


Big Data Management System for U-Healthcare

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ABSTRACT

U-Healthcare monitoring module can sometimes be monitored by using downloadable tracking applications necessary for its services due to the popularity of the smart phone devices, thus continuing to provide new services and healthcare contents and information at a lower cost but the need to analyze larger collections of data continues to evolve as time progresses. As u-healthcare service is published as an alternative to addressing national issues such as aging population, solitary elderly people, or even the child care monitoring, the related monitoring care is expected to grow beyond the normal data that it caters resulting to tougher data management. In this paper, the authors proposed a system that could help handle certain issues in u-healthcare big data management.

KEYWORDS

Big Data, Bio-Signals, Cloud Service, Management System, U-Healthcare

INTRODUCTION

In U-Healthcare, which stands for Ubiquitous Healthcare, represents the latest medical information services and is a future-oriented health care service combining health care services and computer information and communication services. In 2009, aging statistics indicated that people aged 65 or older in the United States represented 12.9% of the total population of the United States. It has been shown that in the year 2000, people over 65 years of age represented 12.4% of the total population of the United States and that figure is expected to reach 19% by 2030. This increase in the phenomena of aging gives rise to the problems of chronic diseases related to age, which are one of the key factors in determining the growth of medical care expenses. Approximately 75% of the \$2 trillion spent annually in the United States for medical care are due to chronic diseases. Diseases are expected to increase from 59% in 2002 to 66% in 2030. In 2005, of 35 million people suffering from chronic diseases, half were under 70 years old and half were women, and almost 80 percent of these deaths occurred in low and middle-income countries. (Touati & Tabish, 2013) The medical information system is small so it is necessary to control your health status and provide a personalized health management service at any time along with the development of a high-speed communication network infrastructure and the development of several signal sensors but to support the personal health information service, it requires a structure of seamless data communication between medical information data to share and exchange information between medical institutions and for health management. Therefore, the

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purpose of this study is to design big data management and analytical models to support intelligent services and to support data exchange between hospital information system and medical information system used for u-Healthcare.

A New Value Frame Work

Health care providers are aware of the value and have developed many levers to achieve this goal, but traditional tools do not always make the most of the information that big data can provide. Reductions in the unit price, for example, are mainly based on contractual leverage and negotiation and like most other well-established medical care value, they focus solely on reducing costs rather than improving outcomes for patients. These will continue to play an important role and stakeholders will only profit from the large amount of data if they take more holistic and patient-centered approach to health spending and treatment outcomes in the future. Finally, health care will have to learn from other data-driven revolutions. Too often, stakeholders have benefited from the transparency of data by pursuing goals that create value only for themselves, and this could also happen in the healthcare sector. For example, owners of MRI machines, which seek to cushion fixed costs for more patients, may choose to use large data only to identify patients and disease areas that do not receive sufficient services. If they market their services convincingly, patients may suffer unnecessary MRI, a situation that increases costs without necessarily improving the results.

Big Data initiatives have the potential to transform medical care. The actors involved in innovation, who seek to build their capacity and open to a new vision of value will probably be the first to reap the rewards of large volumes of data and to help patients achieve better results. (Kayyali et al., n.d.) One of the goals of modern health systems is to provide optimal medical care through the judicious use of health information technology to:

- Our Improve the quality of medical care and coordination so that results are consistent with current professional knowledge.
- Satellite's customized cellular solutions and that's why connectivity is Reduce health care costs to reduce avoidable excessive use
- Provide support for reforming payment structures.

Health You High quality and cost-effective patients significant use of electronic health records. (This approach requires significant improvements in reporting, claims handling, data management, and process automation). The focus on value-based care is a greater focus on patient-centered care.

Taking advantage of technology and focusing care processes on patient outcomes, continuity of care, physicians, hospitals and health insurance must work together to personalize the service that is cost-effective and price-conscious, transparent in its delivery and billing, and measured according to patient satisfaction. (McDonald, 2017)

LITERATURE

Big Data Organizations generate more and larger amounts of data as a result of instrumented business processes, user monitoring activity, monitoring of websites, sensors, finance, and accounting and between other reasons. With the arrival of social networking websites, users create records of their lives by publishing daily activity details they play, the events they attend, the places they visit, the photos they usually take, and the things that they like and want. This deluge of data it is often called Big Data. A term that conveys the challenges it poses to the existing storage infrastructure, management, interoperability, governance and analysis the data.

Figure 1, represents the common phases of a traditional analysis workflow for Big Data. Data from various sources, including databases, flows, marts and data warehouses, are used to build models. The

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