Design and Development of an Medical Record Retention and Destruction Information System Using the Scrum Method at Puskesmas Silo 1

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ABSTRACT

Puskesmas Silo 1 is currently facing challenges in managing the high volume of outpatient medical records, which reached 37,763 patient visits during the 2021–2024 period. Retention activities have not been implemented optimally due to the absence of a supporting system capable of automatically classifying document status. This condition has resulted in an accumulation of files that exceeds the storage capacity and poses a risk of document damage. This research aims to design and develop a web-based Medical Record Retention Management Information System to enhance efficiency and facilitate the performance of medical record officers in the sorting and retention processes. The system development in this research employs the Scrum method, encompassing stages such as product backlog, sprint planning, sprint backlog, sprint, sprint review, and sprint retrospective. The requirements analysis was conducted through observation, interviews, and documentation. The system was built using the PHP programming language with the Laravel 10 framework for the back-end, Tailwind CSS for the front-end, and MySQL as the database. The results of the system testing using the black box testing method indicate that all module functionalities operated correctly without any identified errors. The outcome of this research is the SIMeRA application, which features automatic identification of inactive documents, retention management, and structured generation of destruction reports. The implementation of this system is expected to assist the archival processes in becoming more effective, accurate, and efficient. As a suggestion for future development, this system could be integrated with the SATUSEHAT platform from the Ministry of Health of the Republic of Indonesia to ensure that the history of record destruction is captured on a national scale.

Keywords: *destruction, information system, medical records, retention, scrum*