ABSTRACT

The hospital is a public facility for the community. One of the hospital facilities are common in use is the bell patient nurse call. Patients only need to press a button if need nurse, then at room nurse appeared with a patient call indicator LED. That is one example of nurse call. The patient's room, we often see that the bell usually using cables.

In this final project have developed a tool at the hospital using wireless integrated in android. The working principle of this device is to be active in the system when the button is pressed the device at the patient's side. At the time the button is pressed, the system will send a signal through a wireless active for nurses has not pressed the response button.

Wireless signals transmitted and received by the receiver that existed at the nursing station and an android phone. At that time the nurse desktop applications and android application will display the information that there are patients in need. The nurse when pressing the "tangani" in the desktop application nurse or android application, the device of the nurse's office will send a wireless signal to be captured by the patient, the LCD on the remote in the patient's room will display a notice "mohon tunggu, segera datang " and LED lights green living, if the patient's request is not responded to nurse within 15 seconds, the device will send a nurse also wireless signals to be captured by the patient, the LCD on the remote in the patient's room will display "maaf sedang sibuk". These tools can be integrated with android that functions like a desktop application. Program applications using the Java language.

At this research has found that distance wireless transmitter with the receiver reads NRF24LU1 reached 35 meters without hindrance and 15 meters with obstruction wall.

Keywords: patients, nurses, bell, wireless, desktop applications, LED, LCD, android.