## ABSTRACT

The purpose of this final project is to make the heart's electrical signal monitoring system, drip and body temperature wirelessly. Which will be made in the design and monitoring of ECG monitoring system, Infusion, and body temperature are used to simplify see how the state of a patient who is being treated. Sending data wirelessly via Zigbee more easier because it is not limited by the distance of the patient and the nurse's office and can cut the cost of cable installation.

The monitoring system in real time makes it easier interaction between patients with nurses and patients with a doctor. Based on the results obtained, the result of monitoring drip infusion with a maximum of 100% accurately at a distance of 1-10 meters. And the heart's electrical signal can be obtained accurately 0.1-0.4 mV level is higher than normal measurements without gel


Keywords: Monitoring, ECG, Photodioda, Thermistor, Electrodes, Arduino, E-Health, Biopac, Xbee