2017 Essentials Brief: Cloud

www.himssanalytics.com
Enabling better health through information technology.
HIMSS is a global, cause-based, not-for-profit organization focused on better health through information technology (IT). HIMSS leads efforts to optimize health engagements and care outcomes using information technology.
Healthcare’s Most Comprehensive Market Intelligence Resources & Advisory Solutions

Health IT Market Intelligence
Healthcare Organization Benchmarking
Health IT Insight & Research

2017 Essentials Brief: Cloud
www.himssanalytics.com
Uniquely Positioned to Deliver Actionable Intelligence
2017 Essentials Brief: Cloud Study
Methodsology 1: Web based survey

Dates of Data Collection: 1/12/17 – 1/18/17

Target Audience: CTO, CIO, CISO, IT VP/Directors/Administrators

Number of Respondents: 64

- Other 3%
- IDN 5%
- Academic medical center 6%
- Critical access hospital 25%
- Multi-hospital health system 30%
- Stand-alone hospital 31%
- Greater than 500 beds 17%
- 201 to 500 beds 14%
- 101 to 200 beds 20%
- 50 to 100 beds 16%
- Less than 50 beds 33%
- Greater than 500 beds 17%
When you think of the cloud or of cloud services, which of the following areas or functions come to mind? (please select all that apply)

- Hosting of applications: 90.5%
- Disaster recovery/backup: 84.1%
- Hosting of primary data storage (e.g., application data): 74.6%
- Hosted e-mail services: 69.8%
- Hosting of archived data: 68.3%
- Managed services: 52.4%
- Virtual servers: 36.5%
- Security: 36.5%

Prior to providing our definition of the cloud or cloud services in healthcare, study respondents were asked what they felt were the top functions when they thought of the cloud. Roughly 90 percent of respondents still primarily see the cloud as a way to host applications. This falls in line with the HIMSS Analytics Cloud Study in 2014 as just over 86 percent chose the hosting of applications as the primary function.

Secondary to hosting of applications disaster recovery and backup, which is essential to healthcare organizations as they continue to compile large amounts of data each day.

What stands out most of all is how study respondents still do not think of secure environments when considering the cloud or cloud services.
High level of cloud usage, but mainly limited to specific functions

Does your organization currently utilize the cloud or cloud services?

Yes 65%
No 32%
Unsure 3%

For the purposes of this study, the Cloud was defined as a model of networked online storage where data is stored in virtualized pools hosted by third parties and accessed through a web service application programming interface (API), a cloud storage gateway or via a Web-based user interface. Use cases of the cloud in healthcare include hosting of applications, disaster recovery/back up and hosting of primary data storage.

Roughly 65 percent of study respondents currently utilize the cloud or cloud services within their organization. Much of the usage leans toward clinical application and data hosting, data recovery and backup, and the hosting of operational applications.
Organizations are looking to become more flexible and scalable with IaaS

Nearly 88 percent of respondents using the cloud do so through the Software as a Service (SaaS) model, which has become a preferred deployment method for many clinical application vendors. This compares to roughly 67 percent in the 2014 study.

However, the largest uptick in adoption from the previous study is in Infrastructure as a Service (IaaS). Healthcare organizations seem to be moving more toward this virtualized resource model to allow for additional flexibility and scalability in a number of areas, such as storage, data backup, and computing services.
Lack of single dominant vendor in the healthcare space

While Microsoft comprised roughly 19 percent of respondents using their cloud services, healthcare does not necessarily have a dominant vendor. When given the option, over 53 percent of respondents wrote in an alternative vendor name. Some of the vendors included in the 'Other' category were large EMR vendors Cerner, Allscripts, eClinicalWorks and athenahealth; enterprise vendors such as Oracle and Infor; and disaster recovery specialists such as Datto.

Which of the following vendor(s) does your organization use for cloud services?
Cloud usage is focused on hosting clinical applications and disaster recovery.

Similar to how many healthcare organizations think of the cloud and the services it provides, the hosting of clinical applications and disaster recovery and backup are the primary uses of the cloud across the healthcare market today. Clinical application hosting increased to just over 63% of respondents in 2017 from 52% of respondents in 2014 while disaster recovery increased to 61% in 2017 from roughly 42% in 2014.

Hosting of other applications from non-clinical areas such as HR, finance, and operations have increased slightly from 2014. It seems the market focus has remained with essential clinical applications while other non-clinical areas are hosted on an ancillary basis.

Which of the following vendor(s) does your organization use for cloud services?

- Hosting of clinical applications and data
- Disaster recovery/back up
- Hosting of HR applications and data
- Hosting of financial applications and data
- Hosting of operational applications and data
- Hosting communication services (i.e.: email)
- Managed services
- Hosting archived data
- Hosting of office applications and data
- Server virtualization
- Virtual networks
- Desktop virtualization

DATA AND INSIGHT AVAILABLE IN PREMIUM ESSENTIALS BRIEF
Organizations beginning to see the value of IT scalability and flexibility

When asked for the primary reason for the adoption of cloud services, respondents indicated their need for scalability for an 'always-on' solution. With the increased focus on hosting clinical applications, addressing the organizational need for essential, 'always-on' clinical solutions through the cloud seems to be resonating across the market.

While scalability and disaster recovery are top of mind for many organizations, it is somewhat surprising to see only 12 percent of those that utilize the cloud did so to lower IT costs. The last 10 years of IT adoption has required healthcare organizations to build up massive IT infrastructures that are expensive to maintain. It will be interesting to see if market sentiment around the cloud and IT maintenance changes significantly in the next few years, especially if organizations shift from a capital spending to operational spending model for some of their IT infrastructure.

Meet organizational need for a scalable, always-on solution: 34%

- Lower current IT maintenance costs: 12%
- Lack of internal IT staff or IT expertise on site: 10%
- Enhance our information/data security: 7%
- Other: 10%

Address disaster recovery needs: 27%

Which of the following best describes the primary reason your organization adopted cloud services?
Cloud investments somewhat limited but high growth ceiling

For those not currently utilizing the cloud or cloud services within their organization, roughly 36 percent indicated their plans to invest within the next two years. There could be additional growth in plans to leverage the cloud in the near future as roughly 41 percent were unsure of any plans. While not a significant number of responses, the intent of the data is meant to be a snapshot of a portion of the market at a particular moment and is only directional in nature. Market sentiment around the cloud could shift considerably in the next two years with the implementation of new programs such as precision medicine and population health, which would require increased operational and storage flexibility.
As healthcare organizations continue to leverage IT solutions as tools to provide better care, improve patient outcomes and lower healthcare delivery costs, the need for a more streamlined IT infrastructure could become more essential. Organizations that do not currently have cloud services indicated interest in the Software as a Service (SaaS) model for hosting applications as well as a need for Infrastructure as a Service (IaaS) for storage, backup and computing services. The importance of IaaS in healthcare could gain momentum in the future as maintaining complex hardware infrastructures could potentially strain current organizational resources.

The market has yet to really embrace the Platform as a Service model, which would allow for the creation of development environments.
<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOGIC™</td>
<td>Unique Relationships</td>
</tr>
<tr>
<td></td>
<td>Built collaboratively with Healthcare Organizations.</td>
</tr>
<tr>
<td>CapSite</td>
<td>Industry Expertise</td>
</tr>
<tr>
<td></td>
<td>Lead by former CIOs and vendor executives.</td>
</tr>
<tr>
<td>Market Insight</td>
<td>Deep Data</td>
</tr>
<tr>
<td></td>
<td>Proprietary data bleded with the best available partner sources and data exhaust.</td>
</tr>
<tr>
<td>Advisory Services</td>
<td>Consultative Insight</td>
</tr>
<tr>
<td></td>
<td>More than just theory. Executive insights.</td>
</tr>
</tbody>
</table>
Get all the insights in the Premium Essentials Brief

Highlights from the 2017 Cloud Study include:

- Current usage statistics of healthcare organization cloud solutions
- The primary drivers of cloud solution adoption
- Growth opportunities in the cloud solution market

Purchase the Study