## **ABSTRACT**

Information technology and telecommunications play a role in the creation of telemedicine applications that are juxtaposed with medical science based on innovations in the health sector. Although in Indonesia telemedicine is still in the development stage and has many shortcomings, this application has a very high potential in improving the medical image in the eyes of the public. Looking at the geographical conditions and the uneven distribution of the Indonesian population, there are still many Indonesians who have difficulty accessing public health centers, coupled with the lack of health practitioners in remote areas and islands. KitaSehat is a prototype that is planned to be in the health sector. KitaSehat is a telemedicine system that provides consulting services via chat, prescribing, referral letters for hospitals to providing advice on actions for diseases listed on the KitaSehat telemedicine application service, and the Goal-Directed Design method is used to design a telemedicine application. With this methodology, it is also designed to make business model analysis, competitor analysis, and market potential analysis. Furthermore, in the design stage, business process design, data design, interface design are made. After that, a test was conducted by comparing the scores of the existing prototype and the redesign of the prototype using the Usability Testing method and the System Usability Scale (SUS) as the testing standard. Based on the tests carried out, the results of the existing prototype were 59.0 and the redesign of the prototype was 72.5. Based on the test results, by validating all sources of patient needs, a prototype is quite good and correct and has the function as planned and the analysis has been carried out.

Keywords: Telemedicine, Goal-Directed Design, KitaSehat