

Design and Development of a Web-Based Inpatient Daily Census Reporting System at Regional General Hospital (RSUD) Reda Bolo, Southwest Sumba Regency

Niyalatul Muna S.Kom., M.T. (*Supervisor*)

Aprianto Bobo Manu

Study Program of Health Information Management

Department of Health

ABSTRACT

Inpatient Daily Census (IDC) is a routine activity conducted in hospitals to calculate the number of patients treated in inpatient units. Regional General Hospital (RSUD) Reda Bolo still applies a manual system for recording IDC data. The implementation of manual IDC recording has resulted in several major problems, particularly inaccuracies in IDC data entry, with a total of 255 inaccuracies identified during the period from July to December 2024. This study aims to design and develop a web-based Inpatient Daily Census Reporting System at RSUD Reda Bolo, Southwest Sumba Regency. This study is classified as Research and Development (R&D) using prototype method, which consists of analyzing user requirements, developing a prototype, adjusting the prototype based on user feedback, developing the system, conducting system testing, and refining the system according to user needs. Data collection techniques included interviews, observations, and documentation. User requirements analysis covered functional and non-functional requirements. The resulting prototype design consists of system flowcharts, Data Flow Diagrams (DFD), Entity Relationship Diagrams (ERD), database design, and interface design. The system was developed using the PHP programming language. Subsequently, the completed system was tested using the black-box testing method. Based on user evaluation, the system received a very good rating, with the Interpretation Satisfaction Index (ISI) values ranging from 81% to 93%. The results of this study indicate that the developed web-based IDC reporting system is able to support automatic data entry and processing of IDC, thereby producing accurate reports to support timely and appropriate decision-making by hospital management. RSUD Reda Bolo is recommended to establish Standard Operating Procedure (SOP) related to the implementation of IDC activities and to implement the use of the web-based IDC reporting system within the hospital.

Keywords : Hospital, SHRI, Prototype