Four Questions to Ask About Operating
An EMR System in the "Cloud"

By Jeff McCorpin, LBMC Technologies, LLC

Everywhere you turn these days, there seems to be advertising for a "new" kind of computing -- in the "cloud."

But the truth is, depending on the vendor, that cloud computing may just be a fresh name for a well-established technology that has been deployed in medical offices and other businesses for years. Think on-line banking, for example. What *is* relatively new, though, are the extensive opportunities for medical practices to use the cloud to handle electronic medical records.

This article will explore four questions practices ought to explore before deciding whether cloud computing is right for them.

First, what exactly is the cloud?

It is one of three basic approaches to deploying server-based computing. You can:

1) Set up a server at your business and run software on it there.
2) Pay a remote data center to run a server for you with your software and data on it.
3) Connect via the Internet to servers operated by companies that process your data with their own software.

Approach No. 3 is called "cloud computing". It's also known as Software-as-a-Service (SaaS).

Operating in the cloud can have some nice advantages. Specifically, you don't have to have your own IT department, for example. Although there are ongoing fees, typically there is little or no upfront expense in contrast to the large capital outlay required to set up an EMR system in your offices.

But the cloud may not be for everyone. Security considerations must be weighed, and not all cloud situations are created equal. The financial pros and cons can be somewhat complex.

Here are four questions and answers to help you begin to make the choice:

What are the cost considerations of making an upfront investment for an in-house or data center solution vs. paying over time for the cloud?

The simplest way to think about this issue is to compare it to deciding whether to lease or buy a car.

Yes, a capital outlay will be required to buy a car -- or install EMR on an in-house or data center basis.

Lease payments seem more manageable than the capital outlay. On the other hand, if you tend to keep your cars for more than a few years, your total lease payments are going to be more than your total cost of purchase.

The same likely holds true for EMR systems. The total fees paid to a cloud provider may end up being more over an extended period than the cost of purchase.

In contrast, data center fees, software maintenance/upgrade agreements and possibly IT staff or consulting costs may increase the total outlay for a purchased system. You typically don't have to worry about the cost of IT maintenance in the cloud – it is generally included in the fee, as is the expense of upgraded software.

The best advice here: Have an accountant run the numbers. A common way of comparing costs is to evaluate them over a 5 -year period.

What are the security issues with the cloud? What assurances can vendors give about security?

No matter whether your EMR is on a server in your office, in a data center or in the cloud, it has to meet strict HIPAA security requirements.

Assurances by any vendor should not be taken at face value. You should have the system evaluated by a third-party professional and a gap analysis created to identify any security issues that need to be addressed.

How does the cloud solution compare with the other approaches in terms of reliability, backup, upgrades and bandwith?

As part of your subscription fee, many cloud vendors build in the cost of software upgrades and support. Some SaaS providers upgrade all of their clients at the same time. That is great in some respects, if your solution is turnkey.

The potential downside of this approach is that it can make vendors reluctant to customize your installation since they want to be able to easily upgrade all customers.

If you are a large practice, you also may want to consider whether the cloud solution has enough bandwidth to handle many users working at the same time. This can be especially true in practices where images are frequently used, since they can require large file sizes.

Another factor to consider is downtime. Once a practice is on electronic medical records, it becomes very difficult to function without them. What guarantees does the cloud vendor provide about reliability? And if you are planning to house your EMR system on the premises, what are your provisions for a redundant system that can be used if your main system goes down?

Is the best solution a mixed approach, with some systems in the cloud and others more traditional?

Of course, EMR is not the only system offered in the cloud. Billing systems, payroll systems and others used by medical practices are also available as cloud solutions.

After analyzing your specific EMR needs, financial and security issues, some of your systems may make more sense in the cloud; others perhaps should be hosted in your office or in a data center.

An evaluation of how well those different systems work together is critical.

In summary: A thorough analysis is essential for the best solution

Physicians and practice managers generally are not required to analyze technology in the ways described in this article, and certainly not every day. Yet a thorough analysis is essential to making the right selection for EMR systems and the rest of the solutions in a practice.

For that reason, practices may wish to consider having an outside consultant assist in deciding whether cloud computing is a fit for you.

Jeff McCorpin is a managing partner at LBMC Technologies, which provides consulting to medical practices and other businesses on a wide variety of technology-related issues, including cloud computing. Contact Jeff at 615-309-2452 or jmccorpin@lbmc.com.

Nashville
615-377-4600

Knoxville
865-691-9000

Chattanooga
423-756-6585

www.lbmctech.com