurt J. Long**, founder and CEO of **Fair Warning, Inc** in Clearwater, Florida. "The benefits range from its immutability and transparency to increased level of data security."

However, Long warns that blockchain is still in its infancy as a healthcare tool. "Blockchain is many years away from having a tactical impact," he says. "There are many challenges and obstacles that need to be addressed including regulation, industry adoption, and complex security concerns."