Looking Ahead: 2018 Prospects and Trends in Healthcare Technology

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According to the Office of Coordination of National Health Information, 50 percent of healthcare dollars are wasted on inefficient processes. Transformative innovation must not only change the current way things are done, it must be disruptive by having a meaningful impact on time, quality, cost and operational effectiveness – it must dramatically simplify and accelerate the process it enables.

There are very exciting ways in which digital technology is creating transformation across the entire healthcare system in areas such as connected health, artificial intelligence (AI), blockchain, mobile data gathering, analytics, digital therapeutics and remote patient monitoring. All of these technological developments will improve healthcare efficiency, but more importantly they will drive the delivery of individualized care and dramatically improve patient outcomes as follows:

Access to Care

Connected health, or telehealth, is enabling the delivery of care to rural areas, where access is often nonexistent or very limited. It is also being used to address growing medical staff and physician shortages by providing access to timely care through collaborative tools such as eConsults. Telehealth delivers faster, less expensive and more convenient healthcare and in doing so significantly improves patient outcomes.

Patient Engagement

Conventional patient engagement systems display information at the hospital bedside, which is only one of many relevant ways to connect with patients. Companies are now integrating artificial intelligence or 'virtual' health coaches into interactive educational platforms, resulting in higher utilization and engagement, and delivering more robust, actionable content.

Remote Patient Monitoring (RPM)

A vast array of innovative wearables and sensors such as the biosensor bra patch, implantable glucose sensor, electronic tattoos and the cardiac mapping vest are revolutionizing remote monitoring capabilities. These remote monitoring systems have the potential to help achieve triple aim goals by leveraging the latest advancements to collect and analyze patient data beyond the bedside. Patients and providers can use smart phones, tablets and apps to remotely assess, diagnose and monitor their patients. Electronic monitoring can be an effective solution to identifying issues as they happen while also enabling more effective tracking of patients post-discharge, improving compliance and adherence, and reducing the number of re-admissions.

Data Gathering and Analytics

Blockchain technology provides a shared ledger of online transactions and exchanges that provides access to patient data across the healthcare continuum. New technology is being used to analyze data in innovative ways to deliver critical insights that will improve diagnosis, enable individualized treatment and improve patient outcomes. Decision support systems, virtual nurses and evidence-based guidelines can enable providers to efficiently leverage a body of information and knowledge that can augment and support their clinical decision making.

Stakeholders across the ecosystem must be focused on applying the appropriate technological solutions to improve access to efficient and effective care. Transformative technology trends, such as telehealth, patient engagement platforms, centralized patient monitoring, data gathering and analytics will play an instrumental role in achieving these goals. By streamlining processes and making care delivery more efficient and effective, these technologies will ultimately result in better access to affordable healthcare.