

Case Study: Healthcare

Geisinger and Cognizant Prove There Is Value in Building Interoperability Capabilities

New federal interoperability rules create opportunities to improve member experiences and outcomes when healthcare organizations go beyond compliance.

Geisinger has a long and successful record of developing innovative ways to serve the more than 1.5 million consumers in its markets. So it's no surprise the Danville, Pa.-based healthcare organization envisioned delivering new products and services based on the interoperability rules created by the Center for Medicare and Medicaid Services (CMS) and the Office of the National Coordinator (ONC).

At a glance

Geisinger Health Plan wanted to build innovative member-facing services and improve internal processes using the compliance requirements of new federal health data interoperability rules as the initiator. Cognizant worked with Geisinger to create a comprehensive interoperability implementation strategy, then designed and delivered a proof of concept (POC) application that validated the plan's proposed interoperability solution.

Outcomes

- Demonstrated real-time, standards-based member data delivery to third-party apps on-demand
- Included three HL7® FHIR® standard sources from a data warehouse
- Fully reusable components available from POC
- Alignment with corporate interoperability roadmaps

The challenge

These complementary rules call for the clinical and administrative data maintained by government health plan programs – including Medicare, Medicare Advantage, Medicaid, Children’s Health Insurance Program and qualified health plans – to be made digitally available by authorized apps on-demand. The rules also require health plans to make this data available to third party developers and other plans via an application programming interface (API). The goal is to give members quick and easy access to their clinical and administrative data.

In addition to meeting the January 1, 2021 interoperability compliance deadline, Geisinger wanted a strategy for expanding its interoperability compliance work to create new capabilities and services for its 600,000 health plan members.

The approach

Geisinger and Cognizant collaborated on a comprehensive interoperability strategy. The consulting and advisory project launched with a 10-week assessment coordinated by a team of Cognizant subject matter experts spanning multiple disciplines. The team’s expertise included program management, data management, the HL7® Fast Healthcare Interoperability Resources (FHIR®) standard, security and privacy, TriZetto products as well as functional and solution architectures. Working under aggressive timelines and dealing with the disruption of the COVID-19 pandemic, the Geisinger and Cognizant teams defined an interoperability strategy for meeting compliance requirements in the short term and developed a long-term approach to creating differentiated member experiences based on new interoperability capabilities. One objective was to ensure that Geisinger’s interoperability investments became a technology asset in the future.

The teams conducted education and visioning sessions to ensure Geisinger stakeholders understood the breadth of business processes and other operations affected by interoperability. This included identifying administrative and clinical data that must be orchestrated internally and

from vendors, working through the challenges of meeting the rule’s one-day data delivery requirement, understanding the terminology normalization requirements and supporting third-party developer constituents – necessary to delivering the API gateway.

Proving the business case for interoperability

To demonstrate the potential of interoperability and validate components of the Geisinger strategy, the teams worked to design and build a proof of concept that was a variation of the DaVinci Payer Data Exchange (PDeX) US Drug Formulary use case. The POC would demonstrate a Geisinger Health Plan member using a mobile app to view their demographic data, coverage information and current list of medications.

The teams developed the POC using the TriZetto® Connected Interoperability Solution, modular Software-as-a-Service (SaaS) interoperability products. The POC included three FHIR resources: US Core Patient Profile, Medication Request Bundle Resource and the Carin BB Coverage. To fully demonstrate the solution’s end-to-end capability, Cognizant developed a Test Mobile Application that supported login, authentication with the API gateway, API query for the member’s health information and presentation of the received information to the member.

The POC clearly showed the promise of interoperability, demonstrating the standards-based real-time digital communication of a longitudinal view of a member’s health information from a payer’s internal systems to a mobile app created by a third party. The FHIR-based API successfully tapped Geisinger backend data sources in addition to data elements in its TriZetto® Facets® platform. It proved the smooth technical functioning of all the solution components, the API gateway and the developer registration portal. It demonstrated how the application developer and application security processes – including app and member authorization and authentication capabilities – work in tandem to retrieve data using the FHIR-based API.

Building on compliance

The compliance strategy the Geisinger and Cognizant teams developed included implementation planning, developing the API gateway, data aggregation, terminology normalization, FHIR data mapping, member consent management processes, architecture design support, an orchestration hub and a requirements analysis. It also included high-level cost projections for actions required to achieve compliance and a great member experience.

In the next phase of the project, Geisinger and Cognizant teams plan to scale the POC into a production app for Geisinger's health plan members. Additional phases of the project will include implementing Geisinger's interoperability solution; Cognizant and Geisinger kicked this off in September.

“Cognizant thoroughly understood the interoperability rules and brought its technical and execution expertise to create a working proof of concept that shows the value interoperability can bring to the populations we serve.”

– **Bhaskar Chowdhury, AVP IT, Geisinger Health Plan**

About Cognizant

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