

5 Ways Blockchain Is Revolutionizing Healthcare

The CEO of IBM once said that blockchain would do for trusted transactions what the internet did for communications. As far-fetched as this statement may seem, blockchain technology has the power to change countless industries in some very profound ways, including healthcare. Here are the top five ways that blockchain is revolutionizing how the healthcare industry does business.

Systems Integration

Blockchain, which is based on peer-to-peer shared ledger architecture, uses open-source software, readily available hardware and open APIs. When combined with and applied to healthcare, these technologies make it easier for medical facilities and practitioners to exchange data within the blockchain. Complex point-to-point integrations cease to be a requirement for data integration. Likewise, with blockchain system and data integration, everyone from patients to researchers and healthcare professionals are able to find accurate, timely and comprehensive patient data in one central location.

Access Control Management

The technology that makes blockchain possible can be used to gather data from a variety of sources, including wearable sensors, mobile applications and electronic medical records (EMRs). As a result, it can also be applied as an **access control manager** for health records that aren't directly stored on the blockchain ledger, like images and paper documents. Each transaction would contain a unique identifier, an encrypted link to the data and metadata that would aid in locating the data repository. Any changes made to the ledger would be reflected in every copy of the ledger held by members within the network and would include a built-in disaster recovery system. Data encryption and cryptography, both of which are already considered industry best practices, keep the data secure.

Personalized Health Care

With information available from multiple sources, highly personalized care is the next logical step. Such comprehensive care gives healthcare professionals the ability to analyze the risks and benefits of treatments for each individual patient, taking into account all relevant data, as well as patient feedback. In addition, **studies suggest** that patients are more likely to comply with medical recommendations when they know that they are based on their individual needs instead of generalized medicine. Data like that from blood sugar and blood pressure readings can be analyzed daily, allowing doctors to create increasingly specialized treatment plans based on real-world outcomes.

Real-time Data

Continuous real-time data is assured with blockchain technology. This information can dramatically improve clinical care and ER management software. While wait times and treatment in the US is sure to improve with these innovations, clinics and hospitals in countries with medical staff shortages could use real-time data to more effectively allocate their time and resources to patients who need it the most. Similarly, "smart" applications that

use blockchain allow for 24-hour monitoring, alerting healthcare providers when a patient reaches critical status, resulting in earlier preventative treatments.

Medical Staff Recruiting

High turnover and staffing shortages mean that medical recruiting is more challenging than ever before. However, blockchain has the power to make the process a lot simpler with a streamlined **healthcare applicant tracking system**. High costs and the operational redundancies that often accompany the verification of applicant credentials will soon be a thing of the past. Transcripts, certifications, work experience and even goal attainment are all traceable and verifiable with a high degree of confidence. Likewise, attracting top talent who are best oriented towards patient care is also easier as blockchain technology works matches only those who are a good fit both behaviorally and qualitatively.

Blockchain is poised to change the digital and transactional landscape for a number of industries, though few will be as thoroughly and positively impacted as healthcare. From improved data access and security to life-saving preventative treatment and exceptional talent recruitment, blockchain is already revolutionizing healthcare in ways that will ultimately improve countless lives.