How the cloud is propelling organizations forward — Health executives on progress, roadblocks and what’s to come

By Mary Rechtoris

Throughout the healthcare industry, an air of intrigue and confusion surrounds the cloud. Health system executives and physicians often hear of its great potential in moving healthcare forward, but many are unsure how to best implement the cloud and how transitioning information into this virtual space will directly impact their organizations.

“I tell people to think of the cloud as a data center that someone else controls,” said James Millington, Director of Healthcare Industry Marketing at VMware, a Palo Alto, Calif.-based provider of cloud and virtualization software, services and claims. “Through the cloud, we can take the exact technology you are running in your data centers so your IT people are not managing physical data centers. Rather, they can focus on handling the innovation of services.”

During a roundtable discussion hosted by VMware at Becker’s Hospital Review 8th Annual Meeting on April 20 in Chicago, executives from various U.S. hospitals and health systems discussed challenges they face when implementing cloud technology and progress they want to make within the next few years.

What hospitals and health systems are currently doing

Many organizations are making headway with cloud-based services. VMware polled the roundtable attendees during the discussion and found:

- 33 percent said between 0 percent and 10 recent of their applications are with a cloud-based provider
- 22 percent said between 26 and 50 percent of their applications are with a cloud-based provider
- 22 percent said between 51 and 75 percent of their applications are with a cloud-based provider
- Approximately 11 percent said between 76 and 100 percent of their applications are through a cloud-based provider

The primary reason attendees moved to the cloud was for disaster recovery purposes, which 54 percent cited as their main driver. Forty-six percent of attendees said they integrated the cloud for data analytics purposes.

“Everybody is going to have
to do big data,” said the senior vice president of a for-profit Pacific Northwest health system spanning five states. “It will start with the large integrated systems and then the medium and smaller practices. However, organizations can’t afford not to do it.”

**Challenges: Managing vendor relations & security**

Selecting a vendor that matches an organization’s overall needs is crucial, as many vendors may not be strategically aligned with their clients and therefore will not form a fruitful partnership. A chief compliance officer and chief innovation officer at a southwestern health system said he faced difficulty when working with a vendor that did not fully understand the health system’s emphasis on patient privacy.

“There are vendors out there that have approached us and said they require the ability to use our data for their research [to partner with them],” the executive said. “I tell them that I cannot allow that. That would require me getting approval from everyone in our data pool. They politely told me to take a walk — there was no consideration for the privacy of the patient.”

Vendor lock-in was also an obstacle various healthcare leaders cited during the discussion. Twenty percent of the attendees ranked vendor lock-in as their primary concern with the cloud. A vice president and chief information officer of an independent, nonprofit 151-bed Midwestern community hospital said he faced a trying experience when working with a vendor on IT solutions.

“Once we got into it, it was hard to get out,” he said. “Everything had a charge.”

Ensuring the cloud is secure was also cited as a top concern among attendees as medical records are sought-after commodities on the black market. The chief compliance officer and chief innovation officer at the aforementioned southwestern health system said his organization had upwards of 5,000 attempts to get into their IT system in a single day.

The cloud can help alleviate many concerns hospitals and health systems may have, especially as healthcare mergers become more prevalent and practices work to consolidate their data into each other’s platforms.

The chief medical information officer of a 231-patient room teaching hospital in the Pacific Coast said the hospital moved to some cloud solutions after acquiring another practice that suffered a cyberattack when they tried to consolidate their systems. The executive said the hospital had to shut down and load the other practice’s information onto the hospital’s EHR overnight. This experience led the hospital to integrate more cloud-based services into its IT platform.

As healthcare increasingly moves beyond the four walls of the hospital to be more accessible to patients, healthcare IT will be moving beyond the hospital datacenters into the cloud. Over the next several years, hospitals and health systems may fall behind competitors if they lack updated technology. Eleven percent of attendees said they wanted between 76 percent and 100 percent of their applications to be on the cloud within the next three years.

“We will always consider the cloud. We are seeing good return of investment,” said the aforementioned vice president and CIO of a nonprofit Midwestern community hospital. “Meeting the overall needs of the business is the target and if the cloud continues to do that, that is great.”