Ambulatory versus Acute Care EHRs

Save to myBoK

by Margret Amatayakul, MBA, RHIA, CHPS, FHIMSS

EHR systems for clinics differ from those used in hospitals. But does that mean they can't get along?

Although every electronic health record (EHR) is intended to capture data from multiple sources and to be used at the point of care for clinical decision making, there are significant differences between acute care and ambulatory care settings in their IT infrastructure, work flows, and processes that necessarily make their EHRs different in several respects.

One difference between implementing an EHR in an ambulatory setting versus an acute care setting actually has nothing to do with the EHR itself, but with the existing infrastructure, although as time goes on even this difference is diminishing. Whereas clinics and hospitals generally have some information systems already, the clinic typically has fewer systems. Whether a hospital has deployed a best-of-fit or best-of-breed strategy, the components comprising the system or the various different systems are highly pervasive. Few hospitals are willing to replace all the elements of their existing IT infrastructure.

Alternatively, many clinics approaching an EHR have a practice management system (PMS) and/or a billing system. If the PMS system is fairly new, the vendor probably has an EHR module that will fit well. If it is fairly old, its useful life is virtually nothing and some clinics, at least after they determine the incremental cost of acquiring a new PMS integrated with the EHR, will acquire the fully comprehensive PMS-EHR system.

The result of the infrastructure differences makes it easier for a clinic to achieve interoperability within its own setting. Having observed this, however, it must be recognized that such a scenario still may leave the clinic with interoperability issues between its systems and other external source systems, such as a lab, imaging center, and the hospital where its physicians admit patients.

The Clinic-Hospital Connection

Most EHR vendors, however, are well aware of the need to interface with labs and have created such interfaces with many of the major lab systems. An interface does not necessarily achieve full interoperability, of course. The interface may only transfer a print image of the lab result into a PMS.

Ideally, a lab interface should transmit lab results in discrete form to the PMS and EHR, and some of them do. The same would be true for the results of diagnostic imaging, although, of course, the diagnostic image itself would come across as a digital image. However, the findings ideally would also be in discrete form.

Creating an interface between the hospital and clinic is more challenging. Not only are the systems very different, but the predominant strategy has been to provide a physician portal where data from the hospital can be viewed or downloaded as an image of a document. Some hospital system vendors have created templates where physician offices can enter data for scheduling an admission or surgery. However, in such cases, the office's PMS or EHR does not supply the data directly through an interface; it must be keyed in separately. Some hospitals provide kiosks for physicians to connect to their PMS to enter professional charges, although these have not been very popular.

As a result of the less-than-satisfactory means to achieve interoperability between physician office and hospital, or even between an outpatient system and inpatient system where different vendor products are used, some integrated delivery networks of hospitals and physician practices are considering acquiring the EHR from the same vendor. The physician office may decide to wait for the hospital to make a decision and then acquire the ambulatory EHR component from the same vendor. Alternatively, there have been joint decisions made, especially when the hospital plans to acquire much of a new system.

Unfortunately, the vendor marketplace still does not offer very many EHR systems that are truly acute and ambulatory care integrated. All too often, a hospital information system vendor acquires an ambulatory care vendor or establishes an exclusive relationship with another vendor, writes a custom interface between the two products, and calls it integrated.

This is changing, however, and vendors who have developed both ambulatory and acute care components themselves should be considered when an integrated delivery network is looking for an EHR. Generally such vendors, however, represent complex, highly customizable systems that may offer more than what physician offices—especially very small ones—want or even need.

Waiting for Interoperability

Inevitably, then, the next question is: Should we wait? (This question is being asked by both the acute and ambulatory "sides" of the fence.) There is certainly growing momentum for achieving interoperability, although the degree to which the vendors in a free-market environment will actually achieve interoperability is uncertain.

Most industry observers suggest that each organization needs to assess its goals for an EHR. If the primary goal is to exchange data across the continuum of care, waiting or giving up some functionality to acquire a product from the same vendor may be appropriate. On the other hand, many others believe that functionality is key and that there are sufficient work-arounds, including interfaces and Web-based portals or clinical messaging, to exchange the information that is truly needed.

What data truly need to be exchanged also should be a consideration. Neither a hospital nor a physician office needs or wants all the information held by the other for a given patient. Most want key data, such as data from a problem list, medication list, and recent labs. Physician offices do not need all of a patient's vital signs to repose in its EHR, and hospitals do not need endless records of visits for flu shots.

In addition, it must be recognized that the physician office-hospital connection is not the only point of desirable connectivity. Even in a very small town where there is only one hospital and a small number of physicians, virtually all of whom are members of the hospital's medical staff, patients may well obtain tertiary care from another hospital or receive emergency care in other parts of the country. There is also nursing home or home healthcare to be considered. In areas with more healthcare organizations, it is very unlikely that only one vendor will be represented, so achieving true interoperability with all vendors in the mix will be a long time in coming.

Margret Amatayakul *(margretcpr@aol.com) is president of Margret\A Consulting in Schaumburg, IL.*

This article is excerpted from the forthcoming third edition of the author's book, *Electronic Health Records: A Practical Guide for Professionals and Organizations*, published by AHIMA and available this summer.

Article citation:
Amatayakul, Margret. "Ambulatory versus Acute Care EHRs." *Journal of AHIMA* 77, no.6 (June 2006): 40-41.