
Navigating Data Governance Needs in the Age of AI and Real-Time Insights



Traditional approaches to data governance are inadequate in the era of artificial intelligence and abundant data. The sheer volume of data needed for AI, the complexity of AI models, and the privacy and regulatory challenges of handling large patient datasets demand reevaluation. An effective strategy involves focusing on how AI is utilised at the point of care. By prioritising governance that aligns with real-time clinical insights, organisations can adapt to the requirements of contemporary data management.

Strategies for Real-Time Insights and Enhanced Decision-Making

Empowering clinicians with real-time insights involves several key strategies. Firstly, it's crucial to provide clinicians with a longitudinal view of a patient's medical history and overall well-being. This includes access to past medical records, test results, treatment histories, and any relevant contextual information. Secondly, integrating AI-powered analytics into clinical workflows enables clinicians to make informed decisions quickly. This involves leveraging AI algorithms to analyse patient data in real time and generate actionable insights that support clinical decision-making.

However, it's essential to balance the need for timely insights with maintaining data privacy and security. This includes implementing robust data protection measures to safeguard patient information while ensuring that clinicians have access to the data they need when they need it. Integrating these functions seamlessly into existing applications is critical to avoid disrupting clinicians' workflows. Expecting clinicians to switch between different systems or interfaces can lead to interruptions and frustration, undermining the effectiveness of real-time insights.

Moreover, simply replicating existing interfaces is not sufficient. User-friendly dashboards that present AI-generated insights in an easily interpretable format are necessary. Augmented reality technologies can further enhance visualisation by providing 3-D representations of data, making it easier for clinicians to process complex information quickly.

The impact of real-time clinical insights can be significant, particularly for conditions with long diagnosis timelines, such as mental illness or Type 2 diabetes. By providing clinicians with timely decision support, real-time insights can help expedite diagnosis and treatment, leading to improved patient outcomes and reduced healthcare costs.

Modernising Data Governance for Real-Time Insights

Organisations aiming to implement an "Insights in the Moment" data governance approach must modernise their data management and governance strategies. This involves breaking down data silos and ensuring open access to standardised data. Governance efforts should balance traditional pillars like data quality, security, access, and lifecycle management with new considerations. One crucial aspect is adjusting usage permissions to account for clinical context, rather than solely basing them on roles. This ensures that clinicians have access to the appropriate data sets and decision-support tools based on their specific needs and locations within the hospital.

Contextual considerations extend to researchers as well, with varying data anonymisation practices depending on the research type and audience. Dynamic anonymisation and de-identification capabilities apply privacy policies contextually and can even generate synthetic data sets when necessary.

Modern governance is enhanced by advanced tools such as automated network and data monitoring, anomaly detection, and response mechanisms. These tools bolster security by restricting access to authorised entities at the right time, providing peace of mind, improving compliance, and satisfying cybersecurity requirements with an audit trail.

Ethical and Legal Foundations of AI Governance in Healthcare

Addressing ethical and legal considerations in data governance involves ensuring transparency and fairness in AI utilisation. Clinical teams must trust that AI models are transparent, trained on unbiased data sets, and designed to enhance rather than replace their decision-making abilities. The World Health Organisation (WHO) has issued guidance on AI governance, emphasising adherence to ethical standards and human rights for both clinicians and patients. This guidance covers the development and use of AI models, highlighting the need for governance, enforcement, and audits to uphold ethical principles. This may necessitate the establishment of new legal frameworks or regulatory bodies by governments.

The future of clinical data governance is a continuous journey marked by the need for adaptable policies. As AI capabilities and regulations evolve, governance must continually adjust to remain effective. While this can be challenging amidst competing priorities, dynamic policies foster a culture of continuous learning and improvement. Collaboration between governance, AI development, and clinical practices is vital for promoting AI adoption and maximising its benefits in real-time decision-making.

Source: [DHI](#)

Image Credit: [iStock](#)

Published on : Fri, 26 Apr 2024