

# IoT-Based Prediction of the Failure of Blood Pressure System

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**Abstract:** Presents a wireless system that enables real-time health monitoring of multiple patient(s). In health care centers patient data such as heart rate needs to be constantly monitored. The proposed system monitors the heart rate and other such data of the patient's body. For example, heart rate is measured through Photoplethysmography. A transmitting module is attached which continuously transmits the encoded serial data using a Bluetooth module. A receiver unit is placed in the doctor's cabin, which receives and decodes the data and continuously displays it on a User interface visible on a PC/Laptop. This doctor can observe and monitor many patients at the same time. The system also continuously monitors the patient(s) data and in case of any potential irregularities, in the condition of a patient, the alarm system connected to the system gives an audio-visual warning signal that the patient of a particular room needs immediate attention. In case, the doctor is not in his chamber, the GSM modem connected to the system also sends a message to all the doctors of that unit giving the room number of the patient who needs immediate care.

**Keywords:** Bluetooth, Health Monitoring, GSM, wireless

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