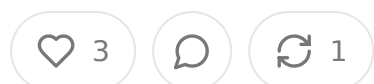


The Impact of HL7 Defunding on Healthcare Interoperability

MAR 16, 2025 • PAID



Share

Healthcare interoperability has long been recognized as a critical component in modern healthcare ecosystem, enabling the seamless exchange of patient information across disparate systems and organizations. At the center of this interoperability landscape has been Health Level Seven International (HL7), a non-profit organization dedicated to developing frameworks and standards for the exchange, integration, sharing, and retrieval of electronic health information. The recent defunding of HL7 represents a significant shift in the healthcare standards landscape, with far-reaching implications for healthcare providers, technology vendors, patients, and policymakers alike.

HL7 has, for decades, served as the backbone of healthcare data exchange, with its standards—particularly HL7 Version 2 messaging, Clinical Document Architecture (CDA), and more recently, Fast Healthcare Interoperability Resources (FHIR)—forming the foundation upon which modern healthcare information systems communicate. The organization's work has been instrumental in breaking down silos, improving care coordination, and enabling the analytics that drive quality improvement initiatives. The defunding of such a pivotal organization therefore raises important questions about the future of healthcare interoperability and the broader implications for healthcare delivery.

The defunding of HL7 did not occur in isolation but rather reflects broader shifts in healthcare funding priorities and approaches to standardization. While the specific circumstances surrounding the defunding decision remain complex, it is clear that the decision has generated significant concern among healthcare IT professionals, clinicians,

informaticists, and healthcare administrators who have invested heavily in HL7-systems and processes.

To understand the full implications of HL7's defunding, it is necessary to first appreciate the historical context of HL7 and its contributions to healthcare interoperability. Founded in 1987, HL7 emerged in response to the growing need for standardized approaches to healthcare data exchange. At that time, healthcare organizations were increasingly adopting computerized systems, but these systems often operated as isolated islands of information, unable to communicate effectively with one another. HL7 addressed this challenge by developing a series of standards that defined how healthcare information should be packaged and communicated from one party to another.

The early success of HL7 Version 2 messaging standards demonstrated the value of standardized approaches to healthcare data exchange. These standards provided a common language for healthcare systems to communicate, enabling the exchange of clinical data, administrative information, and financial transactions. As healthcare information systems became more sophisticated, HL7 continued to evolve its standards, introducing HL7 Version 3 and the Clinical Document Architecture, which offered more robust semantic interoperability.

Perhaps the most significant contribution of HL7 in recent years has been the development of FHIR, a modern, internet-based approach to healthcare interoperability that has gained widespread adoption. FHIR simplifies implementation while addressing the complex requirements of modern healthcare systems, and its RESTful API approach aligns well with contemporary web development practices. The adoption of FHIR has accelerated in recent years, driven in part by regulatory requirements such as those established under the 21st Century Cures Act in the United States.

Given the central role that HL7 has played in healthcare interoperability, its defunding raises important questions about the continuity of existing standards and the development of future standards. One immediate concern is the maintenance of existing HL7 standards, particularly those that are widely implemented across the

healthcare ecosystem. Without ongoing support from HL7, there is uncertainty about how these standards will evolve to address new requirements, security vulnerabilities, or technological advancements.

The defunding also raises questions about the governance of HL7 standards moving forward. Standards development organizations like HL7 provide not only technical specifications but also governance frameworks that ensure standards are developed through consensus-based processes with broad stakeholder input. This governance is critical for ensuring that standards meet the diverse needs of the healthcare community and maintain the trust of those who implement them. The absence of HL7's established governance processes could lead to fragmentation in the standards landscape, with different organizations potentially developing competing approaches to healthcare interoperability.

For healthcare providers who have invested significant resources in implementing HL7-based systems, the defunding creates uncertainty about the long-term viability of these investments. Many healthcare organizations have spent years and millions of dollars building interoperability infrastructure based on HL7 standards. The prospect of these standards becoming obsolete or unsupported creates significant operational and financial risks for these organizations.

Continued...

Technology vendors face similar challenges. Many healthcare IT vendors have built their products around HL7 standards, and these vendors now face uncertainty about the future direction of healthcare interoperability. This uncertainty may lead to hesitation in making new investments in interoperability features, potentially slowing innovation in this critical area.

Patients, too, stand to be affected by the defunding of HL7. Effective interoperability is essential for coordinated care, and disruptions to the interoperability landscape could impact the quality and safety of patient care. Patients have increasingly come to expect that their health information will follow them across different care settings.

and any regression in interoperability capabilities could undermine these expectations.

Given these concerns, it is worth exploring potential paths forward for healthcare interoperability in the absence of a fully funded HL7. One possibility is the emergence of alternative standards development organizations to fill the void left by HL7. While this could provide a path forward for standards development, it also risks creating a fragmented landscape with competing standards, which could ultimately undermine the goal of seamless interoperability.

Another possibility is the increased role of government agencies in standards development and maintenance. In the United States, for example, the Office of the National Coordinator for Health Information Technology (ONC) already plays a significant role in promoting interoperability, and could potentially take on more direct responsibility for standards development. Similarly, in other countries, national health agencies might step in to fill the gap left by HL7's defunding.

The private sector may also play an increased role in the future of healthcare interoperability. Large healthcare organizations and technology companies have resources and expertise to contribute to standards development, and may see strategic value in doing so. However, this approach raises concerns about the inclusivity of standards development processes and the potential for standards to be influenced by commercial interests rather than the broader public good.

Open-source initiatives represent another potential path forward. The success of open-source software in other domains suggests that collaborative, community-driven approaches to standards development could be effective in healthcare as well. The FHIR community, in particular, has already demonstrated the potential of open-source approaches in healthcare interoperability.

Despite these potential paths forward, the defunding of HL7 undoubtedly creates significant challenges for healthcare interoperability. The transition to new governance models will take time, and there is a risk of lost momentum in the

meantime. Moreover, the institutional knowledge and expertise within HL7 may be difficult to replicate in new organizations or initiatives.

The implications of HL7's defunding extend beyond the technical aspects of healthcare interoperability to broader issues of healthcare policy and regulation in many jurisdictions, regulations related to healthcare interoperability specifically reference HL7 standards. The defunding of HL7 creates a need to revisit these regulations and potentially develop new regulatory frameworks that are not dependent on HL7.

International coordination represents another challenge. HL7 has served as a global standards development organization, facilitating collaboration across borders and helping to align interoperability approaches internationally. The defunding of HL7 could lead to a more fragmented international landscape, with different regions potentially adopting different approaches to healthcare interoperability.

The timing of HL7's defunding is particularly significant given the increasing importance of healthcare interoperability in addressing contemporary healthcare challenges. The COVID-19 pandemic highlighted the critical need for effective data sharing across healthcare organizations, public health agencies, and researchers. Similarly, the growth of value-based care models depends on robust interoperability to support care coordination and outcomes measurement. The ongoing digital transformation of healthcare, including the adoption of artificial intelligence and machine learning, also relies on interoperable data.

As the healthcare community grapples with the implications of HL7's defunding, it is important to recognize that this challenge also presents an opportunity to reimagine healthcare interoperability for the future. The principles that have guided HL7's work—a commitment to consensus-based processes, a focus on practical implementation, and a recognition of the diverse needs of the healthcare ecosystem—remain valuable regardless of the specific organizational structures that support standards development.

The path forward will require collaboration among healthcare providers, technology vendors, government agencies, and other stakeholders to ensure that the progress made in healthcare interoperability is not lost. It will also require a commitment to addressing the evolving challenges of healthcare data exchange, including the need for semantic interoperability, support for emerging technologies, and robust privacy and security protections.

In conclusion, the defunding of HL7 represents a significant inflection point in the healthcare interoperability landscape. While the immediate implications create uncertainty and concern, the broader trajectory of healthcare towards greater connectivity and data sharing is unlikely to be reversed. The challenge for the healthcare community is to navigate this transition in a way that preserves the progress that has been made while continuing to advance the goal of seamless healthcare interoperability. The stakes are high, as effective interoperability is not merely a technical challenge but a fundamental requirement for delivering high-quality, coordinated, patient-centered care in the modern healthcare environment.



3 Likes • 1 Restack

← Previous

Next →

Discussion about this post

Comments

Restacks



Write a comment...