For healthcare interop, it's back to the drawing board

By Evan Grossman | October 11, 2018

It's been nearly 10 years since the U.S. government committed billions of dollars toward digitizing electronic health records, yet providers are still struggling to gain a comprehensive view of their patients' care.

Over the past decade, large health systems and their technology vendors – buoyed by government subsidies – invested enormous amounts of time and money into implementing single, standalone enterprise software systems across their owned footprints. Scale, long the answer to so many business challenges, was thought to be the key to unlocking patient data.

Organizations that followed this approach implemented a single EHR vendor so that all providers could have access to the same patient data within their health systems.

But as the delivery and consumption of healthcare has evolved, that approach was doomed to fail. A number of powerful forces converged and conspired against it:

- **Care happening out of network.** In a 2015 study by mobile medical reference vendor Epocrates, 79 percent of surveyed physicians reported that a majority of their patients receive care outside of their network.

- **The persistence of affiliated referral networks.** athenahealth data show that the average health system has 35 different affiliates — and those affiliates use an average of five different EHRs among them.

- **Explosive growth in convenient care.** Retail settings saw a 76 percent increase in visits between 2010 and 2015.

- **Rise of high-deductible health plans and consumerism.** Patients are starting to shop for care and take their dollars to the cheapest, most convenient options without regard for organizational boundaries.

- **Value-based care spurring new partnerships.** The shift to value-based care is stimulating the growth of community networks that require health systems to share data and coordinate care with a new array of

community partners, including home health agencies, telehealth providers, community agencies, and departments of public health.

The reality is that it's neither feasible nor economically tenable for an organization to "own" the full continuum of care for its patients, let alone manage it on a single software system.

In short, it's time for the industry to fully commit to interoperability.

A better way

The good news is that across the healthcare industry and U.S. government, there has been a recent push to finally move past the monolithic, single-system approach in favor of open data exchange across a variety of systems. Even the Centers for Medicare and Medicaid Services (CMS) launched programs to offer incentives for interoperability and penalties for data blocking.

True clinical interoperability requires an approach that puts the patient, not the organization, at the center. Here are three steps we can take as an industry to attain that goal:

We must expand data access across systems

EHR vendors should work to develop national networks (if they don't have them already).

By connecting to a national, multitenant network, health systems can benefit from any global connection their vendor builds. The architecture opens access to a range of existing connections to hospitals, practices, labs, imaging centers, immunization and specialty registers, pharmacies and more. As the network grows and more global connections are added, all clients benefit without doing any additional work.

Industrywide coalitions, such as CommonWell and Carequality, can extend connectivity even further. However, many organizations that could take advantage of this connectivity fail to do so. KLAS Research analyzed nine major EHR vendors that have connected to CommonWell and Carequality and found that client-adoption rates ranged from 1 percent of clients to 100 percent. The EHR vendors that made it easiest for clients to participate in those coalitions had the highest adoption rates.

We must make data more useful

It's not enough just to open up a variety of data sources and declare "Mission Accomplished." Providers already have access to more information than any other time in history. True interoperability provides a unified, longitudinal view of patient health data that helps providers separate signal from noise by surfacing crucial information physicians need at the point of care.

First, providers need a single, chronological view that brings together patient records from various EHRs, faxes, payer claims data, vaccine registries, drug registries, labs, and other sources.

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This includes incorporating data that might not typically be available in the patient chart, such as the cost of the drug that a physician is about to prescribe or a report on that patient's prescription history for controlled substances. It also includes physicians' free-text notes and assessments, not just discrete data – often clinicians want to see their peers' high-level assessment before drilling deeper.

Second, once all that data is assembled, it needs to be organized and prioritized to meet providers' needs. Chronological timelines can help providers navigate the patient chart easily to quickly find the data they need, with machine learning and artificial intelligence filtering that information to make it even more relevant to a specific provider. (For example, a dermatologist may not need to see all past notes from a patient's orthopedist.)

Over time, these technologies can tailor workflows based on clinicians' behavior so their view of the patient chart prioritizes the information they most frequently seek

out. This kind of experience will reduce documentation time and allow clinicians to spend more time focused on and interacting with their patients.

Finally, care teams and organizations should have visibility across patient data in order to effectively address care gaps. Care teams need longitudinal visibility, while organizations need to identify gaps across entire populations so they can conduct effective, efficient outreach to patients.

We must empower patients

Much of what affects patient health happens between visits, in different care settings — and increasingly on devices owned by patients. True interoperability must offer patients convenient access to care and the ability to collaborate with their care teams.

While previous consumerization initiatives have not succeeded, the digitization of healthcare through Meaningful Use and the emergence of data exchange standards such as Fast Healthcare Interoperability Resources (FHIR) have made it easier to implement new systems that allow patients to capture their own information.

Now Apple is working with EHR providers to give patients access to their medical records on their iPhones. These converging trends offer an opportunity to revolutionize the patient experience — as soon as this year.

Bringing it all together

True care coordination requires a single view of the patient chart that brings together data from disparate systems. The exchange of data should be seamless, transparent and useful for all, including patients, who increasingly are demanding consumer-grade experiences as they take control of their own health information.

Let's leave behind our bespoke systems and move forward with the aim of improving provider experience and transforming patient care, regardless of the setting in which it's delivered or the system in which it is documented.

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