



Shaping Healthcare Possibilities

A half-decade of innovation: CitiusTech and a major Blue Plan's leap into next-generation interoperability in care management

The largest Blue plan on the East Coast, with over 4 Mn subscribers, sought a solution that could utilize the clinical data effectively. The goal was to move beyond relying solely on members' claims data and manual chart chases and leverage clinical data to accelerate care gap closures and elevate their HEDIS and STAR ratings.

In a partnership exceeding 5 years and still going strong, CitiusTech played a pivotal role in the client's enterprise transformation journey. Central to this transformation was the seamless integration of clinical data from an array of EHRs and data aggregators.

CitiusTech architected a state-of-the-art clinical data store with robust interoperability, including advanced data parsing, the creation of a Supplemental Data Store, and a BI Dashboard for strategic decision-making. The solution prepared the client for new standards like FHIR, led to enhanced CMS STAR ratings, improved care gap closures, and brought \$10 Mn in annual savings.

CASE STUDY



**BUSINESS
CHALLENGE****Large volume of complex clinical data, heavy reliance on chart chases lead to inefficiencies**

As one of the East Coast's largest blue plan, closing over 6 Mn care gaps annually, the client recognized limitations in their current process. They relied solely on claims data for care gap closures while the clinical and supplemental data was untapped. This opened up opportunities for significant improvements in both care management and gap closures.

Enhancing their HEDIS and STAR ratings became a tangible goal through the effective use of their extensive clinical data, including CCDAs. However, this data, sourced from major vendors like MediVu, Athena Health, Availity, and Veradigm, posed challenges with its sheer volume and complexity.

The process of manual chart chases, each costing around \$30 to \$40 and involving lengthy turnaround times, was leading to substantial operational costs.

The vision was to develop an internal data store with clinical and other supplemental data to close care gaps efficiently - and there lay the major challenge. The CCDAs were a mix of structured, semi-structured, and unstructured data in large volumes, which required intelligent and powerful processing capabilities.

To address these challenges, the client sought a robust solution for effectively capturing and structuring clinical data from Providers and other data aggregators. The objective of transforming processes for deeper member data insights was geared towards achieving higher HEDIS and STAR ratings and growth. In this venture, CitiusTech's proven expertise and longstanding partnership in clinical data management and interoperability positioned them as the ideal solution partner.



THE SOLUTION

An integrated enterprise interoperability solution with advanced data parsing and analytics

By understanding the intricate challenges of clinical data, CitiusTech implemented a custom clinical parsing solution using the homegrown accelerator, DataScale. The CCDAs parser framework, originally developed using Implementation Guide 2012, was progressively upgraded to versions for 2015 and later to 2020. This enhancement, along with its ability to support various data formats, enabled seamless integration of CCDAs from four vendors – MediVu, Athena Health, Availity, and Veradigm – into the client’s enterprise data warehouse.

CitiusTech adopted a phased approach for the enterprise solution, continually enhancing each stage with the latest updates based on Data Quality (DQ) and Data Standardization (DS) feedback.

Phase 1: Ingesting CCDAs clinical data by adding parsing capabilities

The clinical data solution’s foundation involved HL7 CCDAs data parsing capabilities to capture 70+ sections of inbound CCDAs that included members’ clinical observations (procedures, diagnoses, vitals, etc.), and admission / discharge details from various clinical data vendors. The parsed data was mapped to the client’s clinical data schema and stored to setup a clinical data store. The data was then transformed to be utilized by downstream applications.

Phase 2: Developing a Supplemental Data Store (SDS)

Recognizing the need for a unified single source of truth to maintain data integrity, the team developed an SDS. It compiled external data like CCDAs, Labs/ORU, and Provider files, along with internal data from care management and medical record abstraction systems, as well as the Provider portal.

Phase 3: Data curation using HL7 Validator Engine

CitiusTech automated the process of identifying issues with structured and unstructured CCDAs data from new Providers during onboarding ensuring data completeness and accuracy before it is parsed.

Phase 4: Designed BI dashboard

CitiusTech designed a powerful BI dashboard empowering the client’s business team to identify contributions by Providers for care gap closures. The dashboard facilitated strategic incentives based



on Provider involvement in closures and helped quantify ROI from the ingested clinical data sourced from vendors / aggregators.

Phase 5: Ready to adapt to new standards

Anticipating the future, CitiusTech developed solutions for the following:

- Enabled the adoption of FHIR, the next-generation clinical data exchange format, facilitating the exchange of data between Payers and Providers across various stakeholders through standardized APIs.
- CMS' Payer to Payer exchange—enabling CCDA data sharing between the new and old Payer for the last 5 years.
- As part of the Blue Cross Blue Shield Association's Blue Card Modernization initiative, the team facilitated seamless data exchange and advanced communication among partnering Blues plans.
- CitiusTech developed a Unified View of Member Data, which involved matching incoming CCDA patient/member data with existing claims data before storage. This integration of claims and clinical data created a detailed, longitudinal member record, which was further utilized for processing HEDIS and Star measures.



BENEFITS DELIVERED

The implementation of CitiusTech’s solution yielded several significant benefits for the client. Here’s a summary of the key benefits:

- **Enhanced Ratings:** Achieved 4+ CMS STAR ratings for MA Plans.
- **Improved Care Gaps Closure:** Closed 100k gaps annually with CCDA parsing and 354k gaps with SDS, out of a total of 6 Mn.
- **Business Growth:** The Clinical Data Platform exceeded expectations across seven key HEDIS sub-measures, contributing to a 12% improvement in hybrid HEDIS measures.
- **Operational Efficiency:** Optimized and automated chart chase process, closing 10 times more gaps from CCDAs, avoiding 274,000 chart chases, and saving approximately \$10 Mn.
- **Strategic Decision-Making:** A Dashboard provided insights for strategic decision-making and incentivizing Providers based on their involvement.

In conclusion, CitiusTech’s enterprise interoperability solution addressed the client’s immediate challenges and set the stage for a future-ready healthcare ecosystem.

4+

CMS STAR
rating

~6Mn

CCDA’s processed
annually

10x

more care gaps closed from
CCDAs than chart data

\$10Mn

savings in chart
chases



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CitiusTech is a global IT services, consulting, and business solutions enterprise 100% focused on the healthcare and life sciences industry. We enable 140+ enterprises to build a human-first ecosystem that is efficient, effective, and equitable with deep domain expertise and next-gen technology.

With over 8,500 healthcare technology professionals worldwide, CitiusTech powers healthcare digital innovation, business transformation and industry-wide convergence through next-generation technologies, solutions, and products.

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