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Medledger – Blockchain Healthcare

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Abstract: *Healthcare systems generate a large amount of patient data, but accessing this data quickly and securely remains a major challenge. Traditional systems store medical records in separate databases, making it difficult to retrieve complete patient information when needed. This delay can cause problems, especially in emergencies where doctors require instant access to medical history for proper treatment. If a patient is in a different city and faces a medical emergency, retrieving their records can take time, leading to possible treatment delays or errors. Blockchain technology provides a better solution by offering a decentralized and secure way to store and access medical records. Unlike traditional databases, blockchain ensures that patient data is stored safely and cannot be changed or tampered with. By using biometric authentication and smart contracts, healthcare providers can quickly and securely fetch patient information without needing paperwork or third-party approvals. This helps reduce delays, improve data security, and make medical systems more efficient. The implementation of blockchain in healthcare involves designing a system that enables secure and instant data retrieval. This system's aspects include different blockchain models, encryption techniques, and seamless integration with existing medical infrastructure.*

Keywords: Blockchain in healthcare, instant data access, decentralized medical records, biometric authentication, smart contracts

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