

Chapter 10

Health Chain

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ABSTRACT

The research shows that the blockchain has a wide range of healthcare applications including electronic medical records, drug and pharmaceutical supply chain management, biomedical research and education, remote patient monitoring, health data analysis, among others. A number of blockchain-based healthcare applications have been developed as examples based on emerging blockchain paradigms, such as smart contracts, etc. In this research, a health chain system is introduced. HealthChain is an online portal that maintains a digital copy of a patient's medical history, along with all his/her diagnoses, prescriptions, and medical receipts.

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INTRODUCTION

The engendering of newer technologies today, such as the IOT and Big Data, is an example of promoting the development and optimization of healthcare industry globally as well improvise the development of an intelligent and reliable electronic health care system. Intelligent health care is a medical system along with medical data in context to, which includes an e- medical record, e-health archive, e-billing and calculations and an online medical device through the data transfer, Internet of Things, and technology exchange to building medical, management and health services. However, blockchain is a new technology for controlling the feasibility of electronic data regarding health records to support transparency and accountability (Mohammad Hossein et al., 2021).

Blockchain is a type of a record book, which is a transaction in which is the same copy of the record book visible to all members of the computer network. Blockchain is ready for small transactions digital foot. Openness and consistency are beneficial. We the health sector (Negi et al., 2021). This is very important in confirming one's identity. Processing of supply chain management, patient consent and data sharing and the authority to manage access. Blockchain-enabled tools have proven to combat COVID 19 pandemic control system, and its associated systems supports contact tracking in nations like South Korea, facilitates exchange of data and software code for a lot of purposes.

Blockchain along with medications and from there to the vaccinations is the goal for the future. Currently, the smart healthcare industry is rapidly evolving, however there are still several problems with information security and system security. As one of the important technology for the fourth industrial revolution, the blockchain has the characteristics of isolation, inanimate, evidence of disruption, and research (Gul et al., 2021). The combination of blockchain and smart health care can alleviate pain points conventional health care in data sharing, storing, privacy to develop and data security develop user-friendly intelligent health care systems, and establish a network of multidisciplinary medical organizations including government, business, and individuals to promote the industrial development of intelligent health care (Li et al., 2021). Health Chain faces a major gap in the current system of use-handwritten instructions and filing of medical records/receipts – interruptions relating to the data of the patients and their past ailments. This gap is addressed in this study and the implementation of the same. The storage and execution of the history of a patient in accordance with their ailments, insurance and financial calculations. This also gives way to the online assignments of appointments of the patients with the doctors.

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