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NOVELBASED METHOD FOR PATIENT HEALTH RECORDS SECURING AND SHARING IN CLOUD COMPUTING USING ATTRIBUTE BASED ENCRYPTION

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ABSTRACT

Cloud Computing servers provides hopeful platform for storage of data. Sharing of patient healthrecords (PHR) is an emerging patient centric model of well-being information exchange, which is often outsourced to store at third party, such as cloud providers. It allows patients to create, manage, control and share their patient well-being information from one place through the web, with other users as well as healthcare providers. The patient's records maintained with full security and privacy in. the centralized server. To achieve fine grained and scalable data access control for health records stored in semi trusted servers, we make use of attribute based encryption (ABE) to encrypt the each patient's health information. In this paper, we discover key-policy attribute based encryption (KP-ABE) and multi-authority attribute based encryption (MA-ABE) to enforce patient access control policy such that everyone can download the data, but only authorize user can view the medical records. It also supports multiple owner scenarios and divides the users in the system into multiple security domains that greatly reduce the key management complexity for owners and users. A high degree of patient privacy is guaranteed by exploitingma-abein public domain and (KP-ABE) in personal domain.

KEYWORDS: Patient Health Records, Cloud Computing, Data Privacy, Fine-Grained Access Control and Multi-Authority Attribute Based Encryption