Taking Advantage of Health IT: Part 2

Here's how to apply new technology, care collaboration, and telemedicine.

BY KEN TERRY

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Editor's Note: *In part 1 of this two-part article (March 2024 issue), the author explored the long-term potential of Health IT, the challenges of EHR, and the current status of information interoperability. Part 2 discusses care collaboration and telemedicine.*

Care Collaboration Platform

The physician-led reform model depends heavily on care teams. Within a primary care group, care team members could communicate through secure texting and an enhanced EHR that allowed documentation by care managers and other non-physician clinicians. To ensure proper care coordination across the medical neighborhood, however, primary care doctors, specialists, other providers, and patients would need a different kind of mechanism to exchange information and discuss treatment plans.

This would be especially important for patients who have chronic conditions. Today, these patients are referred out as needed, and specialists send reports back to primary care doctors. However, PCPs don't always receive these reports and they don't even necessarily know whether their patient saw the specialist. Moreover, the referral includes notes from the primary care doctor but not the care manager who might be working with the patient.

One of the first uses for a care collaboration platform would be alerts about changes in a patient's health condition.

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Under the physician-led reform model, as explained earlier, primary care doctors and specialists would be in separate practices. To counter the increased fragmentation of care that would inevitably result, it would be imperative for all the physicians caring for a patient to communicate electronically. In addition, PHM requires continuous care for people with chronic conditions; although care managers do the bulk of this work, there must be a way to keep all treating providers in the loop.

Beyond Interoperability

Interoperable EHRs could support this kind of collaboration. But, as we've seen, we're still a long way from full interoperability. What's needed is a care collaboration platform that could use current and emerging health IT to support care coordination across care settings and business boundaries.

Continued on page 126

Health IT *(from page 125)*

Such an online platform, which could be launched directly from EHRs, would allow treating providers and their care teams to collaborate with one another in the care of particular patients.

Functioning as a kind of FHIR app, the platform could be used to pull in relevant data on a patient from disparate EHRs without the need for interfaces. As a result of the increasing standardization of EHR data, which should be well along a decade from now, this information could flow into a single, updatable record available to all users. Until write-back from FHIR apps to EHRs is available, however, only documents such as consultant reports, updated care plans, and CCDs could be sent back to the EHRs.

If each primary care group in an administrative region used a different care collaboration platform, this would present a challenge to the specialists in the groups' networks. The simplest solution would be for the groups in the region to agree to use the same platform. The cloud-based technology would allow each group to collaborate with specialists in their own way without compromising patient privacy or revealing their methods to competitors.

Among the EHR data elements and documents that could be exposed to the care collaboration platform are referrals, recent visit notes, consultant reports, test results, diagnoses, allergies, and medications. Data on a patient's care management and social determinants of health would also be available. And there would be up-to-date information on the patient's condition between visits, whether it came from care managers, self-reports, or remote monitoring.

The most important component of the care collaboration platform would be a longitudinal care plan that would follow a chronically ill or recovering patient through their healthcare journey. This care plan would also be the locus for communications among the participants. Any of the patient's providers of record could update the plan with the consent of the patient's primary care doctor. Each time the plan was updated, it would be automatically transmitted back to the participants' EHRs. In addition, the platform would send alerts to care teams whenever a patient had a significant event.

Observers' Comments

A care collaboration platform such as this one could help improve care across care settings, say some experts.

"That's one of the core pieces of technology that's needed: a semantically rich platform that is not tied to any particular practice or doctor but is patient-centered and is pulling things together," says Steven Waldren, MD, Vice President and Chief Medical Informatics Officer of the American Academy of Family Physicians (AAFP). "It's semantically rich so you can share knowledge and share tasking. There's one care plan for the patient and everyone contributes to that care plan. That way, the PCP knows exactly what the cardiologist is doing, and the cardiologist knows about the other specialists and what the primary care doc is doing, and it's all coordinated together. You also allow the patient to be part of the care team and contribute."

Waldren's allusion to a "semantically rich platform" refers to the need for "semantic interoperability" between the medical terminologies used in different EHRs and different healthcare organizations. In an interview with cio.com, John Halamka, MD, then Executive Director of the Health Technology Exploration Center of Beth Israel Lahey Health and former CIO of Beth Israel Deaconess Medical Center in Boston, explained that many of these terms have not been mapped to standard codes and therefore cannot be represented as FHIR resources.[18]

Micky Tripathi, director of the Argonaut Project, a consortium of providers and technology vendors that has played a key role in the development of FHIR, says that an FHIR-based care collaboration platform could be built in the next decade. It would be predicated, he says, on the ability of EHRs themselves to function as platforms that can query and retrieve specific data elements from other EHRs through FHIR APIs. He doesn't dismiss concerns about semantic interoperability, but says that this challenge will be overcome gradually as more and more data elements are added to the FHIR catalog.

One of the first use cases for a care collaboration platform, Tripathi says, would be alerts about changes in a patient's health condition. For example, if a patient's asthma worsened significantly, his or her doctor would want to communicate that immediately to specialists and care managers who are co-managing the patient.

Today, he says, an EHR could not consume that alert, because it isn't part of the standardized common data set that every certified EHR must include. EHRs are able to extract problems, medications, allergies, and immunizations from the standardized Continuity of Care Document (CCD) and not much else. But FHIR includes resources for all 22 elements in the CCD.

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These common clinical data elements are part of the U.S. Core Data for Interoperability (USCDI), he explains. The Office of the National Coordinator for Health IT is rapidly adding new USCDI data elements, all of which will be expressed as FHIR resources, he says. Eventually, these new standard data elements and corresponding FHIR resources will be available in all EHRs. "So, we'll keep getting better at semantic interoperability because of the USCDI," he says.

Today, FHIR resources cover about 80% of what physicians commonly

Continued on page 127

Health IT *(from page 126)*

do, including most of the care they provide for chronic conditions such as diabetes, asthma, and hypertension, Tripathi says. "What is missing is a lot of the care management things, which are very rudimentary and ill-defined. A care plan is required for EHR certification, but it's unstructured. You just have to list the care team, health concerns, and patient goals."

The Argonaut Project is also working on a "subscription resource" that should be available within the next few years, he notes. By using that FHIR utility, he says, a care collaboration platform could specify in advance what kinds of data it wants pushed to it automatically from participating EHRs.

Telemedicine

The rapidly evolving field of telemedicine promises to have a major impact on healthcare in general and primary care in particular. The growth of value-based care and risk contracting is expected to boost telemedicine, and vice versa. In addition, the COVID-19 pandemic has greatly accelerated the use of telemedicine in the United States. For the physician-led reform model, the ramifications of this technology are huge.

The terms "telemedicine" and "telehealth" are often used interchangeably. In some contexts, telehealth or "connected health" connotes a larger set of technologies that include remote patient monitoring and mobile healthcare.

For the purposes of this discussion, let's use the term "telemedicine" to describe virtual encounters of any kind between clinicians and patients. These encounters encompass asynchronous communications such as secure texting and email, as well as video "visits" that take place on smartphones and computers. In addition, telemedicine includes physician-to-physician virtual consults, which some groups use to speed care delivery.

Long Evolution

Telemedicine began many years ago, long before smartphones were invented. Rural doctors used teleconferencing equipment in their offices to consult with specialists located in metropolitan areas, usually with the patient present. This approach, which is still in use, has spared many patients from having to travel long distances to see specialists.

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Over the past decade, telemedicine services such as *American Well, Teladoc,* and *Doctor on Demand* have offered consumers virtual consults with doctors, either telephonically or through video visits on their smartphones and computers. In the past few years, many healthcare systems and large groups have begun to provide remote consults using their own physicians. In some cases, these are the patients' own physicians; more commonly, the groups have cadres of physicians who host virtual visits as a regular part of their work.

In telemedicine's initial stage, few insurance companies covered it; those that did reimbursed physicians at a lower rate for virtual visits than for office visits. This discouraged physicians from participating because they didn't want virtual visits to cannibalize higher-paid in-person encounters. Today, 31 states require private health plans to reimburse virtual visits at the same rate as office visits, and two other states have partial parity laws. In addition, Medicaid covers telemedicine, to varying extents, in all 50 states.[19]

Medicare has been slower to cover telemedicine. For many years, CMS paid only for telemedicine visits initiated in physician offices in rural areas.[20] Later, the agency liberalized its policy in two ways: it allowed virtual "check-in visits" from any location to determine whether a Medicare patient needed to come into the office,[21] and it permitted Medicare Advantage plans to offer telemedicine as an extra benefit.[22] For the duration of the coronavirus pandemic, CMS largely lifted its restrictions on the use of telemedicine.[23]

Slow Uptake

Although private insurance claims for telemedicine services have increased rapidly in recent years, this growth started from a very small base.[24] A 2019 survey found that only one in 10 consumers had used telemedicine in lieu of a doctor's office visit, urgent care visit, or ER visit in the previous 12 months. The report attributed this low rate of virtual visits partly to a lack of consumer awareness about their access to telehealth services. Nearly half of the respondents also said they believed that the quality of care received in a telehealth session is poorer than that in a doctor's visit.[25]

Employers and insurers jumped on telemedicine early in the hope of reducing costs. But in 2016, although 85% of insured people had access to doctors hired by telemedicine companies, just 2% to 3% of them were availing themselves of the service. At that time, two reasons were given for the low uptake: the remote consults were mostly telephonic; and there was a lack of continuity with the patients' own physicians.[26]

In an interview in *Medical Economics,* Jerry Penso, MD, president and CEO at AMGA, said there are inherent limits to the approach of having patients consult remotely with doctors hired by outside services. These doctors don't know the patients who consult them, and they rarely coordinate care with the patients' regular physicians, he noted. "The critical piece is to make sure the care is coordinated."[19]

Even before the pandemic, larger groups and health systems began offering telemedicine services directly to their patients. For example, the Austin Regional Clinic uses an outside telemedicine platform that allows video, voice, and text messaging. After sending a text about his or her problem, the patient is quickly

Continued on page 128

Health IT *(from page 127)*

connected to a doctor. A group of 20 clinic doctors handles these requests 24/7. Some do it on their own time for extra money; others fit video visits between in-person clinic visits.

Kelsey-Seybold, a multispecialty group in Houston, uses the virtual care platform in its Epic EHR for both video visits and "e-visits" based on online messaging through the EHR's patient portal. When a physician encounters a patient in a scheduled video visit, the doctor sees the patient on one side of the screen and views the EHR on the other side.[19]

companies don't know their patients, this is understandable; even physicians who do virtual visits with their own patients are reluctant to diagnose or treat remotely anything that might be a serious problem.

In recent years, however, the focus of telehealth has begun to expand. Some groups, including Kaiser Permanente and Kelsey-Seybold, are using video visits for post-surgical follow-ups. And some groups employ telemedicine to do follow-up visits with patients who have chronic diseases, as well.

"Virtual health has been great for my diabetic patients," Kelsey-Seybold's Donnie Aga, MD, told *Medical Economics*. "I know them really well, and they can go to the lab at any time; fasting is not an issue. For routine follow-ups on diabetes, it's very well done."

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Until the COVID-19 crisis, only 3% of Kelsey-Seybold's visits were virtual, and the telehealth doctors at the Austin Regional Clinic handled only about 30 virtual visits a week. Even at Kaiser Permanente, only a small percentage of patients made video visits,[27] although the big HMO allowed patients to request telehealth encounters with their own doctors.

"A new patient would typically have a physical exam face-to-face," explains Richard Isaacs, MD, CEO and executive director of the Permanente Medical Group. "After that, they could ask for a virtual visit. First, they'd send their provider a question through secure messaging, then there would be a response and maybe a request for more information. The patient could also send a picture. Based on all of that, a virtual visit could be initiated or the physician might ask the patient to come into office."

Acute Versus Chronic Care

Outside of rural telehealth and the Veterans Health Administration (VA) system, telemedicine is used most often to diagnose and treat minor acute problems such as influenza, low back pain, conjunctivitis, and urinary tract infections.[19] Given that the doctors hired by telehealth

Virtual visits with behavioral health providers have become widespread. Mental health professionals at Summit Medical Group in Summit, New Jersey, for example, regularly do remote therapy and medication management sessions with patients who have difficulty getting to the office, according to James Korman, PsyD, chief of behavioral health and physician wellness. Primary care physicians can consult with therapists or do video visits with patients.

The VA has taken the lead in the more inclusive approach to telemedicine. A VA program that encompasses both remote monitoring and videoconferencing reached nearly 120,000 veterans in 2012 and generated annual savings of $1,999 per patient. Hospital admissions decreased by 38% compared with the previous year; inpatient bed days of care decreased by 58%; and patient satisfaction was 85%.[28] **PM**

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Mr. Terry is former senior editor at *Medical Economics* and author of *Physician-Led Healthcare Reform: A New Approach to Medicare for All* (American Association for Physician Leadership, (2020); email: kenjterry@gmail.com.