



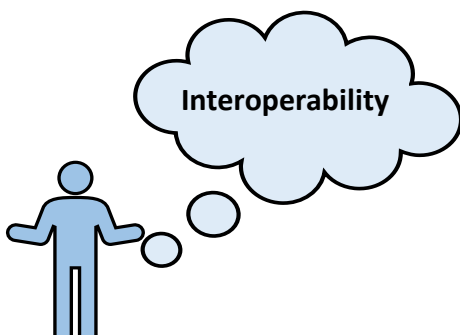
### Data Quality Improvement for Federal Enterprise HealthCare Client

In this Case Study in Data Quality Improvement, you will learn how a large federal healthcare organization dealt with the growing complexity of data and connections. By adopting a responsive integration architecture, the organization is now positioned to grow despite any changes to technical or legislative requirements. With hundreds of hospitals and thousands of clinics to manage throughout the USA, this government healthcare provider focused on delivering quality healthcare and metrics.

#### The Challenge

This client's Health Information Exchange network required analysis of massive amounts of incoming patient data from a growing variety of internal and external healthcare partners and providers. The new status quo had become unwieldy to manage and new data quality issues arose with increasing frequency. They realized that without the needed data quality work on incoming clinical data, the value of their longitudinal patient record would not be there.

Their data sets are both high volume and exceptionally diverse. Their legacy system could not consume the new types of incoming HL7 message files available. Neither could they easily analyze or validate the new incoming messages. Their existing integration tools comprised of custom legacy systems were incapable of handling the growing diversity of data feeds now required by the organization.



**A massive variety of data from diverse sources can bring high volume enterprises to the limits of their integration solutions.**

Interoperability is the ability of different information systems, devices and applications to access, exchange, integrate and cooperatively use data in a coordinated manner.

# Data Quality Improvement & Interoperability

First, we analyzed their interoperability requirements. Then we mapped their legacy systems to the fields in the newer HL7 message standards so they could implement the export and import of the newer standard HL7 messages. This greatly expanded the types of standard HL7 messages which could be exchanged by their legacy systems. The new messages started flowing in and out. Finally, we assessed the network traffic to check for bottlenecks. Now over 3 million patients and their external providers have access to more complete and accurate longitudinal patient records.

We then undertook a detailed examination of the incoming partner data and were able to trace down the root causes of data errors coming into their EHR system. We then worked diligently and diplomatically to communicate with and educate the external exchange partners on exactly how to improve the incoming data quality for various clinical domains.

We increased the interoperability of their data in both quantity and quality. If you want to assess the data quality flowing into in your organization or would like a free terminology or interoperability consultation with J P Systems, please go to [DQDoc.com](http://DQDoc.com) and schedule a free consultation with us. Please schedule a day or two in advance so we can make arrangements to have the staff available. Our free Clinical Data Quality webinar recording may be seen on the [DQDoc videos page](#).

**Better Data**

**Better Patient Care**

**Better Outcomes**



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On our DQ Doctor website, [DQDoc.com](http://DQDoc.com), we offer clients free consultations on our terminology, data quality and interoperability Healthcare IT services.