



## Corda for Healthcare •

The healthcare and life sciences industries are facing increasing pressure to reduce costs, abide by stricter regulation, and deliver more personalized care. This is complicated by a lack of standardization, fragmented data exchange between insurers and hospital providers, susceptibility to data breaches, and limited transparency across supply chains. Though not a panacea, blockchain technology has the potential to remodel the collaborative exchange of data across disparate parties, eliminating third-party bottlenecks.

At R3, we operate at the center of a growing ecosystem of hospital providers, insurers, research organizations, pharmaceutical companies, cloud providers, medical device manufacturers, and system integrators who are building solutions to unlock the value of blockchain. They have chosen Corda because of its privacy features and ease of development. As an example, existing Corda based solutions seek to alleviate the millions of dollars spent on maintaining proper provider credentialing and to reduce the 3+ business days required for a prior authorization.

“As healthcare stakeholders seek real time information that integrates patients, providers, and caregivers, we see Corda as the optimal platform for deployment of smart contracts as part of our workflow solutions and have been users of the Corda platform since its inception.

**Rahul Sharma,**  
Co-founder & CEO, HSBLOX

# corda

## The only blockchain for business

**Corda** was designed to enable businesses and technology firms to build transformational applications that bring disparate organizations into sync, in real-time, over shared facts. It enables the seamless, immutable and secure transfer of assets and value between counterparties, while maintaining the highest levels of privacy and security.

Corda Enterprise, the commercial distribution of Corda open source, harnesses the unique features of Corda and provides enterprise support, security features, fine-tuned performance and high resilience for production environments.

Corda was designed with privacy, scalability and strong governance at its core—making it the perfect fit for businesses operating in complex and highly-regulated global markets. Corda’s consensus mechanism ensures transaction finality—one reason why it is the only platform deemed acceptable by leading security standards agencies such as the National Institute of Standards and Technology.

# Why Corda for Healthcare



## Privacy

Users share data on a 'need to know' basis. Participants across the value chain can connect and transact securely and efficiently with a single source of truth. Corda supports confidential identities and chain snipping, thereby reducing vulnerabilities stemming from storing patient PII on ledger. Corda can support zero knowledge proofs as and when the technology matures. We also enable hardware privacy-enhancing technologies such as Intel SGX.



## Scalability + performance

Corda can scale to address even the most complex and high-volume markets in production environments. In healthcare this is key as clinical data sets consist of large amounts of data, such as historical information from multiple parties.



## Interoperability

The Corda network ensures that parties can participate and transact freely across multiple business networks, each with their own rules and governance. Other enterprise blockchain platforms cannot allow multiple interoperating applications on the same network. Interoperability is critical for improved care quality and patient engagement.



## Integration

Corda integrates with most popular industry database technologies (Azure SQL, SQL Server, Oracle and PostgreSQL) for easy deployment. It is cloud ready for 'one click' deployment on the leading cloud platforms (AWS, Azure, etc).

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**“ We were very impressed by the privacy of data distributed across nodes on Corda, which we didn't see elsewhere.**

**Anthony Begando,**  
CEO, ProCredEx



## Healthcare use cases

### Healthcare Data and Asset Exchanges

The ability to create multi-sided marketplaces for the listing, trading, and instantaneous settlement of digital assets.

**Provider Credentialing:** Credentialing ensures that a healthcare practitioner can competently deliver patient care. **ProCredEx** created an exchange where verified credentials can be instantly purchased and traded as digital assets. Corda's data privacy and tracking of asset ownership verifies authenticity.

### Revenue Cycle Management

The use of smart contracts that enable transactions without the need for intermediaries and third parties. Smart contracts enforce business rules, enabling automation of processes, data sharing, and transaction processing.

**Episodic Payments:** Enable healthcare organizations to receive bundled payments from contracted insurers or employers and orchestrate episode workflows, including movement of funds and data to/from other post-acute providers. Smart contracts initiate and authorize episodes in real-time and care team notifications are broadcast on a permissioned basis e.g. Curablox. Curablox uses smart contracts in this way to provide a workflow solution for episode and payment administration.

**Prior Authorizations:** Used to authorize approvals from insurers prior to care delivery. Deterministic smart contracts codify insurers' rules and automate approvals in real-time.

### Supply Chain Transparency & Traceability

Blockchain can help enable end-to-end visibility across the supply chain. The ability to keep the same data across multiple nodes in a network prevents any manipulation of data or loss from downtime.

**Medical Device Safety:** Increasing regulation is driving stricter rules for the traceability and identification of medical devices. Unique device identifications (UDI) and quality control can be stored on ledger, giving regulators greater access into the lifecycle of any device and ensuring its ability to perform its intended use.

**Clinical Trials:** During trials, biological samples are collected from patients at various locations. Accurate administration of the chain of custody of these samples is critical to trial success. Blockchain helps automate receipt, reporting, and reconciliation of this data which is typically stored in centralized databases.



## Contact

Discover why Corda is the only software platform that delivers on the promise of blockchain for the healthcare industry. Visit [r3.com/contact](https://r3.com/contact).

[Learn More](#)

## About R3

R3 is an enterprise software firm that is pioneering digital industry transformation. We deliver purpose-built blockchain technology for all types of businesses in all industries.

Developed in collaboration with our ecosystem, our enterprise blockchain platform Corda is transforming entire industries by digitalizing the processes and systems that firms rely on to connect and transact with each other. Our blockchain ecosystem is the largest in the world with more than 350 institutions deploying and building on Corda and Corda Enterprise. Our customers and partners have access to a network of leading systems integrators, cloud providers, technology firms, software vendors, corporates and banks.

To ensure our customers derive the greatest value from their investment, we provide services and support to shorten time-to-market, as well as guidance on implementation, integration and building ecosystems based on a blockchain platform. Learn more at [www.r3.com](https://www.r3.com) and [www.corda.net](https://www.corda.net).



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