

## **ABSTRACT**

In healthcare settings such as hospitals, queue build-up is often a major obstacle that disrupts patient comfort and lowers productivity. This build-up not only causes boredom, but also slows down the service process and negatively impacts patient satisfaction levels. To remain competitive with other hospitals, it is important for every healthcare facility to provide optimal and efficient services. One of the steps to improve service quality is by using the latest technology. This technology can help manage queues more effectively, so that patients do not have to wait too long at the hospital. With an integrated system, patients can make reservations and monitor their queue remotely, allowing them to do other activities while waiting for their turn.

To solve this problem of queue build-up, we proposed the development of a web application that connects with WhatsApp to provide notifications to patients. These notifications will provide information regarding the status of the patient's queue in real-time. The selection of WhatsApp as the notification platform is based on its popularity and ease of access by various levels of society. By using WhatsApp, information about the queue can be delivered quickly and efficiently as the majority of patients are already familiar with this platform. This technology is expected to be an effective solution to reduce waiting time and improve patient experience in hospitals.

The application was developed using the waterfall method, which ensures that each stage of development is carried out in a systematic and structured manner. Testing of the application was conducted in a hospital environment, and the results showed that the application can improve service efficiency and reduce patient waiting time significantly. Therefore, this application is expected to be an effective tool for hospitals in managing patient queues and improving the quality of health services. The use of notifications via WhatsApp as a communication tool is also expected to increase patient engagement and satisfaction by providing accurate and timely information.

**Keywords:** Healthcare, Notification, Hospital, Reservation, Web Application, WhatsApp