



## Laying the Groundwork for Data Interoperability, CMS Compliance and Future Innovations

*With the deadline for the CMS Interoperability and Patient Access final rule here, healthcare organizations can benefit from taking an open-source approach to data exchange*

The ability to seamlessly consolidate patient health information across different provider, payer and life sciences organizations has long been a challenge in the healthcare industry. But, the COVID-19 pandemic accelerated the industry's need to successfully collect and integrate pertinent health data, with the Centers for Medicare & Medicaid Services (CMS) issuing a final rule for Interoperability and Patient Access to promote more effective data exchange, with new mandates to be enacted by July 2021.<sup>1,2</sup> According to Atif Chaughtai, Senior Healthcare Market Leader, Red Hat, the final rule has created a sense of urgency around putting new interoperability capabilities in place.

"This rule is about data transformation," he said. "When you look at the value chain, there are a lot of different organizations involved in driving better outcomes for the patient. Having data interoperability ensures we have the right information available at the right time to make the best possible decision they can make for a particular patient at any moment."

Certainly, the CMS final rule isn't the only driver behind organizations wanting to improve their data integration capabilities. The U.S. Department of Health and Human Services Risk Adjustment Data Validation (HHS-RADV) program final rule was recently released, which has its own mandates surrounding data sharing. And, of course, having efficient access to data in real-time can also fuel clinical reasoning, patient engagement and prior authorization needs. When you put all these factors together, Chaughtai said, there is now ample impetus and opportunity for healthcare organizations (HCOs) to evolve the way they operate in the healthcare ecosystem, allowing them access to the kind of data that can transform both their clinical and business practices. But, time is of the essence – and HCOs need to put a strong transformation strategy in place now.

"Many organizations, thanks to mergers and acquisitions and other reasons, have patient data across a variety of different vendor systems that may not communicate well with another," he said. "So, it's important to look at the bigger picture when you look to drive compliance for these new mandates and lay down all the capabilities required to make them happen. It all starts with knowing what your security model is, where all your data resides and how that data can be accessed."

Chaughtai added that, once that groundwork has been completed, organizations can benefit from the use of open-source solutions. By treating data as an asset – and making it available as a service – HCOs can access the information they need without disrupting or reconfiguring architectural segments already built into the enterprise infrastructure. Intelligent data-as-a-service (iDaaS) offerings can help organizations facilitate the kind of interoperability required, making it easy for organizations to connect disparate data sources in a secure and standardized manner.



*“There are so many open-source projects that have transformed healthcare. ... They allow democratization of the data in healthcare, with the kind of standards that make data sharing possible. It breaks down all those locked-in data silos and accelerates the kind of data transformation needed to meet these interoperability and patient access mandates.”*

Atif Chaughtai | Senior Healthcare Market Leader | Red Hat

“There are so many open-source projects that have transformed healthcare like HL7,” he said. “They allow democratization of the data in healthcare, with the kind of standards that make data sharing possible. It breaks down all those locked-in data silos and accelerates the kind of data transformation needed to meet these interoperability and patient access mandates. When you use something like iDaaS, you can pull the data you need together, correlate it and then make it FHIR [Fast Healthcare Interoperability Resources]-conforming and expose it to a secure endpoint so you can access it where and when you need it.” In fact, Red Hat’s iDaaS open-source solution includes pre-built accelerators to help HCOs quickly meet several of the final rules’ specific mandates.

By putting a core open-source strategy in place, HCOs can lay a strong foundation for the use of artificial intelligence (AI) and machine learning (ML) tools to help them glean more insights from their data – and make such insights more actionable, Chaughtai added.

“The next step, for both payers and providers, is to use these AI/ML models on these data sets that offer more effective predictions they can use to provide better patient care,” he said. “For example, some organizations are particularly good at detecting COVID-19 from X-rays using AI/ML image processing. With this interoperability mandate, that algorithm could be shared across the healthcare marketplace so even more remote organizations, who don’t necessarily have that kind of expertise, can access this kind of algorithm to improve their patient care. There is a lot of opportunity in this kind of data transformation once you put these data sharing capabilities in place.”

## Interoperability’s big picture: Data transformation

While many organizations may be laser focused on strict compliance to the new CMS and ONC rules, Chaughtai warned it is important to also consider the bigger picture when it comes to interoperability – and use it as an opportunity for true data transformation to drive value.

**Think bigger.** This isn’t just about meeting the rules. As you develop a strategy, ask yourself if your planned solution will have the capability to add additional views of important data to drive knowledge and insights for future needs, without having to later make costly revisions to your data architecture or models.

**Stay flexible.** The COVID-19 pandemic has demonstrated the importance of agility in healthcare. Chaughtai recommends treating data as an asset – and making it available as a service. Microservices containers and cloud-based applications can help with such endeavors – as well as a more nimble open-source platform.

To learn more about how open-source iDaaS solutions can help improve interoperability and CMS compliance, watch [redhat.com/idaas](https://www.redhat.com/idaas).

### References

1. Goswami J. 2020. Interoperability for improved care coordination amid COVID-19. *Healthcare IT News*. Aug. 17. <https://www.healthcareitnews.com/blog/interoperability-improved-care-coordination-amid-covid-19>.
2. Centers for Medicare & Medicaid Services. 2020. CMS Interoperability and Patient Access Final Rule. Last updated July 17. <https://www.cms.gov/Regulations-and-Guidance/Guidance/Interoperability/index>.



### About Red Hat

As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat provides healthcare solutions for 100% of the Global Fortune 500 Healthcare companies providing innovative technologies and healthcare solutions that improve patient care. Learn more at [redhat.com/health](https://www.redhat.com/health).