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Akhilendra Pratap Singh; Nihar Ranjan Pradhan; Ashish kr. Kr. Luhach; Shivanshu Agnihotri; Nz Jha...

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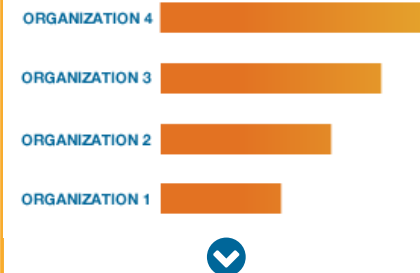
With the proliferation of Information and Communication Technology (ICT) in every walks of the society, including healthcare services; digitization and increased sophistication have been gaining pace. With increased patient volumes recording and management of patients data digital healthcare alternatives, particularly, Electronic Healthcare Record (EHR) has gained prominence. However, traditional EHR based systems are plagued by data loss risks, security and immutability consensus over health records, gapped communication among constituted hospitals, inefficient clinical data retrieval systems among others. Blockchain has been developed as a decentralized technology that holds the promise to address the aforesaid facilities in EHR based systems. This paper presents a patient-centric design of a decentralized healthcare management system with blockchain based EHR using javascript based Smart Contracts. A working prototype based on hyperledger fabric and composer technology has also been implemented that guarantees the security of proposed model. Experiments with the hyperledger caliper benchmarking tool provides performance of metrics such as latency, throughput, resource utilization and so on under varied scenarios and control parameters and the results affirm the efficacy of the proposed approach.

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