an incomplete picture

By Chris Hobson

AS SOME ELECTRONIC HEALTH RECORDS SYSTEMS BECOME HARDER TO ACCESS, RADIOLOGISTS FIND IT DIFFICULT TO ASSEMBLE PATIENTS' COMPLETE MEDICAL HISTORIES.

Imagine a time in which a few giants of industry rise up to consume the majority of market share. An era when small-scale businesses are run out of town because the major players will not engage with them operationally. In short, a time when government programs meant to level the playing field are implemented with the opposite intent in the name of the bottom line. This may sound like a description of John D. Rockefeller's Standard Oil Company or the steel empire of Andrew Carnegie, but some radiologists believe it is becoming the modus operandi of some hospitals and a few large vendors as referring physicians switch from using paper reports to electronic health records (EHRs). These radiologists believe that in the pursuit of market position, some hospitals and large EHR system vendors are not fully supporting the ability of competitors and smaller vendors to interface with their products, thus creating barriers to fair competition. Other radiologists, however, feel that the lack of widespread EHR system interoperability has come about due to poor decisions made by the medical community. So how did this lack of interoperability and health information exchange arise, and what can radiologists do about it?

Return on Investment

The Health Information Technology for Economic and Clinical Health Act, which was passed in 2009, mandated that the U.S. Department of Health and Human Services (HHS) encourage the adoption of health information technology. To this end, HHS set up the EHR Incentive Program, which encourages the meaningful use (MU) of certified EHR technology. The program greatly increased physicians' demand for certified EHR technology, which resulted in more EHR product donations from hospitals and health systems to referring physicians allowed under the 2006 EHR exception and safe harbor from CMS self-referral and HHS Office of Inspector General (OIG) anti-kickback rules. Unfortunately, inadequate and outdated interoperability requirements in that exception created an environment in which many physicians could not readily order imaging services from competitors of the hospitals using donated software.

Since the first stage of MU was rolled out, many radiologists have been eager to comply in hopes of joining an endeavor that promotes quality patient care, according to Alan D. Kaye, MD, FACR, member of ACR's Board of Chancellors. "The HHS Office of the National Coordinator for Health Information Technology (ONC), CMS, and the OIG are all cognizant of the benefits of interoperability," says Kaye. However, he notes, to participate in the MU program, health care entities merely have to show that their EHR system can potentially exchange with other systems, not demonstrate that the system is actually used that way on a regular basis.

This is a problem, explains Kaye, because "some entities who own the EHR systems are not using them to promote interoperability but to inhibit it," sidestepping physician self-referral laws in the process. Indeed, according to public comments submitted by ACR in response to ONC's Request for Information on health information exchange and interoperability in April of this year, "certain hospitals/health systems may be knowingly or unknowingly using the 2006 self-referral/anti-kickback safe harbor … together with the EHR Incentive Program's Stage 2 (MU) menu objective regarding 'imaging results accessibility' … to discourage primary care physicians and others from ordering diagnostic imaging services provided by competitors."[1]

This anti-competitive behavior, whether intentional or unintentional, has the potential to not only diminish patient care but to hurt radiologists. Public comments submitted by ACR in response to CMS and HHS OIG proposed rules to renew and modify the EHR exception/safe harbor from self-referral/anti-kickback requirements from June of this year spell out how health care entities can discourage referrals to competing imaging providers by constructing inappropriate barriers to the choice of provider:

> [These barriers are constructed when health care entities who donate EHR technology to referring physicians] or their vendors refuse to adequately interface or connect [donated] EHRs with disparate technologies, thereby restricting the ability of users of the donated technology to order or schedule examinations at unaffiliated facilities. In the most serious cases, even when doctors or patients have strong preferences for external entities … they are unable to [refer patients to donors' competitors] because of an inability to connect with those entities using donated EHRs.[2]

If these health care organizations are indeed purposefully restricting interoperability, what might be the reason for this? Kaye suspects that it has to do, in part, with hospitals wanting a return on their substantial investment in EHR technologies.

Small Practices in the Crossfire

Mark D. Alson, MD, FACR, president of Sierra Imaging Associates in Fresno, Calif., is intimately aware of the problems that a lack of EHR system interoperability can pose. His practice has contracted with a smaller vendor to make the transition to EHRs, but some of the referring physicians with whom he works use technology set up by a large vendor that he says does not seem interested in interoperating with him. Alson

thinks he knows one reason for the large vendor's apparent indifference: "Its clients may want to be exclusive and may not want interoperability. I think some of the big hospital systems kind of like the fact that they can lock everybody in, and they don't necessarily want outsiders in their system. They don't want patients to go to an outside group of radiologists."

Since Alson's practice falls into this "outsider" category, he worries about its long-term viability if he cannot efficiently share EHRs with referring physicians. To counteract this trend toward exclusivity, Alson recommends trying to motivate referring physicians to demand widespread interoperability from their EHR vendors. The bottom line, he says, is that the major vendors have no reason to respond to radiologists, but they do have a reason to respond to "the referring doctors who are their clients, who want to be able to link to radiology practices. Those people carry a lot more weight."

Self-Imposed Barriers

Whereas many radiologists feel that large EHR vendors and health care systems are making life difficult for smaller radiology practices, others feel that the lack of EHR interoperability is a product of the medical field's own design. Paul J. Chang, MD, professor and vice chair of radiology informatics at the University of Chicago School of Medicine, notes that many other service-oriented industries already employ seamless interoperability, so physicians have no excuse not to follow suit. He uses the model of Amazon.com to illustrate his point: "You can actually set it up where you can complete your order in one click. In order for you to be able to do that and get your package within a couple of days, Amazon has to interface with banks, delivery companies like UPS and FedEx, inventory control, and so on. The process is seamless to the user. This is a seamless workflow through interoperability. This workflow has been routine for the past 15 years in other businesses, so why can't health care IT vendors and hospital IT groups do it too?"

One answer to this question, he speculates, lies in the way the medical field approached the internet from the beginning. "Several decades ago, when standard electronic protocols and strategies for interoperability were just getting off the ground, many businesses embraced them," he says. "But we in health IT wanted to establish our own protocols. That was probably shortsighted. We thought our bits and bytes were somehow different than everyone else's, so we needed different kinds of electronic-based approaches. So instead of adopting standard interoperability methods (such as web services) like everyone else, we initially did it our own way. This has made interoperability difficult."

Chang asserts that the only way to get back on track with interoperability is by taking a page from other service-oriented businesses, like Amazon. In developing the EHR system at the University of Chicago, Chang says that he and others in IT had to humble themselves. "We've tried to learn from other companies who use communication standards other than Health Level Seven (HL7) and DICOM, methods that involve service-oriented architecture and other well-established approaches," says Chang. "And our system works. Now we can efficiently insert information from EHRs into PACS." By exposing EHR data in an easily consumable form, it is much cheaper to locally customize and optimize functionality for users. And because the IT team has employed standard architectures that are used by many other industries, he notes that the technology is cheaper and has allowed the University of Chicago to achieve interoperability at a fraction of the cost that most large EHR vendors charge.

Whether the lack of widespread EHR system interoperability is due to questionable business practices by hospitals and EHR vendors or because of poor decisions made by vendors and the medical provider community, quality patient care has suffered as a result.

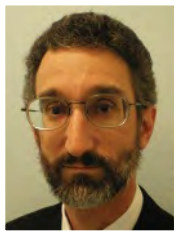
But there are reasons for optimism. Government agencies have expressed discontent with the current dearth of interoperability and have opportunities to speed its adoption through requiring its implementation in order to qualify for Stark law exemptions and federal subsidies. Also, to the extent that regulators and customers demand interoperability, vendors who offer and facilitate it will thrive. But this impetus must come from the government, Kaye says. "It is the combination of federal legislative relaxation of Stark and the subsidies from MU that facilitates adoption of EHR. That gives the government a lot of say in how information is shared among providers, so the government has to hold their feet to the fire." //

ENDNOTES

1. American College of Radiology. "Advancing Interoperability and Health Information Exchange Request for Information; Comments of the American College of Radiology (78 FR 14793; CMS-0038-NC)." Public comment submission to the Department of Health and Human Services. Available at http://bit.ly/ONCLetter. Accessed Sept. 17, 2013.
2. American College of Radiology. "(CMS-1454-P; 78 FR 2 1308) Medicare Program; Physicians' Referrals to Health Care Entities With Which They Have Financial Relationships: Exception for Certain EHR Arrangements; Comments of the American College of Radiology." Public comment submission to the Centers for Medicare & Medicaid Services. Available at http://bit.ly/CMSLetter. Accessed Sept. 17, 2013.

The only way to get back on track with interoperability is by taking a page from other service-oriented businesses, asserts Paul J. Chang, MD.

Alan D. Kaye, MD, FACR, notes that many radiologists are eager to comply with meaningful use requirements in hopes of promoting quality patient care.



According to Mark D. Alson, MD, FACR, radiologists can provide higher-value reports when they're able to review prior studies, an important component of EHRs.