

Statement of Carl Dvorak, Epic
Panel 3: Policy Challenges & Infrastructure Requirements to
Facilitate Patient/Consumers' Meaningful Use of HIT
April 20, 2010

Thank you for the opportunity to share our experience and insights here today. My name is Carl Dvorak and I am executive vice president of Epic Systems Corporation. We develop software for medical groups and health systems. My experience dates back to the early 1990s as a developer working with a small team of programmers to create Epic's first physician-oriented Electronic Health Record (EHR).

Today I am responsible for our software development and support activities. I work closely with programmers, implementers and customers to develop software to help improve patient care.

Epic's electronic health records are used by clinicians providing care for millions of citizens served by Federally Qualified Health Centers (FQHCs), county hospitals, community hospitals, independent medical groups and some of the largest integrated health systems and networks in the country.

In the late 1990s, Epic developed a patient portal application called MyChart. Organizations that use Epic's EHR can use MyChart to provide their patients with access to their records. Many of my remarks today draw on these over ten years of experience Epic has with sharing the EHR with the patient and the ways that healthcare organizations using MyChart have managed to improve the quality of the care they provide and the efficiency of the care they provide by engaging the patient.

1. You asked about the meaningful uses of patient information and about that data once exported. What evidence of measureable benefits exist?

Many of the benefits of patient access to their health information have to do with improving the dialog between patients and providers. In those cases, it is not accurate to say the data is "exported," but rather that it is shared.

When the patient wants to play an active role in transporting her data from one healthcare system to another, exporting data in a standard format, such as the Continuity of Care Document, is helpful. This allows the patient to transition the information from one provider to another in a way that can be consumed by the receiver's EHR system. The ability to export data in that format and provide it to patients electronically is already proposed as a Stage 1 Meaningful Use requirement.

You asked about evidence of measurable benefits. Let me share some examples of the benefits of sharing information electronically between the patient and the provider. These are examples that organizations using our software have shared with us.

- They have found that their patients who have online access to their health information are twice as likely to receive suggested routine screening.
- Offering this access to patients raised the patient perception of quality by 20%.
- 73% of the physicians using the tool agreed that the access improved patient/physician interaction, and 97% of the patients said it was important in their choice of where to receive care.

These advantages center on improving the communication between providers and patients. Electronic access helps improve communication in several ways.

First, patients have access to their health information at any time that is convenient for them. They are not forced to play phone tag with their clinic and take an inconveniently timed call because they are anxious to know a test result.

The patient can digest messages from their provider or provider's staff educational materials suggested by their provider in the context of their health record on their own time. If their provider is suggesting a new medication based on a recent lab result, the patient can look back and review their previous lab results and graph the same trend their physician saw.

Patients have a large quantity of information available to them that would be difficult to assemble and maintain on paper. They can log in to see their health information from any internet connection, even if they are traveling or not at home. If they forget instructions their provider gave them at their last visit or lose a printout, they can review these instructions online.

Communication can also be improved with other family members participating in the patient's care. Parents can view their children's health information online. They can easily print out immunization records for school rather than calling the clinic. A child concerned about an elderly parent's health can be given proxy access to the information as well, and can help his parent monitor their recent test results, medications and upcoming appointments even from across the country.

There are some communication benefits for providers as well, besides the increased patient satisfaction and engagement. Providers and their staff find asynchronous communication convenient also, because they are again presented with the communication in the context of the patient's health record and the ability to act on the question.

Here are two more examples that focus on the provider's side of the communication advantage. Organizations using our patient portal have found that:

- Providers' staff saves an average of four minutes per medication refill when requested online versus being phoned in.
- They save approximately \$3 per lab result delivered online versus being mailed to the patient.
- *Patients are more likely to show up for appointments that they schedule themselves online. Patient no-shows were reduced 30% with online scheduling.*
- *Providing patients with the convenience of being able to pay their bills online reduced 1 day of outstanding A/R on average.*

2. Second, you asked about the role of the provider in making data available to patients in meaningful ways.

Providers have an important role in making data available to patients in meaningful ways and engaging patients in their own care. Providers have long done this through activities like giving a patient a paper summary of their visit, distributing educational materials about the patient's condition, or having their staff call a patient to provide a test result.

In some cases, existing processes can be streamlined by providing this same type of information to patients electronically. I gave some examples of this earlier, when I mentioned the savings of online medication refills and of delivering lab results online. If a provider conveys the same message to a patient through a secure message that she would have given over the phone, but it is more convenient for her to send it when she has a moment than to catch the patient on the phone, then this is a savings in provider time and potentially her ability to focus on the patients already waiting in exam rooms.

In other cases, we need to think about how to properly compensate providers for this new model of care. Our current model of care doesn't sufficiently compensate primary care providers for educating or counseling patients, regardless of what medium this takes place in. We've seen two approaches in recent years. There are a few organizations that have negotiated plans with payers to compensate providers for e-visits. And we've seen HMOs allot time in provider's schedules for responding to electronic patient messages.

We've looked for evidence on the advantages of disconnected PHRs, and have not found the same quantity we have for connected PHRs that are a conduit between the patient and the health system.

For this reason, we recommend that patient engagement objectives focus on the advantages gained by connecting the patient and the provider. For example:

- Providers sending patients an electronic questionnaire to fill out before a visit
- Access to electronic messaging

3. What are the privacy and trust issues that might prevent this from happening?

When the health system is the custodian of a patient's data and the patient shares access to that data, we find that patients have less concern about the privacy and security of their data. Generally speaking, we find that patients appreciate the additional privacy of being able to view their health information electronically rather than having to take a call from their provider at a time that might be inconvenient or indiscrete.

One thing that makes patients nervous about electronic health information is the idea that their health information is being shared without their knowledge, or that their health information is being sold for other purposes. If they are provided a view into their provider's record, where the data is already residing, that's different than exporting their data to a different system, whose business model may be based on aggregating and selling data for research, marketing or in some cases direct and indirect advertising.

Providers are also nervous about the idea of including advertisements along with health information, as patients may be confused by the presentation of recommended educational materials and drug company advertisements on the same site. Advertisements targeting particular medical conditions may appear to be education or legitimate advice when they are in fact sponsored advertisements.

4. Finally, you asked about what is required for vendors to export data from EHRs in such a way that patients can use the data meaningfully.

Epic and many other vendors already provide ways for patients to have meaningful access to their health information and to share that information with their providers. Per the proposed Stage 1 Meaningful Use certification requirements, vendors are also able to export data from the EHR in the standard Continuity of Care Document format and provide it to the patient electronically.

Standards and technical capabilities do not seem to be the limiting factors for increased patient engagement with HIT and with their providers. Focusing on reimbursement models that support providers in engaging with their patients electronically would likely provide more value than increased focus on technical standards.

Conclusion

To summarize, the organizations who have used our shared PHR with their patients have reported many successes to us and to other organizations that use our software at our Users' Group Meetings. The commonality between these successes seems to be the improved communication between providers and patients, because the format and timing of the communication and self service opportunities is more convenient to both patients and providers.

To expand on previous successes, we suggest initiatives that continue to promote the PHR as a tool to facilitate the relationship between the patient and the provider as well as simply providing data. We would also caution that careful consideration is needed with regard to secondary use of patient data in way that a patient may not realize or expect.