PATIENT MEDICAL RECORD DATA SECURITY APPLICATION USING AES-128 ALGORITHM

(Case Study: Slogohimo Community Health Center)

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ABSTRACT

Current technological developments are increasingly advanced and of course have a big impact on various fields. Not only positive impacts but also negative impacts are relatively high due to the influence of this technological progress. Some of them are confidentiality regarding document privacy and security. The health sector is a good example of the confidentiality and privacy of documents, especially when it comes to medical records. Not a few cases of patient data leakage have occurred. However, this does not mean that technological advances always have bad impacts. With advances in technology, we are also able to maintain the confidentiality and security of documents, especially medical record documents. Cryptography is the most promising solution today. There are several cryptographic methods that can be used to maintain the security of medical record documents, one of which is the AES algorithm. Based on this description, this research aims to secure medical record documents in one hospital using the AES algorithm. Through an encryption process to hide data into a form that cannot be understood, then decrypt it again to its original form that can be understood. This method can be advantageous because it is able to maintain the confidentiality of documents such as medical records.

***Keywords**: Security, medical records, cryptography, AES algorithm.*