VINS CHRISTIAN WOMENS COLLEGE OF ENGINEERING , CHUNKANKADAI

Department of Information and Communication Engineering

IBM NALAIYA THIRAN

LITERATURE SURVEY

TITLE: **Personal Assistance for Seniors Who Are Self-Reliant**

DOMAIN NAME: **INTERNET OF THINGS**

LEADER NAME: Bebisha Therese G   963019104002

TEAM MEMBERS: Fathima Rehana M.   963019104003

        Kanchana B J   963019104004

        Abitha K   963019106001

MENTOR NAME: Carolin Preetha

ABSTRACT

   In modern society, busy life has made people forget many things in day to day life. The elderly people and the people victims of Chronicle diseases who need to take the medicines timely without missing are suffering from dementia, which is forgetting things. In their daily routine. Considering this situation study has been done in this. Paper reviewing the technologies of home health Care which are currently used for improving this situation by reminding the scheduled of medicine, remote monitoring and update. New medicine data of patients, which can be done by prescriber through web

 INTRODUCTION

   Most of the time due to number of work for the people as well as regarding age and some disease which leads to forget the basic things among daily routine. If the patient sufferings from the disease where it is compulsory to take medicine at proper time, in this paper we Have review the technology of home health care system among them a medicine reminder system and some Improvement regarding authentication have well focused. Generally for home based health care the arrangement include communications, imaging, sensing and human Computer interaction technologies embattled at diagnosis, treatment and monitoring patients without disturbing the Quality of lifestyle. It can be possible the development of a low cost medical sensing, communication

and analytics Device that is real-time monitoring internet allowed patients physical conditions. Internet of Things (IoT) network Will provide active and real-time appointment of patient, hospitals, caretaker and doctors apart from this the secured Data transmission from source point to destination for the purpose of remote monitoring there is need of the Architecture of a low cost embedded platform for Web-based monitoring. The distant monitoring is made possible by using various biomedical devices, they measure and transmit data via Bluetooth or ZigBee to a unit that manages them (PC). The collected information may be stored on the device Or sent to a collection centre that provides a complete monitoring, for both health professionals and patients. Access to the medical centre can be allowed, via web, from mobile device or PC.

The IOT and RFID combination also play a vital role in object detection and personal identification which can be use categorized the person while remote monitoring when number of people information have observed which will helpful to unique identity to each patient and their respective data will be stored. As a Consequence of healthcare reforms, digital medical records have facilitated the widespread availability of publicly available, statistical data. Feeding the pool of mounting data is the patient doctor interaction Physicians Assess the patient's complaint and prescribe a course of action.

The data collected provides the basis for a decision support tool for Patients to compare Prescription Drug Plans based on a patient's individual situation and preferences. The tool will provide explicit information that will assist the patient in determining the most suitable prescription drug plan, taking into account the individual importance of plan features. Utilizing historic data, comparisons on Prescription spending will be made to past patients who have a similar health profile as identified by the current patient. According to scheduled and the situation can be recorded with help of sensor which will remotely monitor, save for the future reference, update drug information according to need through web after comparing drug taking habit of patient.

LITERATURE SURVEY

Ilkko et al4 proposed UbiPILL A Medicine Dose Controller of Ubiquitous Home Environment (2009), Home Automation and wireless sensor network which have enhancing the quality of life by providing security, information and comfort. Here had discuss a centric home server with three main roles: use of existing Interfaces on registered systems for remote monitoring and Control, serving the surrounding system as a data gateway and Providing content adaptive user interfaces enhanced by Belongings of end-user client devices, the ubipill device had implemented to remind people for elder and for monitoring purposes ubipill and home server have been design to reliably monitor the medicine box activity by web browser.

Shivakumar et al proposed Design of vital sign monitor based on wireless sensor networks and telemedicine technology(2014), Vital sign monitor can be implemented with Bluetooth technology which is embedded with Sensor, the transmitter will include the application oriented smart phone enable with 3G or IEEE 802.11 i.e. wi fi based transmission. The data from transmitter will be sending to cloud for centralized monitoring takes place; the expert in remote place can view all patient data and in case of emergency can take appropriate action.

Ajmal Sawand et al1 proposed Multidisciplinary approaches to achieving efficient and trustworthy eHealth Monitoring systems(2014),The technological merging between IOT, wireless body area

network and cloud Computing have vital contribution in e health care which improve the quality of medical care, basically patient Centric monitoring play a role in e health care services which involve medical data collection, aggregation, data transmission and data analysis here entire monitoring lifecycle and essential services component have discus as well as design challenges in designing the quality and patient centric monitoring scheme along with potential solution.

Huang et al8 proposed the intelligent pill box—Design and implementation (2014), the implementation of pill box has proposed by keeping the problems of old age people in mind to provide full medication safety. The pill box will remind the patient about timing by doing this drug abusing can be controlled.

Moga et al11 proposed Embedded platform for Web-based monitoring and control of a smart home (2015), present the low cost embedded platform for web based monitoring and controlling and the platform consist of distributed sensing and control network and touch screen to easy use interface to the user and remote web based access.

CONCLUSION

For home health care various technology have evolved as review considered, in this paper medicine, its scheduling have well focused which is beneficial to improve efficiency of prescribed drug and reduce economic factor. To improve the existing home health care technique number of monitoring technology has observed which leads to home health monitoring system. The monitoring system can be implemented with sensing element and wireless module which should need to secure so that message containing the health related information should not be corrupt.

IOT (Internet of Things) play a vital role in communicating the two devices, the use of messaging standard and communication protocol we can securely transfer the important messages regarding to health. Open source IOT cloud will be effective for storing sensors data,the benefit of digitally storing is the retrieving of data is easy and faster manner in case of emergency for secure health. For the user personal identity and Encryption/Decryption purposes the RFID will best.

REFERENCES

1. Sawand, S. Djahel, Z. Zhang, and F. Na. Multidisciplinary Approaches to Achieving Efficient and Trustworthy eHealth Monitoring Systems. Commun. China (ICCC), 2014 IEEE/CIC Int. Conf., pp. 187–192; 2014.
2. D. a. Clifton, D. Wong, L. Clifton, S. Wilson, R. Way, R. Pullinger, and L. Tarassenko. A large-scale clinical validation of an integrated monitoring system in the Emergency Department. IEEE J. Biomed. Heal. Informatics vol. 17, no. 4, pp. 835–842; 2013.
3. M. Parida, H.-C. Yang, S.-W. Jheng, and C.-J. Kuo. Application of RFID Technology for In-House Drug Management System.15th Int. Conf. Network-Based Inf. Syst., pp. 577–581; 2012.
4. L. Ilkko and J. Karppinen. UbiPILL A Medicine Dose Controller of Ubiquitous Home Environment. 2009 Third Int. Conf. Mob. Ubiquitous Comput. Syst. Serv. Technol., pp. 329–333; 2009.
5. Kliem, M. Hovestadt, and O. Kao. Security and Communication Architecture for Networked Medical Devices in Mobility-Aware eHealth Environments," 2012 IEEE First Int. Conf. Mob. Serv., pp. 112–114;2012.

6. S. T.-B. Hamida, E. Ben Hamida, B. Ahmed, and A. Abu-Dayya. Towards efficient and secure in-home wearable insomnia monitoring and Diagnosis system. 13th IEEE Int. Conf. Bioinforma. Bioeng., pp. 1–6; 2013.