ABSTRACT

Health records are often stored in disparate systems that lack interoperability. This fragmentation impedes the seamless exchange of patient data between healthcare providers, leading to inefficiencies and potential security vulnerabilities during data transfers. With the increasing digitization of health records, the risk of data breaches and cyberattacks is a significant concern. Healthcare organizations face the challenge of protecting sensitive patient information from unauthorized access and malicious actors. The emergence of Blockchain technology as a transformative force across various sectors, notably healthcare, has ignited a paradigm shift in data management practices. Within the healthcare landscape, Blockchain networks have become instrumental in preserving and facilitating the exchange of patient data seamlessly among key stakeholders such `as hospitals, diagnostic laboratories, pharmacy firms, and physicians. This paper embarks on an exploration of the manifold applications of Blockchain networks within the healthcare system, emphasizing their pivotal role in enabling secure and transparent data exchanges. Notably, Blockchain applications exhibit an unparalleled capacity to accurately identify critical errors within the medical field, potentially averting severe and dangerous consequences.