Summary

This project aims to revolutionize the healthcare industry by using blockchain technology to securely store and distribute patients' medical information. Decentralized applications (DApps) have revealed the importance of patient-centered management by allowing patients to manage their own medical information and decide who can access this data and information. The system divides users into five different roles: owners, hospitals, insurance companies, doctors and patients.

1. Introduction

In today's digital age, sharing medical information is an important part of providing effective and efficient healthcare. However, ensuring the confidentiality and security of patient information is the most important issue. The project solves these problems by using blockchain technology to create a patient-centered system that allows individuals to manage their medical information.

2. Methodology

The methodology involves the development of a app that uses blockchain technology to store and manage patient medical information. Key elements of the system include: Patient-centered controls: Patients have the power to determine who can access their information and data. This control increases privacy and security. Users: The system divides users into four groups: hospitals, doctors, patients and insurance companies each with special permissions and access rights. File Storage: Patients can add more files to their profile, such as medical records and x-rays, which are securely stored using the InterPlanetary File System (IPFS).

3. Work

The work program includes DApp development, integrating blockchain technology, smart contracts and IPFS to enable data storage. Provide a user-friendly interface for interacting with the system.

4. Results

The project achieved the following features: Patient Control: Can allow or revoke access to their data for patients, doctors and other relevant areas. File Storage: Use IPFS to securely store health-related information and provide access to authorized healthcare providers. Consultation Records: Patients can gain a better understanding of their medical history by viewing previous consultation records.

5. Discussion

The results prove the effectiveness of blockchain-based medical information sharing. By prioritizing patient management and data security, the system increases patient confidence and ensures that doctors have the timely information they need to provide the right care.

6. Conclusion

In summary, "Medical Information Sharing Using Blockchain" is an important step forward in medical technology. It empowers patients to manage their data, improves data security, and makes it easier to share important medical information between doctors. This initiative has the potential to benefit both patients and doctors by revolutionizing the way medical information is managed and shared.

7. Future Work

Future work includes optimizing the app, addressing any limitations, and more comprehensive evaluation of the system. Additionally, further research could investigate the development and use of blockchain in the healthcare industry