HEALTH FLOW

Empowering Care Coordination and Outcomes Through Secure, Patient Centric Design

Current state: Health data is scattered across electronic systems and locked in paper forms. This creates friction and leads to immense challenges for providers, systems, and most importantly **patients** to aggregate data into a **longitudinal patient record.** Getting to this longitudinal record is **critical** in the effort to **improve care coordination and care outcomes** at the patient level.

To address the friction in health data exchange and use, the HealthFlow Solution:
- Aggregates data from disparate sources via standards-based and custom APIs/connectors
- Processes and enriches data in alignment with clinical standards
- Packages and formats data for easy, secure exchange across entities
- Tracks exchange details and consent

HealthFlow provides the foundation for the patient-specific longitudinal record. Empowering patients through Blockchain-enabled secure data exchanges that are **Patient-driven.** Underlying these capabilities, HealthFlow incorporates **Distributed Ledger Technology (DLT) and Smart Contracts** to enable resilient and reliable **self-sovereign identity and consent management** for every patient in the HealthFlow system.

Intelligent Integration as a Service (I2aaS)

HealthFlow is designed from the ground up to provide a secure, resilient, and standards-aligned health data transformation and interoperable data exchange capability.

Combining advanced tooling with Natural Language Processing and Machine Learning (NLP/ML), the HealthFlow platform accelerates on-boarding of new partners and data sources, as well as management of change, through enhanced context discovery and automated information mapping, drastically improving accuracy of the data exchanged and reducing time to value.

As data is transported over the HealthFlow platform, native NLP/ML processing can facilitate identification and discovery of potential areas of concern by identifying and highlighting connections across previously disparate and disconnected data sources, be they structured or unstructured.

Data Security, Governance, & Monitoring

- Active HIPAA and GDPR-compliant design is core to the HealthFlow platform
- Advanced cryptographic protocols ensure that data is encrypted in transit and at rest
- Native distributed ledger technology provides an immutable record of all data sharing requests (approved and denied) and actively demonstrates the payload was delivered intact
- Privacy preserving machine learning techniques such as fully homomorphic encryption and secure multi-part computation provides enhanced value and security when dealing with competitive collaborators

HealthFlow Data Source & System Onboarding

The HealthFlow platform leverages advanced analytics capability, AI, Machine Learning and native Natural Language Processing to accelerate on-boarding of new partners and data sources, as well as management of change, through enhanced context discovery and automated information mapping.

This capability can reduce both the level of effort and time associated with standing up new exchanges, enabling organizational agility and enhancing care delivery.

As data sources are on-boarded to the platform, profiles are established and aligned to data use agreements and any constraints are noted, ensuring that information management processes are fully in compliance with applicable guidance.

Additionally, the HealthFlow platform is built to support industry standards of interoperability and comply with regulatory frameworks, such as HIPAA and GDPR, for transparency and control, providing a reliable, fully auditable record of all exchange transactions.

This transparency extends to all relevant stakeholders, including the data owner (patient) themselves, empowering a previously unavailable level of visibility into the sharing and use of your health data.
As patient data is requested, updated, and exchanged, HealthFlow leverages Distributed Ledger Technology (DLT) and Smart Contracts to automatically enforce data consistency and establish a patient-specific record for all transactions, creating a complete and correct picture of your health data history on the HealthFlow platform.

Patient and Provider Analytics and Reporting

Leveraging FHIR enabled and HIPAA compliant APIs, the HealthFlow platform fully supports integration with standards compliant Personal Health Records (PHR) Mobile Apps and patient portals to provide reporting on historical data exchanges and real time notifications of data exchange requests that the HealthFlow platform has supported for that specific patient's health data.

From a provider and system level perspective, the HealthFlow Analytics engine provides robust reporting capabilities on the type and nature of data that is exchanged, but also incorporates a consistently updated data health picture which can be leveraged to support organizational goals.

Complete Patient Visibility and Empowerment

HealthFlow was founded to support data transparency, enable patient engagement, and ultimately empower patients to take ownership of their own healthcare. We believe this is the only way to drive value based delivery and ultimately improve outcomes.

By aggregating data from the never-ending array of sources, processing it to increase value and align with standards, and packaging it for secure interoperable information exchange, HealthFlow provides the foundation for achieving a patient-specific longitudinal record.