

WHITE PAPER

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# The Evolution of EHR Interoperability

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With billions of structured and unstructured clinical data created every year, data is spread across various information systems, devices, and applications to access, exchange, integrate, and cooperatively use data in a coordinated manner. In this white paper, we will explore the challenges and progress of EHR interoperability and how to leverage AI capabilities to improve operational, clinical, and financial outcomes.

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## Healthcare, We Have a Problem

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**In this white paper we'll explore the challenges and opportunities that payers and providers have when it comes to EHR systems.**

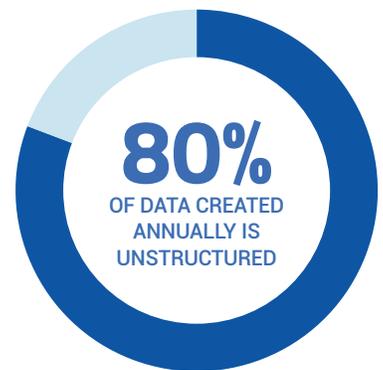
Healthcare has a huge data problem—the methods used to acquire and analyze data have not changed fast enough to meet the needs across the healthcare ecosystem. The number of different electronic health record (EHR) systems only seems to complicate this lack of interoperability even more—there are more than 100 different electronic EHR systems holding an estimated 4.1 million clinicians documenting patient care. Within these systems, nearly 80% of the data in the 1.2 billion clinical documents are unstructured data created annually, which comprises around 60% of all clinical data.

The unstructured data is largely locked—thus underutilized by payers and providers when managing and delivering care and creates further silos from EHRs, data warehouses, document management systems, and many others.

This lack of coordination has led to a variety of problems and much discord within the healthcare system.

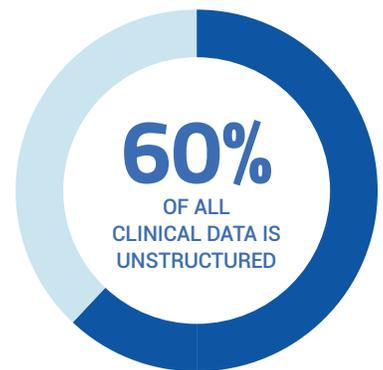
Apixio interoperability solutions enable bi-directional data sharing and leverage Apixio's AI platform to support payers and provider to meet their goals around value-based care.

**AN ESTIMATED 4.1 MILLION CLINICIANS DOCUMENT PATIENT CARE**



**FIGURE 1**

Nearly 80% of the data in the 1.2 billion clinical documents created annually is unstructured



**FIGURE 2**

Unstructured data comprises around 60% of all clinical data

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## Why This Matters

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**Today's challenge for data access creates obstacles that directly impact payers and providers operational, clinical, and financial performance.**

### OBSTACLES TO SUCCESS

#### **Operational**

The administrative burden for payers and providers can be difficult and time-consuming to manage and maintain the structured and unstructured data across multiple systems.

#### **Clinical**

Current interoperability barriers across EHR platforms result in inconsistent access to clinical information, which, in turn, gives way to provider abrasion. And has the potential to increase the risk of medical errors by not fully utilizing integrated clinical information.

#### **Financial**

Health plans are spending hundreds of millions of dollars for chart retrieval. In tandem, payers and providers can experience unnecessary duplication of medical data and increased labor costs due to redundant and time-consuming projects that can be addressed with an EHR interoperability solution.

## Efforts are Being Made

### With the help of legislation that supports interoperability standards, payers and providers are seeing some of these aforementioned pain points addressed.

In 2004, the Office of the National Coordinator for Health Information Technology (ONC) was created. One of the first endeavors of ONC was the planning and design of a National Health Information Network as a means to facilitate the exchange of electronic health information among providers and Health Information Exchange (HIE) entities. Not long after, the [Health Information Technology for Economic and Clinical Health \(HITECH\) Act of 2009](#) was introduced by the ONC. The HITECH Act provides Health and Human Services (HHS) with the authority to establish programs to improve health care quality, safety, and efficiency through the promotion of health IT, including electronic health records and private and secure electronic health information exchange.

In 2011, ONC created the Standards and Interoperability (S&I) Framework—a collaborative community of participants from the public and private sectors who are focused on providing the tools, services, and guidance to facilitate the functional exchange of health information.

In the next few years, legislation is enabling additional rules to help payers and providers improve the impact of their patient care with the use of interoperability. These regulatory changes under the 21st Century Cures Act with CMS Interoperability and Patient Access Final Rules to be enforced in 2021 and

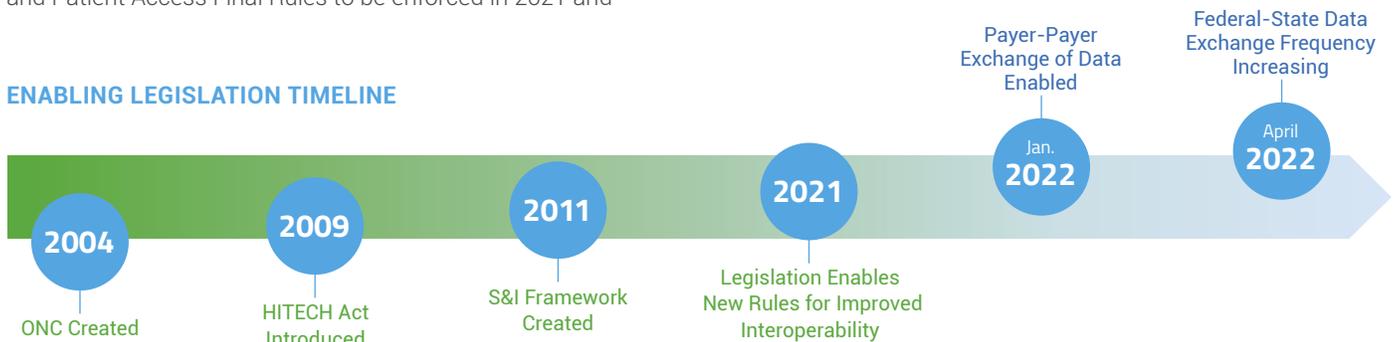
are enabling payer to payer exchange of data in early 2022 followed by an increase in the frequency of federal-state data exchange in Spring 2022.

While legislation is creating policies and rules to address the discord that occurs with the lack of interoperability, there is more that needs to be done to address these gaps. Part of what legislation is trying to address requires the standardization of programs and processes that allow for data to be leveraged and scaled.

With the utilization of new technology standards like Fast Healthcare Interoperability Resources (FHIR®) APIs, Health Information Exchanges (HIEs), and healthcare regulation with [CMS Interoperability and Patient Access Rule](#), data silos are being lowered and thus providing payers, providers, and patients with an improved data exchange process. But, there is still more room to improve.

Beyond the technology, networks are also being created to support and utilize interoperability in a scalable manner. By expanding their communications across systems, networks utilizing interoperability solutions can find, extract, and execute data in a timely and effective manner.

#### ENABLING LEGISLATION TIMELINE



## There are three key drivers that are helping to advance interoperability and the use of clinical information:

### 1 LEGISLATION

Legislative regulations/ requirements to support the flow and exchange of electronic health information.

### 2 TECHNOLOGY

Evolution of technology

- A. Access to cloud-based products and services
- B. EHR developer platform to enable access and integration
- C. Adoption of API standards from FHIR®, SMART on FHIR, CDS Hooks

### 3 DATA ACCESS

Streamline administrative and clinical data sharing and unlocks innovation to improve outcomes for patients, providers, and payers.

## Addressing the “more that needs to be done” is three-fold.

### 1 DEPLOY

Deploy a platform architecture that anticipates the business and data requirements. The platform must have trusted access and security measures.

### 2 DEFINE

Define a comprehensive interoperability and engagement strategy. The industry is continuing to move away from manual processes and utilizing more digital solutions.

### 3 DEVELOP

Develop interoperability expertise that can orchestrate a successful strategy. Partner with interoperability experts who have the know-how to expand your capabilities.



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## Enabling Interoperability with Apixio's InfoStream™

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### With our experience ingesting millions of charts across different EHR systems, Apixio expands our offering into supporting healthcare data interoperability with InfoStream.

Apixio's interoperability solution allows payers and providers for healthcare data acquisition and workflow integrations with major EHR vendors including Epic, athenahealth, Allscripts, NextGen, and others. By using the latest technology from FHIR APIs, proprietary EHR APIs, and HL7, InfoStream enables for digital chart retrieval along with EHR integration at the point-of-care.

- **InfoStream for Chart Retrieval** reduces the time for chart retrieval by automating access to medical records. The outcome is to improve access to clinical information to successfully execute key value-based initiatives. These initiatives include the use of information captured from InfoStream for risk score accuracy and quality measurements with a higher frequency of chart pulls to support risk adjustment and quality activities and streamlines chart retrieval for the better.
- **InfoStream for EHR Integration** supports Apixio AI-powered prospective solutions to present risk and care gaps directly integrated into the EHR workflow to streamline administrative tasks and improve patient care.

By using Apixio's InfoStream, we can help to reach your goals by leveraging technology to support value-based care activities in risk and quality.

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# AI-Powered Solutions for Forward-Thinking RA Programs

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**Apixio's Best in KLAS risk adjustment and quality solutions are built on patented AI technology that extracts targeted information relevant to HCCs from patient charts, claims, labs, EMRs, and more.**

## **APIXIO | HCC Identifier**

Our market-leading risk adjustment coding & QA solution that serves up targeted HCC coding opportunities for reviewers and provides powerful project management tools for coding managers

## **APIXIO | HCC Auditor**

Our proven RA auditing and compliance solution that scans claims and patient charts for unsupported HCC codes

## **APIXIO | Quality Identifier**

Our artificial intelligence (AI) solution that helps streamline the abstraction process and improve quality measurement accuracy

## **APIXIO | Care Analytics**

Our condition suspecting solution that provides a targeted chase list to providers to proactively address care and documentation gaps

## **APIXIO | Care View Pre-Visit**

Our AI-assisted pre-visit workflow solution that enables accurate and efficient care gap review to be pushed to providers at the point-of-care.



Visit our website to learn how Apixio can help you maximize your VBC program efforts.

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