# Development of a Framework to Link the Patient with the Local and Remote Doctors with Internet of Medical Things (IoMT)


## Abstract:

In recent years, providing the appropriate medical facility for the diseased humans is a challenging task due to various reasons such as availability of hospitals, experienced doctor and appropriate medical facilities to control and cure the disease in patient without further delay. The availability of the medical facilities is very less in remote and rural locations; particularly in developing nations. The advancement in Science and Engineering paved way to solve a considerable number of industrial problems with recent developments such as the artificial intelligence, machine-learning, deep-learning and Internet of Things (IoT).

The development in IoT helps to connect the customer (patient) to the supplier (hospital/doctor), which ensures the remote monitoring and providing the possible suggestion during the normal monitoring conditions and the emergency situations. The IoT adopted in the medical industry is commonly known as the IoMT; which links the patient with the local/remote hospital/doctor to monitor the patient in an efficient way till the disease is cured. The IoMT also helped to reduce the mortality rate in recent years.

The proposed work aims to provide a framework to monitor the patient in an efficient way using; (i) Possible sensor network (which receives the continuous/intermediate patient information), (ii) Local Area Network (LAN), (iii) Dedicated and secure CLOUD to store and process data, (iv) A network to link the doctor to the cloud to assess the patient information and (iv) Identification of the proposer drug and its dose level based on the patient data and transferring the information to the care taker (assistance to the patient).

If this framework is implemented; it is possible to provide the all the possible appropriate treatment process to the patient irrespective of their location. Further, this framework also helps to get the all the possible experts opinion to recommend the suggested drug and alternate drug to improve the curing and recovering rate in patient. Further, the patient data can be efficiently monitored from the hospital as well as from the remote locations.

# Framework