

CONNECTING COMMUNITY PHYSICIANS

CSC

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Many hospital leaders and physicians believe that sharing clinical information to provide more seamless, coordinated care for patients is the right thing to do. With recent changes in the Stark rules and the anti-kickback safe harbor, and a rapidly changing competitive environment, the incentives for hospitals and integrated delivery networks (IDNs) to connect with community physicians are only increasing.

Though electronic health record (EHR) adoption by ambulatory physicians is still relatively low,¹ astute physicians increasingly view EHRs as a necessity not only for providing better care more efficiently, but for meeting pay-for-performance incentives, measuring and managing clinical quality, and staying competitive.

Consolidation and certification of EHR vendors have somewhat narrowed the options for physicians. In many cases, however, supporting an ambulatory EHR may be a new endeavor for many hospitals. Clearly, not all physicians will be ready to make the leap to an EHR; and in most cases, physicians in a given market will not all opt to use the same vendor product. As a result, true community integration will remain an elusive challenge. What options, then, do hospitals have for connecting with community physicians, for supporting their adoption of EHRs and for achieving stronger community integration?

Options and Key Considerations

Community Connectivity Approaches

There are four emerging approaches that hospitals are undertaking to connect with community physicians:

1. *Hosting a Community Portal*

Most inpatient EHR vendors offer Web-based remote access for physicians. These portals provide access to hospital-based test results and other clinical information that would be useful to physicians treating shared patients. In some cases, they also support the exchange of information between referring physicians and specialists, or the entry of admission orders by a community-based physician. These portals require minimal overhead and infrastructure, but do not substitute for an ambulatory EHR. As a result, they are of greatest interest to physician practices that do not already have an EHR and admit patients and/or rely on the hospital for laboratory testing. These products typically provide one-way access by physicians into the hospital's patient database, but they do not themselves provide full-scale integration of multiple EHR products across a community. For hospitals whose inpatient clinical vendor lacks a community physician portal, or where clinical information resides on multiple vendor platforms (i.e., separate PACS or laboratory information systems), there are also "wraparound" products that provide remote physician access through an easy-to-use Web interface.

+ ADVANTAGES

- First logical step towards community exchange of information
- Relatively easy extension of hospital's core application
- Minimal overhead, infrastructure and support — especially for community physicians

- DISADVANTAGES

- Lacks full-scale integration
- Often view-only access of limited to no use in ambulatory practice

THE BOTTOM LINE

Of greatest interest to physician practices that do not have an EHR and may not be ready to implement one, but desire increased connectivity with the hospital

2. Offering the Ambulatory EHR Product Associated with the Hospital's Current Inpatient Solution

Most vendors of inpatient EHRs also offer an ambulatory EHR. While many of these products are not well known among physicians in ambulatory practices, most of them are strong EHR products certified by the Certification Commission for Healthcare Information Technology (CCHIT).² In a few cases the ambulatory EHR is integrated with the inpatient one (same patient database). Many hospitals select the associated ambulatory EHR for employed physicians.

Extending an associated EHR product to physicians in the community can often be accomplished with relatively minimal configuration effort and at a lower cost than installing an EHR solution from a different vendor. This is especially true if the organization has already rolled out this solution to its own physicians. If a significant number of the community's physicians adopt this as their EHR solution, then building a true community health record for each patient will be accomplished more easily than if each practice were to use its own EHR product. However, integrating the EHR with practice management systems (PMS) being used by community physician practices will be essential if physician practices want to avoid re-entering all of their patient demographics data into the EHR and maintain seamless integration for billing.

As with the previous option, this approach is best suited for practices that do not already have an EHR but seek one — especially when they do not already have a preconceived notion of which EHR vendor they want. Interested practices will likely be those that conduct a significant portion of their business with the hospital.

+ ADVANTAGES

- Logical extension of hospital's core application
- Lower cost and complexity vs. installing an EHR from a different vendor
- Greatest potential for building a true community health record

- DISADVANTAGES

- Products not always well known as ambulatory EHRs
- Likely to require PMS interfaces
- Requires community physicians to agree on one EHR solution

THE BOTTOM LINE

Best suited for practices that do not already have an EHR and do not have a preconceived preference for an EHR vendor

Extending a hospital's ambulatory EHR out to community physicians represents the greatest potential for building a true community health record.



3. Hosting an EHR or EHR/PMS Solution

For hospitals with a core inpatient EHR vendor that lacks an ambulatory EHR, and for hospital communities in which physicians have already begun focusing their search on an ambulatory EHR solution, the most suitable approach may be to host an EHR product that is distinct from the core vendor solution a hospital already has in place. Many hospitals contemplating community-based EHRs are considering this approach, though it is more complicated to execute than the previous two.

First, many hospitals, unlike independent physician associations (IPAs)³, have little experience hosting and supporting ambulatory applications. As a result, this often represents a whole new line of business they must understand and support. (In such cases, hospitals should investigate EHR solutions hosted by a third-party entity such as the vendor, or an application service provider in order to minimize the burden on the hospital.) Second, because EHR integration with a practice's PMS application is often deemed essential, hospitals may be forced to consider hosting a fully-integrated EHR/PMS solution, which in turn may represent an added data ownership threat for practices. Third, getting physicians in a community to agree on one vendor solution they're all willing to adopt can be difficult.⁴ As a result, some hospitals feel obligated to investigate multiple EHR vendor options — an approach that obviously represents additional costs and complexity. In all cases, engaging community physicians in the EHR selection process becomes essential for achieving consensus and buy-in.

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+ ADVANTAGES

- Best suited for practices lacking an EHR
- May allow hospital to offer a more well-known ambulatory EHR product for physician practices

- DISADVANTAGES

- Big investment for hospital
- May require integrated EHR-PMS offering
- Represents a new business for the hospital
- May require offering multiple EHRs to interest enough community physicians

THE BOTTOM LINE

Best for hospitals with a core inpatient vendor system that lacks an ambulatory EHR, and for hospital communities in which physicians have already begun focusing their search on an ambulatory EHR solution

4. Integrating the Hospital's Core Inpatient Solution with Community EHRs

In communities where practices already have an EHR in place, connecting those EHRs to the hospital's current clinical information system becomes the primary goal. Unfortunately, there are no known examples in which this has been successfully and comprehensively accomplished. Although some vendors have conducted robust testing and demonstration projects, interoperability standards for clinical information are not yet in place (though they are just now emerging for laboratory test results and e-prescribing)⁵; achieving integration between inpatient and ambulatory systems is a highly-customized, labor-intensive endeavor. There are a number of associated challenges.

- Practices may not want all of the hospital's data pushed to their EHR — even for shared patients. Certain patient data and reports will be of greater interest.
- Each community practice may differ in how it wants the data to be integrated into the EHR. Exporting and importing information as reports or text documents is easier than incorporating discrete patient data — like diagnoses, test results and medications — into specific EHR fields. Data mapping becomes critical in the latter approach.
- Hospitals and physician practices may seek to validate data before it's imported into their clinical applications, or at least tag it to reflect the source.
- Accurately aligning clinical data for shared patients in a community requires good master patient indexing (MPI) capabilities and extensive data mapping.

Interface engines can facilitate this effort, and there are several emerging vendors that remotely host and support clinical information system integration. However, the overall scope of this effort becomes increasingly complex when multiple EHR vendors are in place in a community. From the physician's perspective, this option is most attractive for practices that already have an EHR because they retain control of their current vendor system and gain access to essential hospital data.

+ ADVANTAGES

- Best suited for communities with ambulatory EHRs already in place
- Allows practices to retain current EHR products and workflow

- DISADVANTAGES

- Data integration challenges
- Difficult to create a true community-wide record

THE BOTTOM LINE

Best suited for communities where practices already have an EHR in place

These four approaches are not necessarily mutually exclusive. The circumstances in some communities may require multiple approaches to meet the needs of local physicians.

Key Adoption Factors and Considerations

How does a hospital or IDN choose the most appropriate approach? The current systems, capabilities and interests of each physician practice will most certainly differ. For example, some physician practices will want a relatively low-cost, non-invasive solution that provides them access to hospital information for the few times a week they need it. Other practices will more aggressively seek a local hospital to host, support and partially fund a robust EHR that provides access to integrated patient data from across the community.

In addition, local and regional market pressures can make physician adoption of EHRs more likely. These include pay-for-performance incentives, quality measurement and reporting requirements, competition with other practices, and a high penetration of clinical information technology (IT) solutions in that market. For example, in markets such as California and Massachusetts, where pay-for-performance is prevalent, EHR adoption has been shown to be significantly higher than in areas in which it is not.

To help determine which of the four approaches, singly or collectively, best suit a given community, hospitals will need to assess their local environment against seven key factors.

1. Cost. There is still a wide gap between the cost of most EHRs and what physicians are willing to pay for one. For most practices, the extent to which a hospital is willing and able to subsidize this gap will be the major factor affecting physician adoption.

2. The level of interaction a given practice has with the hospital. Practices that conduct a fair amount of business (admissions, referrals) with the hospital are more likely to seek solutions that make communication and the joint management of shared patients easier. Conversely, physicians who admit to multiple hospitals may be unwilling to adopt multiple solutions, or one IT solution that supports only a portion of their patient volume.

3. The core inpatient clinical information system vendor that's in place at the hospital. For the inpatient-focused vendors that offer an ambulatory EHR solution, or at least Web-based capabilities that can be readily extended to community physicians, simply making this capability available to community physicians can provide significant community value, particularly for heavy admitters.

4. The level of comfort physician practices have in adopting a remote-hosted or community-based application. Patient privacy concerns and the security of clinical data, requirements for system availability and reliability, and control over the practice's vital information can all influence whether a practice is comfortable entrusting its core applications to a third party. The role that a third party plays in hosting an EHR and its reputation in the community thus become important factors that physicians weigh.

5. The PMS vendor product being used at a physician practice and whether the practice is willing to switch products. Integrating one vendor's EHR product with a different vendor's PMS, while doable and not uncommon, is not ideal. Having both products on the same vendor

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platform eliminates the need for interfaces and makes the exchange of important demographic, clinical and billing information much more seamless. Practices that desire an integrated EHR–PMS solution may need, or wish, to de-install their current PMS application in favor of a single, integrated application hosted by a third party.

6. The level of EHR adoption by community physicians and the vendor products they are currently using. Community physicians lacking an EHR are obviously the target candidates to install one. On the other hand, the minority of physicians who already have one will likely request a solution that also provides some level of interoperability and connectivity with the hospital. These more advanced practices will seek to leverage their current EHR to seamlessly exchange clinical information with the hospital.

7. Interoperability standards and solutions that are available. When inpatient information, such as discharge summaries, emergency department records, test results, discharge medications, and patient instructions, is available in the ambulatory setting, patient follow-up and clinical outcomes can greatly improve. Similarly, receiving a list of current diagnoses, active medications and admitting orders in the inpatient setting makes the admission process smoother and may decrease errors. However, the seamless integration of inpatient applications with ambulatory EHRs is very difficult and rarely accomplished today. Interoperability standards and vendor solutions that make community-wide application integration easier are only just emerging.

Open Questions

Despite the increasing understanding of the key factors outlined above, several remaining questions will need to be addressed as hospitals move forward with community connectivity.

1. What are the overall investment costs for the hospital? In general, the options in the order arrayed above become increasingly expensive. The fully-loaded costs for implementing and supporting a high-end EHR can run \$1,000 or more per physician per month. Some vendors are considerably less expensive (closer to \$500 per physician per month). Two essential components of the costs include on-site implementation and ongoing support for these physician practices. A failed EHR implementation or inadequate support can do more to harm the community's perception of the hospital than the goodwill and stronger relationships that are intended.

2. What is the planned level of subsidization? Early feedback from some physicians indicates an EHR price tolerance of only \$100 to \$200 per physician per month. Hospitals will need to consider whether they're willing to finance up to 85 percent of the EHR costs as allowed under Stark so that this price target can be met. Prioritizing which practices get to implement an EHR first and the level of subsidy available to certain practice types are related considerations. Though admissions volume can't be used as a criterion for determining EHR subsidies, practice size, IT readiness, and willingness to "go first" can be.

3. What is the level of physician interest and expected rate of adoption? Not every physician in a given community will be interested in using an

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EHR, but will a majority? Sponsoring hospitals need to understand the expected rate of IT adoption in order to estimate their costs for the community. Supporting a user base of 20 physicians, for example, will cost more per physician than supporting a 200-physician community.

4. What are the long-term benefits and return-on-investment? Though many healthcare visionaries, including hospital leaders and physicians, believe that connecting communities is the right thing to do to improve patient care and coordination, the associated financial benefit for both the hospital and the physician practice has not yet been measured. Achieving tangible value from EHRs is possible⁶, but each practice will have its own improvement objectives. Ultimately, the cost and the benefit (in both financial and clinical terms) will need to be in balance for each hospital and physician practice in order to make participation worthwhile.

Recommendation

Hospitals that begin now will become the early leaders. Developing a plan early on to support the organization's community connectivity strategy will allow physicians to make their EHR choices sooner. Educating and communicating with physicians will need to be a key component of the hospital's strategy. And, in the end, the earlier a hospital intervenes to help consolidate the EHR choices among the community's physicians, the easier it will be to achieve true community interoperability.

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References

- 1 DesRoches et al. "Electronic Health Records in Ambulatory Care — A National Survey of Physicians". *New England Journal of Medicine* (2008): 359:50-60.
- 2 For more information about CCHIT — including which ambulatory EHR vendor products have been certified — go to www.cchit.org.
- 3 Fortin, J. and MacDonald, K. "Physician Practices: Are Application Service Providers Right for You?" California HealthCare Foundation (October 2006). <http://www.chcf.org/topics/view.cfm?itemID=125716>
- 4 One notable exception is the three pilot cities selected for the Massachusetts eHealth Collaborative. Virtually all physicians in these three communities selected a common EHR vendor product. This will ultimately make the exchange of data among physician practices and with the community's hospital systems much easier. More information about this initiative can be found at www.maehc.org.
5. For more information about ELINCS — the EHR-Lab Interoperability and Connectivity Specification — go to www.chcf.org/topics/chronicdisease/index.cfm?itemID=111047.
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Cost, EHR interest and adoption rates, and ROI are important considerations when embarking on community connectivity.

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