**Business Requirements Statement**

Diavantae’ D. Reddick

College of Arts and Sciences, Campbell University

ITS-465: Senior Project

Dr. Umesh Varma

February 22, 2021

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The problem that plagues hospital databases that this system creation aims to solve are the storage, shelf life and security of data.

Data storage in healthcare settings will continually increase at a dramatic rate. Managing this is a must considering that the space for this information can be costly. Companies are satisfied with warehousing the records in-house, which would work well but not in this setting as this hikes the price of storing data and could potential bottleneck the network if mismanaged (Bresnick, 2017). I propose to implement a cross between on-site and cloud-based storage. This will accomplish making security a priority as it will be executed to protect operational data and solve the problem with data not being accessible on a timely manner.

Data shelf-life is also important to consider in the dynamic setting of healthcare. HIPAA requires that patient records be kept available for a minimum of six years. Whether this data is destroyed or developed for research, the organization should appoint an individual to control the creation and protection of valuable information on data (HIPAA Journal, 2018).

In order to enhance the system, I propose to establish a more in-depth encryption of sensitive information. At first the Rivest-Shamir-Adleman (RSA) algorithm was appealing but is not the best option for securing user data. Employing the Advanced Encryption Standard (AES) within the cloud-based implementation is an attractive option and allows patients more control of their documents (Varsha & Suryateja, 2014).

The objectives of this database are to establish a two-way data storage center between on-site and in the cloud protected by a set of public and private keys to ward off intruders, to appoint a data governor to oversee the updating of metadata and retention or proper deletion of records, to speed up the accessibility of records.

The key findings of this report are that hospitals are no stranger to volatility and uncertainty. In order to curb this the implementation within the design phases will incorporate various security, storage, and supervisory methods in order to improve the flow of day-to-day operations within the hospital and help serve the public in a better fashion.

**References**

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