ABSTRACT

Hasan Sadikin Central General Hospital is a general hospital located in Bandung, West Java. In addition to having a positive impact on supporting public health, it also harms solid medical waste containing various kinds of viruses and bacteria produced from hospital operational activities. Hasan Sadikin Hospital in managing solid medical waste is still done manually without using a system. It is still separate from the initial sorting of solid medical waste management to the reporting stage. Solid medical waste management is also not yet integrated between existing waste management, waste generating division units, and units tasked with managing waste, causing medical waste management data to be not recorded properly. Reporting is not integrated because it is not recorded in one system. This study will develop an Enterprise Resource Planning (ERP) system for solid medical waste management using open-source ERP (Odoo) software that supports integrated hospital solid medical waste management using the Quickstart method, which can minimize the system development process. The ERP system will make it easier for hospitals to design solid medical waste management systems starting from the stage of sorting the containers from each division unit that generates waste, preparation for management, monitoring processing, sterilization of waste, storage, transportation to the final process, namely reporting on solid medical waste management that can be presented. In the form of transaction documents, export excels files and chart diagrams. The system will be tested for functionality using unit testing, integration testing, and black box testing validated by the environmental health department. The results of the research on the development of a solid medical waste management system to be able to sort and store solid medical waste, assist in the preparation of waste management, monitor waste treatment, carry out waste storage, transport and return waste to third parties and assist in reporting solid medical waste management. And customization of the Odoo app. The developed system can integrate every unit that produces waste in hospitals. The units in charge of managing waste and integrating solid medical waste management with liquid, general, and nuclear medical waste have been successfully integrated. The waste management report

developed produces transaction reports on solid medical waste management in the form of pdf, excel, and dashboard chart reporting that can assist hospitals in data analysis and reporting on solid medical waste management.

Keywords— Enterprise Resource Planning (ERP), Open-source ERP, Odoo, Quickstart, Solid Medical Waste