EMERGENCY SYSTEM 1ST July 1, 2021

ABSTRACT

Over the last several decades, the role of hospital-based emergency and trauma care has evolved. Hospitals continue to focus on their traditional mission of providing urgent and lifesaving care, but have taken on additional responsibilities to meet the needs of communities, providers, and patients. Today, their complex role also encompasses safety net care for uninsured patients, public health surveillance, disaster preparedness, and serving as an adjunct to community physician practices. In some rural communities, the hospital may be the main source of health care for a widely dispersed population. While the demands on emergency and trauma care have grown dramatically, however, the capacity of the system has not kept pace. Balancing these roles in the face of increasing patient volume and limited resources has become increasingly challenging. The situation is creating a widening gap between the quality of emergency care Americans expect and the quality they actually receive.

The increase in population has made the current medical system slow where hospitals now get over 1000 visits a day where 14% are pregnant women who need delivery , 45% are of children and the remaining 41% are of adults.

The number of accidents has also increased. Sudden allergies attacks too and the elderly facing heart attacks.

In recent years, most Kenyans have access to mobile phones including some children.Internet connections across the country has also grown making it communication faster and easily within the country and also across borders.

Despite this, not many hospitals have implemented this feature to there services making the task of getting the required medical service such a tiresome task which often result to more fatal injuries or even death.

A well designed emergency system that uses the users geolocation to find the affected victim, a well established diagnosis of the users and fast response will help save more life.

The patients mobile phone provides the necessary data such as the current location on the map which is used to decide whats the best approach to take to reach the patient ,if its either by air or land or what kind of vehicle would be best suited for such terrain.

Location monitoring systems and video transmission systems are also commercially available. The emergency patient transportation systems uniquely require transmission of data pertaining to the patient, vehicle, time of the call, physiological signals like blood pressure body temperature, blood oxygen saturation, and location information. These requirements are presently met by using separate communication systems for physiological data and location that result in lot of inconvenience to the technicians, maintenance related issues, in addition to being expensive. This project presents design, development and implementation of such a telemonitoring system for emergency patient transportation using Flutter and Firebase.