2d Lt James Marvin

CTC 10

The military’s healthcare system deals with millions of end users that are spread out across the country and have information tied to both physical and digital media. There is no consistency in how security controls are applied across systems and there are no standard ways of having the data communicated1,2. The main concern from the healthcare providers is HIPAA regulations and keeping their patient’s data secure. They may think traditional storage means are secure, but there is rarely competent auditing practice to ensure physical patient files are not leaked. An insider threat could simply walk out of the premises with sensitive data and there are no sophisticated alarms that would go off in that scenario. Cloud computing could reduce the significance of these security concerns. Now there are cloud vendors that will sign a HIPAA agreement.

Hosting healthcare data on the cloud allows the user to aggregate the security methods used by other companies who are also tenants in the cloud. This puts less of the onus for security innovation on the client and more on the vendor. An example of this strategy is placing subsections of the cloud data into different encryption schemes. This prevents all data from being compromised if one of the schemes is broken by an attacker1 . Another security benefit for healthcare providers that use cloud is the ability to create virtual desktop interfaces. This allows all sensitive software that holds and processes the patient data to be access remotely and not have to store the sensitive information on the end user’s machine. The avenue I propose that military medicine investigate is forming a relationship with Google’s Cloud Healthcare API. The goal of this API is to create a single medium for storing healthcare data and processing it using powerful Machine Learning tools. This will hopefully declutter the DoD’s anachronistic system and help improve efficiency for patients.

Sources:

1. Snell, E. (2017, April 07). Utilizing Cloud Computing for Stronger Healthcare Data Security. Retrieved November 4, 2018, from <https://healthitsecurity.com/features/utilizing-cloud-computing-for-stronger-healthcare-data-security>
2. Aungst, T. (2018, March 12). Retrieved November 4, 2018, from <https://www.pharmacytimes.com/contributor/timothy-aungst-pharmd/2018/03/google-unveils-new-cloud-service-for-healthcare>