



Driving Change in Healthcare Today

By: Anna Schoenbaum, DNP, MS, RN, NI-BC and Valencia Payne, RN, BSN, MS

In this series, Driving Change in Healthcare Today, we will explore how implementing interoperability, Natural Language Processing (NLP), and standardized data collection practices can drive transformative change in healthcare organizations, from hospital enterprises to private practices. We will share insights into how these cutting-edge technologies and strategies can improve patient care and operational efficiency.

- **Implementing Interoperability**
- **NLP, Standards for Data Collection**
- **Data Analytics for Hospital Enterprises and Private Practices**

Blog #3

Introduction: Standards for Data Collection

In today's complex healthcare landscape, where every decision hinges on data, the need for standardized data collection practices has never been more critical. These practices lay the groundwork for accuracy, regulatory compliance, and effective data analytics, ensuring that patient information is not only collected consistently but also utilized to its fullest potential. As we venture deeper into a data-driven era, the significance of these standards becomes even clearer, particularly with the advancements in interoperability and Natural Language Processing (NLP).

Imagine a world where every healthcare provider, regardless of location, shares a unified understanding of patient data. Standardized data collection acts as a bridge, minimizing discrepancies and enhancing care coordination. By streamlining workflows and improving data exchange, healthcare professionals can access accurate and comprehensive patient information—ultimately leading to better outcomes and more informed clinical decisions.

In this blog, we will explore the goals and strategies behind standardized data collection practices. From ensuring accuracy in records to supporting robust analytics and maintaining compliance, we'll discuss how healthcare organizations can build a solid foundation for patient care. Join us as we uncover the essential deliverables for effective data collection and how they contribute to a more efficient, reliable, and patient-centered healthcare system. Together, we'll lay the groundwork for a future where high-quality data drives excellence in care delivery.

Standards for Data Collection – Building a Solid Foundation for Patient Care

Standardized data collection practices are essential for maintaining accuracy, supporting data analytics, and ensuring regulatory compliance in healthcare. These practices provide a consistent framework for gathering, recording, and utilizing patient information, which is critical in today's data-driven healthcare environment.

With advancements in data exchange interoperability and the development of Natural Language Processing (NLP), having standardized data collection practices is more important than ever. By promoting a shared understanding of patient information, standardized data collection powered by NLP minimizes discrepancies and enhances care coordination.¹ This approach not only streamlines clinical workflows but also improves data exchange, ensuring all healthcare professionals have access to accurate, complete patient information. Ultimately, this leads to better patient outcomes.

Goals and Strategies for Standardized Data Collection

1. Accuracy in Records

The integrity of patient care decisions is contingent upon the quality of the data that informs them. Consistent collection and recording of patient data are essential to mitigate errors and enhance the reliability of clinical decision-making. Implementing standardized templates and guidelines for data entry into Electronic Health Records (EHRs) is crucial in this regard, ensuring that no critical information is omitted.

2. Integration

Effective data utilization requires seamless integration across hospitals at local, regional, and national levels. A key component of this integration is maintaining consistent and accurate data formats as information moves between systems. By standardizing data collection, understanding the data being captured, and employing data mapping techniques, healthcare organizations can prevent discrepancies and ensure that information is transmitted in a uniform format. This approach safeguards the integrity of patient information, supports accurate clinical decision-making, and promotes efficient communication between departments and institutions, ultimately leading to better-coordinated and more informed care.²

3. Support for Analytics

High-quality data collection serves as the foundation for robust data analytics, enabling healthcare organizations to enhance patient outcomes, optimize operational efficiencies, and improve overall care delivery. Consistent data entry ensures precise reporting and reliable insights from analytics platforms, leading to more informed decision-making and strategic long-term planning. Many organizations are now turning to cloud solutions for their data analytics needs, leveraging the scalability, security, and cost-effectiveness of these platforms. By utilizing a highly reliable data analytics system, healthcare organizations can process vast amounts of data efficiently, ensure accuracy, and maintain real-time monitoring capabilities. This approach allows organizations to trust data-driven insights to guide clinical decisions, streamline operations, and continuously improve patient care.

4. Compliance

Adherence to standardized data collection practices is essential for fulfilling regulatory requirements and preparing for audits. By following established standards, healthcare organizations can ensure compliance with legal obligations while simultaneously safeguarding patient privacy. Regular monitoring and validation of data are required to maintain data integrity and meet regulatory expectations. This ongoing process not only protects against potential compliance issues but also helps to identify and rectify discrepancies in real time, ensuring that patient information remains accurate, secure, and reliable.

Deliverables for Standardized Data Collection

To build a robust and effective standardized data collection process, healthcare organizations should focus on the following key deliverables:

- **Data Collection Plan:**
Develop a comprehensive plan outlining how patient information will be collected across the hospital/health system, ensuring consistency, accuracy, and completeness. This plan should account for both structured and unstructured data sources, with clear guidelines to standardize the process of data capture.
- **Templates and Guidelines:**
Create standardized tools, such as forms, prompts, and workflows, to ensure uniform data entry at every touchpoint within the healthcare system. These templates should be accompanied by comprehensive training programs for staff, equipping them with the knowledge and skills necessary for proper utilization. This training is essential to maintain data integrity throughout the organization and to reinforce the importance of accurate and consistent data collection practices.
- **Governance Policies:**
Establish governance frameworks and policies to maintain data quality, ensure regulatory compliance, and drive continuous improvement in data management. This should include protocols for new data collection processes, guidelines for generating new reports, and policies governing data access to protect patient information. Regular monitoring of data collection practices, ongoing staff training, and validation of data and reports are essential to ensure accuracy and consistency. Additionally, these governance measures will help to adapt to evolving data needs and ensure that all stakeholders have appropriate access to the information they require.

To access the Data Automation Action Plan and other resources created by the HIMSS Clinician Burden Reduction Task Force, click [here](#) to access the Burden Reduction Task Force Toolkit.

References

White House Office of Science and Technology Policy. Blueprint for an AI Bill of Rights: Making automated systems work for the American people. 2022.

<https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf>

HIMSS, author. *Interoperability in healthcare*. [Updated on Sep 2023]. <https://www.himss.org/resources/interoperability-healthcare>.