



Data-Driven Healthcare: Better outcomes, lower costs

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THE CHALLENGE

In healthcare, balancing patient outcomes with value has become more challenging amid rising patient numbers, evolving treatments, and budget constraints. Data standards like GSI compliance, alongside spend analytics and inventory management, are essential tools that help healthcare providers deliver quality care, reduce waste, and improve efficiency.

THE IMPORTANCE OF GS1 AND DATA STANDARDS

GSI standards enable the identification, capture and sharing of information in a common format, streamlining processes and improving patient safety. GSI-compliant data enables consistent tracking of medical products, ensuring that medications, devices, and other supplies reach patients safely and efficiently.

Patient Safety Benefits

Standardised barcodes on medical products allow organisations to track items from manufacturing to patient use. This traceability reduces risks, like administering the wrong drug or using expired items. For example, a medication can be scanned before administration to verify dosage, expiration, and match with the prescription, enhancing the reliability of care.

Boosting Efficiency

GSI compliance also optimises operational efficiency. Hospitals rely on efficient supply chains to avoid critical shortages and minimize waste. GSI standards enable accurate, real-time inventory management, reducing costly emergency purchases and ensuring that necessary equipment is always available. Additionally, tracking medical supplies helps prevent losses due to theft, misplacement, or expiration, saving costs.

SPEND ANALYTICS: INFORMING HEALTHCARE PROCUREMENT

While GSI data standards track items, spend analytics turns this data into actionable insights, allowing organisations to see spending patterns, supplier performance, and opportunities for efficiency.

Importance of Spend Analytics

Healthcare procurement often suffers from fragmented processes, with departments purchasing at different price points. This lack of transparency increases costs and inefficiencies. Spend analytics provides a complete view of expenditure, identifying areas of overspending or duplicate orders, allowing organisations to negotiate better deals, reduce redundancies, and ensure value for every pound spent.

Reducing Clinical Variation

One of spend analytics' significant benefits is its role in identifying clinical variation—differences in treatment approaches for similar conditions across practitioners. While some variation is natural, excessive differences can lead to poorer outcomes and higher costs. Spend analytics highlights variations in medical product and drug usage, helping standardise practices, reduce unnecessary costs, and improve patient outcomes.

■ INVENTORY MANAGEMENT: OPTIMISING RESOURCES

Effective inventory management is another pillar of delivering high-quality, cost-effective care. Healthcare inventory includes medical supplies, diagnostic equipment, and even PPE.

Reducing Clinical Variation

Accurate inventory management ensures necessary resources are available without excess. Overstocking leads to expired products and waste, while understocking risks patient care delays. Advanced inventory systems, integrated with GSI standards, provide real-time visibility into stock levels, usage, and expiration dates, allowing for better demand planning and reduced last-minute purchases.

For instance, a surgery department benefits from knowing exact surgical kit availability, location, and reorder needs, avoiding critical shortages and enabling precise forecasting.

Reducing Costs and Supporting Sustainability

Combining GSI standards for tracking with spend analytics for purchasing insights reduces manual inventory checks, lowers stock holding costs, and minimises waste. These efficiencies lower costs and ensure that resources go where needed most, enhancing patient care. Effective inventory management also supports sustainability, a priority for many healthcare organisations. By reducing overstock and waste, providers cut costs and lessen their environmental impact, aligning with green procurement goals.

A UNIFIED APPROACH TO HEALTHCARE IMPROVEMENT

The integration of GS1 standards, spend analytics, and inventory management maximises efficiency and supports patient-centred care. When combined, these tools provide real-time visibility into inventory and data-driven insights from spend analytics, enabling proactive decision-making and agility in response to changes.

Investing in Technology

While the infrastructure required for GSI compliance, advanced analytics, and inventory management may seem costly, the return on investment is evident. Healthcare organisations adopting these tools can significantly reduce operational costs, enhance patient safety, and improve care quality.

CONCLUSION

Achieving the best patient outcomes at the best value extends beyond clinical care. GSI standards ensure safety and traceability, spend analytics informs procurement efficiency, and inventory management ensures resources are available when needed. Together, these components help healthcare providers optimise operations, reduce waste, and deliver quality care sustainably.

The future of healthcare lies in leveraging data and technology to build efficient, transparent, patient-focused systems, with GSI standards, advanced analytics, and effective inventory management as essential steps on that journey.



