## **ABSTRACT**

## EVALUATION AND REDESIGN OF REGOMAS APPLICATION USING HUMAN CENTERED DESIGN

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Banyumas Regional General Hospital is a hospital in Banyumas Regency, Central Java that has used an application-based online registration information system for health services, namely the Repomas application. The features in this application help patients in conducting consultations, taking outpatient queues, viewing queues, and seeing room availability on the application. The method used in this study is with a Human Centered Design and Usability Testing approach consisting of effectiveness, efficiency, and satisfaction. The results of the System Usability Scale measurement in the old design Regomas application (Ver 2.0) were obtained on average of 53.91 which means it is included in the grade D category and the adjective rating is in the poor category. The level of user satisfaction needs to be improved because the results of the previous evaluation still found users who had difficulty using the Regomas application version 2.0, so it was proposed to redesign the appearance of Regomas with the aim of increasing the level of user satisfaction. After the redesign, an average score of 80.16 was obtained based on the grade scale included in the good rating acceptable to users. Based on the results of the System Usability Scale, there was an increase of 26.25 after repairs. The level of performance metrics after usability testing for the new design resulted in a value of 100% on the effectiveness metric, which means that the task scenario given to the respondent was successful. Time Based Efficiency shows an average value of 0.119 goals / sec with a very fast achievement rate. These results show that efficiency metrics are efficient in terms of time needed. This research produces applications with temporary storage data or hardcoded so that the results of the research output cannot be changed except by changing the code from the programming source. For further research, you can use a database.

Keywords: Human Centered Design, System Usability Scale, Usability Testing