

# FHIRing up the cloud: liberating health information to drive interoperability

Edifecs replicated GuideWell's on-premise framework in the cloud to enable seamless and compliant access to healthcare data

## About Edifecs

For 24 years, [Edifecs](#) has been solving complex healthcare challenges, with the mission to improve healthcare outcomes, reduce costs, and accelerate innovation. Touching the lives of over 215 million people, Edifecs strives to build solutions that harness data into meaningful transactions, reduce operating risks, and scale value-based initiatives.

## About GuideWell

[GuideWell](#) is improving the cost, quality, and access of healthcare for its customers by applying broad industry experience to reimagine and reshape the future of health. In this spirit, GuideWell collaborates with, supports, and creates health companies with a broad range of health-related products and services that are integral and useful to people's everyday lives.

They say that information is power. Ensuring that patients, providers, and plans have easy and efficient access to patient information is essential to improving care coordination, treatment outcomes, and cost efficiency. But it's been notoriously difficult to construct a full picture of individual patients from siloed clinical and financial systems that store data in a myriad of different formats like HL7, CCD, CSV, JSON, XML, CPCDS, and NCPDP, among others. Moreover, as patients switch providers or health plans, their data becomes even more fragmented over time.

To address this problem, the US government is enacting the Interoperability and Patient Access final rule ([CMS-9115-F](#)) to ensure that patients can retain access to their data wherever their healthcare journeys take them. It requires all payers and providers servicing the national healthcare plans administered by the Centers for Medicare and Medicaid Services (CMS) to adopt the Fast Healthcare Interoperability Resources (FHIR) standard, thus laying the groundwork for secure data exchange.

With the deadline approaching in early 2021, healthcare organizations have started to bring their systems into compliance with the final rule. Edifecs, a healthcare interoperability vendor that works with most US healthcare plans, is offering to help. "Our primary focus is to deliver a solution for FHIR interoperability that's scalable and easy to deploy," explains Maxim Abramsky, Senior Director of Product Management at Edifecs. "The rule says that all health plan members need to have access to data about them, and FHIR is included as the only API mechanism to get access to the data."



### Building a FHIR interoperability solution

To optimize their solution, Edifecs sought guidance from their partner GuideWell, one of Florida's leading healthcare companies. GuideWell's on-premises [Blue Button 2.0](#) solution incorporates Edifecs software to facilitate interaction with the more than 40,000 providers in their healthcare network.

"We have a lot of different health solutions, as well as insurance businesses," says Amit Shah, Senior Director of Shared Applications/Service at GuideWell. "We needed help making the shift toward utilizing a FHIR-based API for real-time, bidirectional exchange of data between our provider offices, our clinics, and us, so we could give our members better care during their visits with a provider. We had an Edifecs platform for EDI transactions and decided to leverage their FHIR module to help with this particular interoperability."

While GuideWell's on-premises solution meets their needs, other healthcare organizations may find it challenging to replicate their approach. For one thing, on-premises deployments may take as long as six months and require significant investment in hardware and staffing expertise.

"GuideWell provided us with a lot of feedback and a lot of information on how to solve different business problems while being deployed on-premises," Mr. Abramsky says. For example, GuideWell showed Edifecs how to match members across different EMR systems when orchestrating payer-to-payer data exchanges. Such learnings helped Edifecs design an alternate solution, built on Google Cloud, for translating data from older, siloed systems into the compliant FHIR format.



Amit Shah, Senior Director of Shared Applications/Service, Florida Blue/GuideWell

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### The Google Cloud advantage

The Edifecs solution ingests terabytes of data related to patients or health plan members, then converts it into the FHIR format using out-of-the-box maps. After validating the data and removing duplicates, the solution moves the cleaned-up data into a FHIR repository. "Google Cloud has one of the best FHIR servers in the industry, which supports the most recent version of FHIR R4," Mr. Abramsky says. "GuideWell told us the precise number of terabytes of data we'd need to load, so we could mimic that load with Google Cloud engineers to confirm that their FHIR service could sustain it."

Because the Edifecs solution runs on Google Cloud, additional resources scale on demand, requiring minimal up-front configuration. "We were able to very rapidly deploy the Edifecs solution on Google Cloud and make it available on demand," remarks Mr. Abramsky. "When the amount of data increased, Google Cloud was able to just scale up."

The added benefit of converting data into FHIR format and storing it in a cloud repository, Mr. Abramsky says, is the access healthcare organizations gain to Google Cloud capabilities such as analytics reporting, Artificial Intelligence, and Machine Learning. "Once the data is loaded into the FHIR server, all that becomes instantly available to you versus on-premises, where you have to deploy and implement custom solutions."



Maxim Abramsky, Senior Director of Product Management, Edifecs

"With Google Cloud, the actual deployment took less than a day. If somebody comes in saying, 'Hey, we need the same solution but we need it tomorrow,' we can do that."

The cloud-based solution Edifecs built with help from GuideWell and Google Cloud demonstrates that healthcare systems and provider networks can quickly and easily deploy a HIPAA-compliant solution to meet the Blue Button 2.0 requirements from CMS. "With Google Cloud, the actual deployment took less than a day," Mr. Abramsky declares. "If somebody comes in saying, 'Hey, we need the same solution but we need it tomorrow,' we can do that."



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