

○ By John Moore

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Remotely hosted EMR systems attract doctors who don't want the expense and headaches of in-house solutions

Physicians who have so far resisted the urge to buy an electronic medical record system often cite costs, the management attention they would divert and doubts about their efficacy. But now momentum is building for an approach to using EMRs that takes some of the risk out of the equation.

An increasing number of health information technology firms are offering EMRs as a hosted service, making it easier for small and independent physicians' practices to adopt the technology, according to some who have taken that route.

With a hosted or software-as-a-service (SaaS) model, a third-party firm runs and maintains EMR software for the customer. Experts say the approach lowers upfront costs and reduces the complexity of fielding a system. It could also inspire greater acceptance among physicians in smaller practices, where health IT is taking longer to catch on.

"SaaS is essential if you are going to unlock the low end of the market," said Marc Holland, a research director at IDC's Health Industry Insights. "The [adoption] rate among solo and less-than-three-doctor practices is really pretty dismal."

In an October 2008 report, the Healthcare Information and Management Systems Society pegged the EMR adoption rate among small practices at 24 percent. A study published in the New England Journal of Medicine in June found that practices of more than 50 physicians were four times more likely to have a fully functional EMR than practices of three or fewer physicians.

Now that hosted EMR systems are an option, small practices "are finally going to take the plunge," Holland said.

Public health organizations are also exploring hosted solutions. For example, New Mexico's Department of Health chose such a system for its 49 public health offices.

Hosted market evolves

A number of firms that historically focused on client/server EMRs now also offer SaaS as an option. Allscripts, eClinicalWorks and McKesson are among the companies that offer both approaches.

Girish Kumar Navani, president of eClinicalWorks, said he believes vendors that offer hosted EMRs will fare better this year than those that carry only client/server products. The hosted model is easier and less expensive for health care providers to adopt, which makes it especially appealing during the current economic downturn.

"You don't have to buy a server, so cost-wise, it becomes more attractive," he said.

With SaaS, customers typically pay monthly hosting charges and licensing fees for using the software. Licensing fees for client/server EMRs can run into the tens of thousands of dollars, while monthly subscription fees for a SaaS-based EMR are generally a couple hundred dollars per provider.

LifeSpan, a health care system in Rhode Island that uses eClinicalWorks' hosted EMR and practice management solution, offers the EMR service to members of its Physicians Professional Services Organization.

"The [hosted] approach has been extremely beneficial in getting smaller practices to adopt the EMR system," said Bill Florio, director of information services at LifeSpan's physician organization. "The main advantage is that there is a dramatically reduced start-up cost [because] the only hardware needed in the offices is the client PCs."

At least one hosted EMR vendor offers its product for free. Practice Fusion doesn't charge for licensing, hosting, implementation or training. Instead, the company generates revenue from banner ads and the sale of anonymized patient and doctor data.

Ryan Howard, chief executive officer of Practice Fusion, said his company also offers a fee-based, ad-free product, but most doctors choose the free version.

The rigors of managing an in-house technology deployment represent a barrier to EMR acceptance. But the SaaS approach addresses those issues by offloading technology oversight to the software vendor or application service provider (ASP).

Bob Mayer, chief information officer at the New Mexico Department of Health, said the agency chose a hosted EMR system from Allscripts because of the complexity of EMR applications and skills required to manage the technology. "We weren't confident we could support it ourselves," Mayer said.

Holland said the Web-based nature of hosted solutions means that health organizations only need to focus on client devices and Internet connectivity. "There's no server to worry about," he said. "You just have to keep the workstation up and the router and Internet connection running."

The SaaS approach also shields customers from the need to maintain and update software. Vendors handle those tasks, and subscription fees cover the costs.

New Mexico's arrangement with Allscripts lets the health department lock in EMR software costs for the four-year term of the contract and build them into its budget, Mayer said. Otherwise, obtaining extra funds to pay for software upgrades can prove difficult for state agencies, he said.

Data ownership

The hosted approach has a few drawbacks. For example, its reliance on the Internet means an EMR system's performance is only as good as the available bandwidth and the reliability of the Internet service provider.

Glen Tullman, CEO of Allscripts, said medical records are time-sensitive and doctors have concerns about a hosted EMR's ability to deliver instantaneous updates. However, improvements in bandwidth and ASP offerings have helped allay those concerns, Tullman said.

However, some areas still lack adequate infrastructure. "Some rural communities don't have reliable broadband connectivity," said Jonah Frohlich, senior program officer at the California HealthCare Foundation, adding that small practices in some urban areas can also encounter bandwidth difficulties.

Lack of control is another issue, with many clients citing concerns about data security. For example, LifeSpan sought greater control over its hosting arrangement with eClinicalWorks. As a result, the EMR application resides at eClinicalWorks' data center, but LifeSpan owns the server that gives it access to the software.

Florio said hardware ownership provides "an additional layer of security to our environment" by ensuring that only LifeSpan-affiliated physician datasets run on its server. By contrast, multiple customers typically share hardware in a SaaS vendor's data center.

Server ownership also lets LifeSpan manage scalability on its own terms. If performance lags, the organization can add more hardware instead of asking a vendor for more capacity, Florio said.

Ultimately, SaaS firms believe customers will be willing to work around the hosted model's negatives to reduce upfront costs and outsource technology management.

Tullman said smaller practices are concluding that they "want to practice medicine [and] want someone else to handle the technology."

About the Author

John Moore is a freelance writer based in Syracuse, N.Y.