While hospitals are evaluating strategies to help physicians purchase electronic medical records (EMRs) following recent federal regulatory changes, they are proceeding cautiously, according to findings from the Center for Studying Health System Change’s (HSC) 2007 site visits to 12 nationally representative metropolitan communities.

Hospital strategies to aid physician EMR adoption include offering direct financial subsidies, extending the hospital’s ambulatory EMR vendor discounts and providing technical support. Two key factors driving hospital interest in supporting physician EMR adoption are improving the quality and efficiency of care and aligning physicians more closely with the hospital. A few hospitals have begun small-scale, phased rollouts of subsidized EMRs, but the burden of other hospital information technology projects, budget limitations and lack of physician interest are among the factors impeding hospital action. While it is too early to assess whether the regulatory changes will spur greater physician EMR adoption, the outcome will depend both on hospitals’ willingness to provide support and physicians’ acceptance of hospital assistance.

**Regulations Relaxed to Encourage Hospital Support for Physician EMR Adoption**

Physicians have been slow to adopt health information technologies (IT), such as electronic medical records (EMRs) and electronic prescribing, in part because of the financial burden. Frustrated by low physician adoption rates, policy makers have looked to hospitals to provide financial assistance to physicians. However, federal laws and related regulations, including the physician self-referral law—commonly referred to as the Stark law—and the anti-kickback statute, were perceived as inhibiting hospitals’ willingness to assist physicians. Both laws are intended to prevent hospitals from offering financial incentives to physicians in return for patient referrals.

In hopes of speeding physician IT adoption, the U.S. Department of Health and Human Services (HHS) in August 2006 simultaneously issued IT exceptions to the Stark law and IT safe harbors to the anti-kickback statute. In May and June 2007, the Internal Revenue Service (IRS) clarified that hospital compliance with the Stark exception and anti-kickback safe harbor to subsidize physicians’ EMR purchases would not violate federal tax law.

Under the regulatory changes, hospitals now are explicitly allowed to subsidize up to 85 percent of the upfront and ongoing costs of EMR software and related IT support services for physicians; physicians must pay the full costs of any hardware. The regulations are scheduled to sunset on Dec. 31, 2013, when physicians must assume any ongoing EMR costs. Under the revised regulations, hospitals can subsidize only an interoperable EMR that can communicate with a wide range of IT systems, not just those of the subsidizing hospital, as the prevailing state of technology permits. With this stipulation, regulators sought to support federal goals of achieving widespread interoperability while mitigating the potential for hospitals to lock in patient referrals using the technology.

**Hospitals Consider Strategies**

In light of the regulatory changes, hospitals have considered a variety of options to provide financial and other support to physicians purchasing EMRs. However, only a small proportion of hospitals has done so, according to findings from follow-up interviews conducted as part of HSC’s 2007 site visits to 12 nationally representative metropolitan communities (see Data Source). The follow-up interviews examined whether hospitals were offering or planned to offer community physicians any assistance in purchasing EMRs. Among the 24 hospitals included in the follow-up interviews, seven reported pursuing a strategy to provide financial or other support to physicians to purchase EMRs. Four of the hospitals...
Hospitals identified two main motivations for supporting physician adoption of electronic medical records: to improve quality of care and strategically align with referring physicians. Hospitals that indicated they did not committed to providing direct financial support, five had decided on or were considering extending EMR vendor discounts in tandem with other IT support services. The other eight hospitals, a third of those interviewed, had either decided on or were considering providing IT support services exclusively or did not identify any preference among these approaches.

Hospitals that indicated they did not want to directly subsidize EMR costs gave varied explanations. Some were categorically opposed to subsidizing physicians’ EMR purchases. Others believed that access to the hospital’s vendor discounts was sufficient incentive to motivate physician EMR adoption. Some hospitals were interested in subsidizing physicians’ costs but were constrained by fiscal limitations.

Quality, Tighter Physician Alignment Spur Hospitals

Regardless of the particular strategies under consideration, hospital executives consistently cited two key factors spurring their interest in supporting physician IT adoption—improving patient care and strengthening ties with referring physicians. Respondents highlighted the potential to improve the quality and efficiency of care by coupling greater physician adoption of EMRs with enhanced clinical data exchange between the hospital and community physicians and among physicians. As one hospital executive said, “Clinical integration through a robust EMR is common sense and good care.”

In selecting EMRs and structuring IT support services for community physicians, hospitals have the potential to develop IT networks that allow physicians to electronically access or incorporate patient data from the hospital or other physicians into their office-based EMRs and allow physicians access to ambulatory records for hospitalized patients. As a result, clinical decision-making and care coordination may improve, especially if additional tools are available to leverage the more complete patient data, such as clinical reminders and alerts and quality measurement and reporting.

Offering EMR support also was a physician alignment strategy for hospitals. Hospital executives expected physicians would be more likely to maintain, and even expand, their relationship with the hospital because of the improved efficiency from interoperability with the hospital’s IT systems. “From a loyalty perspective, if you have physicians tied in where your labs and your X-rays [are located] and all those flow easily into their records, it will make it less likely they’ll take their business across the street,” was a common sentiment echoed by hospital executives. The use of IT as a physician alignment strategy is consistent with previous HSC site-visit findings of hospitals giving physicians remote electronic access to hospital data via Web-based portals to align them more closely.'

Physician requests for support were not a major factor driving hospital strategies. In fact, physicians’ disinterest tempered some hospitals’ enthusiasm. Some respondents explained that interest dwindled when physicians learned that the regulations required...
them to cover all hardware costs and at least 15 percent of other costs, including the EMR software. As a hospital respondent said, “A lot of people thought this was a slam dunk, that as soon as Stark changed and safe harbors kicked in, it would be easy, but it’s more complex—you can’t hand physicians money…and let them do what they want…there are parameters.”

**Challenges to Hospital Strategies**

While hospitals willing to provide EMR subsidies hoped to reach out to more physicians, they expected to begin on a relatively small scale, starting with a few practices and phasing in additional practices as budget, IT staffing and physician interest allowed. Most hospitals planned to target, on average, 100 doctors across 10 practices for their initial rollout, although there were a few at either end of the spectrum, including a two-physician pilot and a 400-plus physician program, respectively. In addition to limited budgets, this phased approach reflected that hospitals’ administrative and IT resources were already heavily taxed by implementing hospital-based IT systems, as well as ambulatory EMRs for hospital-owned physician practices. As one respondent noted, “We certainly have enough on our plates with what we already have to do.” Respondents also indicated that a scaled rollout was an opportunity to identify and resolve implementation difficulties without alienating many physicians. As a respondent cautioned, “We need a predictable product that can be deployed without difficulty.”

In deciding which physicians to support, hospitals often sought to support tightly aligned with select physicians. Under the Stark exception and anti-kickback safe harbor, hospitals are not allowed to target physicians for inclusion based directly on the volume or value of the physicians’ referrals to the hospital. Hospitals are permitted to use selection criteria that are indirectly related to referrals, giving them some leeway to structure strategies that promote tighter physician alignment. The most popular strategy was to offer support to physicians who are members of affiliated physician organizations or who are otherwise closely affiliated with the hospital. Some hospitals specifically identified primary care physicians (PCPs) or specialty physicians as needing the technology most. As one respondent discussed, “We want to make sure we bond PCPs to the organization...We’re starting out with the people who have enthusiasm and PCPs have been stepping up. They’re heavy admiters to our system and great users of the data source.”

While hospitals must meet the regulatory standards on interoperability when offering an EMR, they face strategic incentives to focus specifically on enhancing the electronic link between their own hospital IT systems and physician EMRs. Hospitals reported that costs and technical challenges to achieve this data exchange are substantial, but many viewed it as a key component of hospitals’ EMR strategies to support improved patient care and tighter physician alignment.

Hospitals were crafting different approaches to linking hospital and physician IT systems. A few hospitals were planning for complete interoperability by offering physicians access to an EMR product structured as a single clinical data repository, which contains both hospital and physician practice data in a single patient record. Most other hospitals were planning to take a two-step approach, first typically offering physicians access to the ambulatory-only EMR product used by hospital-owned practices and then building the interfaces or portal needed to link the physician EMRs with the hospital’s IT systems as much as possible. Some hospitals were planning to offer access to a networked ambulatory EMR that links participating physician practices, facilitating data exchange among them and minimizing the number of needed interfaces with the hospital IT systems. Despite identifying the importance of linking the hospital and physician systems to achieve the strategic benefits of the hospital EMR programs, hospitals varied substantially in the priority they assigned to completing this task.

While enhancing interoperability between the hospital and the physician may improve quality, tying physicians more closely to particular hospitals can create potential competitive barriers because interoperability is still not widespread. For example, physicians who purchase a hospital-sponsored EMR may have difficulty using that EMR to store the records of patients treated at other hospitals. This increases the burden—financial and other—for physicians practicing at multiple, unaffiliated hospitals. Similarly, switching hospital affiliation may be more costly to the extent that obstacles to transferring patient data to another hospital-sponsored EMR exist. EMRs with a single clinical repository across inpatient and ambulatory settings may provide greater potential to improve patient care, but also pose potentially larger barriers for physicians who admit to multiple hospitals or desire to discontinue their affiliation with a hospital.

**Implications**

Hospitals identified two main motivations for supporting physician adoption of EMRs: to improve quality of care and strategically align with referring physicians. Regulators, in crafting the Stark exception and anti-kickback safe harbor for EMRs, wanted to permit hospitals to offer physicians financial support in adopting EMRs, while mitigating the opportunities for hospitals and physicians to improperly benefit from the relaxed standards. The Stark exception and anti-kickback safe harbor appear to have had a modest impact in encouraging hospitals to support physician adoption of EMRs. While some hospitals are committed to taking advantage of the regulatory changes by offering direct financial subsidies to promote physician adoption of EMRs, the other common strategies, such as offering IT support and extending vendor discounts to physicians, if properly structured, could have been pursued without regulatory changes. Overall, evidence from this study suggests that larger metropolitan communities might expect to see small-scale, phased rollouts of EMR programs by larger hospitals interested in improving patient care and increasing alignment with physicians. In any given community, however, only a small proportion of physicians are likely to be affected, at least in the next few years.

Several factors may speed the introduction of hospital programs. For example, hospitals reported that they might act more quickly if they feel competitive pressure to respond to other hospitals’ initiatives. The pace also may intensify as hospitals make more progress in implementing hospital-based IT systems and EMRs in hospital-owned physician practices, particularly as the 2013 regulatory sunset approaches.

Ultimately, the extent to which the regulatory changes achieve the goal of accelerating physician EMR adoption will depend both on what hospitals offer and physician acceptance or “take up.” While it is too early to assess how physicians will respond, some
physicians may decide that, among other factors, the costs and difficulties associated with EMR installation and regulatory compliance outweigh the benefits of accepting hospital support. For example, physicians still face uncertainty about whether hospital subsidies result in taxable physician income, which the 2007 IRS guidance did not resolve. Also, physicians have to consider the requirement to bear the full burden of ongoing EMR costs once the regulations sunset in 2013. Physicians may feel more pressure to accept hospital offers, however, in light of recent Medicare payment changes that provide financial incentives for physicians to adopt electronic prescribing, a required component of hospital-subsidized EMRs.

While hospital support of physician EMR adoption has the potential to improve the quality and efficiency of patient care, those potential benefits should be balanced against possible unintended anticompetitive consequences if physicians face barriers to changing hospital affiliations or maintaining multiple hospital affiliations. From a societal standpoint, the potential value of care delivery improvements from creating virtually integrated provider IT systems may exceed the potential loss from having physicians and patients face greater barriers to moving among hospitals.

However, in today’s health care market, hospital efforts to promote adoption and improve interoperability are not by themselves sufficient to drive the type of integrated care delivery that policy makers envision health IT supporting. Substantial efforts on the part of both hospitals and physicians well beyond technical IT implementation will be required, such as redesigning clinical workflows and changing financial incentives for care delivery.

Similarly, growth of proprietary hospital-physician IT networks in response to the regulatory changes could help spur the exchange of clinical data and even the development of community-wide health information exchanges (HIEs), which are being promoted by HHS and others to provide a mechanism for aggregating a patient’s medical record across unaffiliated providers. The presence of proprietary networks does not preclude the development of an HIE; several respondents suggested that the IT networks they were supporting could serve as the foundation for a community-wide HIE open to all physicians and hospitals.

However, the competitive dynamics that are among the factors currently impeding HIE development in many communities suggest that the presence of competing hospital-sponsored networks might reduce the potential clinical and financial benefits providers could gain from a community-wide exchange if physicians are able to already easily exchange data with the hospitals where they treat most of their patients.

Notes


2. While the regulations were finalized in August 2006, Congress initially directed HHS to relax regulations to support the adoption of electronic prescribing under the Medicare Modernization Act of 2003. Subsequently, the 2004 HHS Health IT Strategic Framework also suggested relaxing regulations to support physician adoption of EMRs. The proposed regulatory changes were published in October 2005. For more information and links to the final regulations, see Hinkley, Gerry, Allen E. Briskin and Jill H. Gordon, OIG and CMS Adopt Final Regulations Permitting Donation of e-Prescribing and Electronic Health Records Technology, Advisory Bulletin, Davis Wright Tremaine LLP, Seattle, Wash. (August 2006).


5. For more information on physician requirements under the regulations, see American Medical Association, Health Information Technology Donations: A Guide for Physicians, Chicago, Ill. (2008).