

Informatics

## Advancing and connecting care through a cloud-based platform approach for health informatics



The landscape of care delivery has been rapidly evolving - with more care being managed outside the hospital, the introduction of new data is ever increasing. As health systems consider how to manage this influx of data, cloud technology has emerged as a potential solution. And though one of the biggest concerns related to cloud adoption is security, the reality is that cloud solutions do not compromise security and privacy. In fact, moving data to the cloud may actually enhance security. "Cloud-based solutions have matured to a point where they are more secure than local server solutions alone The reality is that these solutions, when properly integrated, should and do strengthen an enterprise's overall cybersecurity posture by adding additional layers of security and monitoring."

- Why healthcare data may be more secure with cloud computing. MobiHealthNews, 2018.9

Cloud technology offers advantages to health systems as it relates to managing the complexities of data protection. Security protocols such as HIPAA-compliant 128-bit encryption, multi-factor authentication, and layered server security become the responsibility of the cloud provider, who maintains a team dedicated to monitoring, addressing current vulnerabilities, and preparing for the future. The burden of keeping systems up-to-date and compliant is transferred away from internal IT. The more flexible health systems can be in responding to needs and adopting innovations, the sooner healthcare leaders can adapt to new realities and work towards achieving the quadruple aim - improved patient experiences, improved staff experiences, better outcomes, and lower cost of care.

## Cloud adoption will not compromise data privacy

"Cloud solutions tend to be more secure because large infrastructures generally are updated with the latest patches and security measures, whereas "closet-IT" or on-premise solutions might not have the same level of attention."

## - Why healthcare data may be more secure with cloud computing. MobiHealthNews, 2018.9

Like other highly regulated entities, healthcare organizations often mention security and data privacy as potential barriers to adopting cloud-based solutions. And while it is true that the protection of patient data should be paramount, there are many reasons why utilizing the cloud can be beneficial.

- Cloud security technologies are specifically designed to protect data stored or transmitted beyond the network perimeter. Because the software is in the cloud, the vendor can apply critical patches and updates instead of relying on users to do the job themselves.<sup>2</sup>
- Many cloud solutions offer the ability to use data lakes to house raw data. This structure inherently protects patient information:

"As data enters the 'lake,' each piece of information is identified with a range of security information that embeds security capability within the data itself. This type of approach could reduce barriers to information sharing between the industry and the public."  As cloud solutions continue to evolve and security measures become more robust, governments are revising regulations to allow for data storage in the cloud. For example, France's Hébergeurs de Données de Santé (HDS) certification was updated in 2018 to include cloud service providers that host personal health data governed by French laws and collected for delivering health services. Issued by ASIP SANTÉ - the organization responsible for promoting electronically based healthcare solutions in France - HDS certification requires that service providers keep personal health data secure, confidential, and accessible by patients. Cloud solutions that meet the certification requirements adhere to stringent privacy policies.

• Cloud solutions are becoming more widely available at the global level - which means that data no longer needs to leave the country or region to be stored in the cloud. Organizations can adopt cloud solutions while remaining compliant with local requirements regarding data residency.

As healthcare continues to evolve, it is vital for organizations to take a holistic view of the end-to-end patient journey as they consider how to adapt and lead the future of care delivery. Patients will continue accessing care from different points, and because of that we must be connected and prepared to meet them where they are - with personalized services that are informed by centralized sources of information.

Cloud-based platform solutions offer healthcare organizations a way to deliver secure access to the insights that guide care decisions, while reducing strain on internal resources to keep systems up-to-date and compliant.

That's why Philips is leveraging our deep clinical and operational expertise, along with our unique health informatics solutions portfolio, to build innovations that link most of the clinical workflows inside the hospital with the patient's health journey in ambulatory and at home. We believe that it is through cloud-based platform solutions that we have an unsurpassable opportunity to connect care across care settings and provide a single, secure, unified experience for patients and healthcare professionals alike. And we're committed to making that experience a reality.

Learn more about how Philips is connecting care and empowering collaboration through HealthSuite: www.philips.com/healthsuite-solutions

- James Norman<sup>3</sup>

## References:

<sup>3.</sup> Norman, J. (2016, June 13). Why healthcare organisations should take the plunge with data lakes. Retrieved December, 2020, from https://www.linkedin.com/pulse/why-healthcareorganisations-should-take-plunge-data-lakes-norman/



<sup>1.</sup> Comstock, J. (2019, April 01). Why healthcare data may be more secure with cloud computing. Retrieved November, 2020, from https://www.mobihealthnews.com/content/why-healthcare-data-may-be-more-secure-cloud-computing

<sup>2.</sup> Protecting Data in a Shifting Security Landscape. (2019, May 01). Retrieved November, 2020, from https://healthtechmagazine.net/resources/white-paper/protecting-data-shiftingsecurity-landscape