GHX

Healthcare Supply Chains: **Six Priorities of High-Reliability Organizations**

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Introduction

"High reliability" refers to an organizational mindset and set of principles that prioritize and consistently achieve exceptionally reliable performance in high-risk and complex environments. From airlines to emergency services, high-reliability organizations (HROs) are characterized by their ability to operate effectively and safely in complex, high-risk situations with a high potential for errors and catastrophic failures.

In today's healthcare landscape, hospitals leaders must actively seek innovative approaches to enhance financial performance by minimizing costs and reducing waste. Adopting a high-reliability mindset in supply chain operations is emerging as a strategy for ensuring long-term financial health and supporting Cost, Quality, and Outcomes (CQO) initiatives.

Additionally, there are supply chain considerations pertaining to sustainability and social responsibility, including item-level details like packaging, waste management and eco-friendliness. Moreover, there is a focus on evaluating how vendor relationships align with the values of the communities the supply chain serves.

This report examines the value of the high-reliability mindset within healthcare and highlights six critical priorities that high-reliability supply chains must address to build financial resilience while concurrently meeting CQO objectives.

Five Characteristics of High-Reliability Organizations

Preoccupation with failure	Identify and address potential threats before they escalate
Reluctance to simplify	Recognize that there may be multiple factors contributing to a problem
Sensitivity to operations	Learn from the experiences of those directly involved in day-to-day activities
Deference to expertise	Base decision-making on expertise and experience rather than hierarchy alone
Commitment to resilience	Analyze failures and successes to extract lessons for future performance improvement

The Need for **High-Reliability Supply Chains**

As healthcare leaders seek innovative strategies to bolster their organizations financially, the spotlight is turning towards optimizing supply chain operations. Adopting a high-reliability mindset is a key component in building financial resilience.

The Intersection of Cost, Quality and Outcomes

Supply chain operations play a pivotal role in CQO initiatives. Efficient supply chain management ensures that hospitals have the right products available when needed, minimizing waste, reducing costs and supporting optimal patient outcomes.

In response to recent healthcare events and disruptions, one way that health systems are actively seeking to mitigate risk is by adopting multisource contracts and engaging diversified vendors. This expansion of vendor partnerships also entails an increase in contracts, items and prices to oversee.

By integrating with clinical and operational processes, supply chain can identify and implement value-based purchasing decisions, promote standardization of equipment and supplies, and negotiate better pricing and contracts with vendors. Furthermore, a robust supply chain helps reduce product-related errors and ensure that safe, high-quality products are used.

High-Reliability Performance in Uncertain Times

The role of the supply chain in HROs extends beyond procurement; it plays a crucial part in maintaining operational reliability and compliance, serving as a safeguard against variability and unpredictability. A well-managed supply chain minimizes variation by ensuring the timely availability of the right supplies and equipment, thereby supporting consistent adherence to patient care protocols.

Moreover, by diligently monitoring inventory, tracking product performance and promptly addressing potential disruptions, a high-reliability supply chain helps to anticipate and adapt swiftly to issues. This proactive stance ensures that frontline care providers have access to the necessary tools and resources, maintaining the highest standards of patient safety and care quality.

Defining CQO: A Holistic View

Cost: All costs associated with delivering patient care and supporting the care environment

Outcomes: Financial reimbursement driven by outstanding clinical care at the appropriate costs

Quality: Patient-centered care aimed at achieving the best possible clinical outcomes

Six Priorities for High-Reliability Supply Chains

These six priorities highlight areas where operating challenges can be turned into opportunities to foster a high-reliability supply chain. Underscoring the critical need for proactive planning, risk management and sustainable practices, they address the complex interplay of economic considerations, sustainability and social responsibility that extend beyond mere procurement.

The Six Priorities at a Glance

1. Broaden spend under management

Realize savings by applying supply chain discipline to purchasing activity across every category of spend.

2. Shape demand

Drive preferred purchasing behavior by informing and empowering requesters to make the best decisions.

3. Ensure rigid formulary control

Enforce compliance from the front end of the procurement process and orchestrate demand in response to disruptions.

4. Improve data integrity

Ensure the accuracy and completeness of the data by improving master data management workstreams.

5. Drive efficiency through automation and integration

Leverage technology to enable the flow of data across the supply chain ecosystem.

6. Become a data-driven supply chain

Provide actionable decision support by engaging organizational participation to achieve performance objectives.

Priority 1: Broaden Spend Under Management

Hospital supply chain leaders are increasingly expected to play a more active role in a broader range of procurement categories. This expansion includes nontraditional categories, historically managed by consuming departments, now requiring supply chain involvement due to demand variability and the complexities of aligning contracts with invoice amounts.

Challenges and Opportunities for Improvement

Expanding control empowers the supply chain to influence spending across various pathways and categories in multiple settings. The key objective is to instill discipline and drive savings across all spend categories, extending beyond finance to include considerations for supplier diversity, sustainability, risk, compliance and service levels.

Technologies that Support Greater Spend Under Management

Examining nontraditional spending categories necessitates adoption of new implementation models. Modern self-serve procurement solutions address workflow nuances, standardizing and centralizing control for services, pharmacy purchases and capital equipment.

To streamline, the supply chain can define standardized forms for each purchase category, specifying data attributes and controlling vendors. Increased supply chain involvement in nontraditional spending procurement guarantees optimal control and oversight for a perfect order — the right item, from the right vendor, at the right price.

The GHX Marketplace Solution

As a single purchasing gateway for all clinical and nonclinical supplies and services, GHX Marketplace directs users' search and purchasing activity to the preferred sources at the right price, helping to ensure drive perfect orders.

Non-Traditional Procurement Categories

Pharmacy

Purchased Services

Durable Medical Equipment

Capital

Research

Lab Supplies

Priority 2: Shape Demand

Health systems typically purchase tens of thousands of items annually, with most requesters unaware of the supplying vendor or the contracted price. While a common practice is to store item details and prices in the ERP item master, this method covers less than half of the overall purchase volume across the industry.

Hospital supply chain management must direct preferred buying decisions on thousands of purchasing decisions being made every day, while at the same time helping requesters feel empowered with information that they are making the best choices for a compliant supply chain.

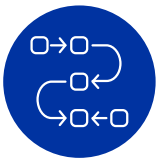
Orchestrating Demand Empowers Requesters to Make the Right Choices

The supply chain's value lies in guiding and influencing every purchasing decision. By coordinating demand, it aligns approved formularies with users based on role, location and permissions. Requesters are presented with preferred options that align with clinical, operational, and financial objectives. This ensures users get an approved item, sourced from the contracted vendor, at the compliant price and terms.

Supply chain teams often need to swiftly redirect demand to alternative items or supply sources. Contract conversion is another scenario where more cost-advantageous or lower-priced items can seamlessly substitute at the point of service. This redirection is valuable in instances of discontinued or recalled items, allowing requesters to opt for approved, functionally equivalent alternatives.

The GHX Marketplace Solution

GHX Marketplace shapes purchasing decisions by influencing the search results being presented to each requester. By displaying preferred options higher in search results, the supply chain can influence requesters toward preferred options, thereby directing spend to contractually compliant and cost optimized options during the procurement process.



Priority 3: Ensure Rigid Formulary Control

Rigid formulary control entails standardization in supply chain management as well as standardization of suppliers, items and prices to ensure coverage limiting rogue options and centralizing purchasing channels. Each dollar of clinically aligned and compliant spending channeled through the supply chain represents an opportunity to streamline healthcare, positively impact patients and families, and manage costs.

Eliminating manual sourcing workflows mitigates the risk of introducing unvetted or counterfeit items during patient care. This control is particularly crucial for swiftly addressing product shortages or supply disruptions, providing a streamlined workflow for contract conversions. Simultaneously, it maximizes anticipated negotiated savings throughout the contract lifecycle, contributing to the overall efficiency and reliability of healthcare supply chains.

How Formulary Control Works

Formulary control allows supply chains to guide requesters through a directed buying journey, steering purchasing behaviors toward cost-saving objectives. Additionally, formulary control accommodates specific clinical preferences and ordering thresholds without compromising contracted commitments.

Once item formularies gain approval across clinical, operational, and financial functions, requesters need a unified procurement workflow to ensure they can easily order approved, preferred items from contractually compliant and cost-optimized product options in real time.

The Pivotal Role of Value Analysis

Formulary control requires the active involvement of value analysis to assess the efficacy of products, sourcing professionals to manage supply channel risks, and contracting teams to align contract coverage across the demand footprint. **Find out more about GHX value analysis solutions here.**

The GHX Marketplace Solution

GHX Marketplace's Virtual Item Formulary enables supply chain leaders to control purchasing compliance from the front-end. Item formulary management and advanced search filtering logic in a modern, intuitive ecommerce platform not only helps ensure that the right item is purchased from the right supplier but that the right price is applied — even if it varies by location and application.

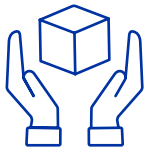
Priority 4: Improve Data Integrity

The supply chain serves as the as the entry point and gatekeeper for data flowing between internal and external stakeholders. The challenge arises from the substantial volume, velocity and variability of item and price data in healthcare, often leading to off-contract purchases during requisition and undermining the anticipated savings from contract negotiations.

The struggle to achieve accuracy or compliance in the requisition process can be attributed to (1) disparate data storage, (2) data not aligning with preferred vendors and (3) frequent data changes. Data integrity is strengthened by improving master data management workstreams to ensure accuracy and completeness. Operational efficiencies are gained through end-to-end integration of the data and by enforcing data quality across the transaction lifecycle.

Prescriptive Actions

Despite these challenges, there are clear actions supply chains can take to help improve data integrity:



Engage trading partners to be stewards of their own data – or, perhaps, even make it a contractual condition.

Adopt standards by creating a common language with trading partners and GPOs to ensure that data can be matched and attributed.

Operationalize contracts to enable dynamic price synchronization across the procurement workstream. Operationalizing a contract makes it purchasable and linked to activity in the vendor purchase transaction.

The GHX Marketplace Solution

GHX Marketplace integrates with GHX's ecosystem of expertly enriched and validated supply chain data to help bridge the gap between all data assets, improving data quality, increasing compliance, and delivering perfect orders.

Priority 5: Drive Efficiency Through Automation and Integration

Given how fast and frequently supply chain data changes, it must be connected to a single source of truth. Supply chain data management proves challenging due to three key variables: (1) volume, (2) velocity and (3) variability. The limited availability of reliable data and the lack of interoperability between trading partners often result in gaps between reality and the promise of clinical integration.

Supply chain automation involves utilizing technology to operate, manage, and monitor processes with minimal human intervention. The goal is to complement human workers, informing their decisions and streamlining manual tasks without replacing them.

Maintaining Accurate Price Data

Maintaining price data is challenging because there are, on average, 800,000 contract condition changes per day, six million price changes in GPO healthcare portfolios annually, 1,200 contracts per provider on average, and over 40,000 new items being introduced to providers every six months.

Achieving operational efficiency hinges on the interoperability of supply chain data across external partners and internal clinical, financial, and operational systems. Maintaining data agnosticism and autonomy between data publishers and subscribers is crucial. Embracing industry initiatives related to item identification (UDI, GTIN, etc.) and classification standards (UNSPSC and HCPCS) can be a critical enabler in this process.

Addressing Automation and Integration Challenges

Achieving efficiency through automation and integration faces challenges:

- **Complex contract and item landscape:** Healthcare deals with a multitude of contracts and items, surpassing other industry verticals and there is often no standard definition between physical and virtual items.
- **Technical hurdles:** ERPs systems are not data enablement platforms for mastering item and price data, presenting challenges in onboarding, transforming, and sharing data.

To overcome these challenges, supply chains should use purpose-built technology to facilitate the seamless flow of data across systems. Furthermore, as suppliers are brought on board, supply chains need to be flexible in adapting to the capabilities of their trading partners, striving for harmonization without imposing rigid terms of engagement.

The GHX Marketplace Solution

GHX Marketplace is complementary to ERP systems, like Oracle, Workday, and Infor (Lawson). The platform extends the value of ERP investment and fills the gaps in usability, data interoperability, and workflow automation.

Priority 6: Become a Data-Driven Supply Chain

To drive necessary improvements, supply chains must deliver the right data to prompt the right actions. Transparency across organizational boundaries should reinforce positive behaviors and outcomes, while also prompting corrective actions when partners negatively impact operations, all backed by valid data-driven evidence.

One approach is to shape future demand and identify corrective actions based on past results. Supply chains should track trends over time to demonstrate progress and understand how myriad small decisions influence long-term performance.

Consider a common objective like improving contract compliance. By refining formulary management, supply chains can shape demand at the point of care, directing purchasing activity to preferred sources at the contracted price. The emphasis should shift from rectifying errors at the back end (invoice) to getting it right at the front end of the procurement cycle.

Aligning spending activity with ESG and diversity priorities requires informing purchasing decisions and tracking how enhanced transparency enables requesters to modify behavior for incremental change. Rather than seeking "big bang" solutions, the focus should be on every decision, influenced by available information, contributing to desired outcomes.

The GHX Marketplace Solution

As the healthcare supply chain evolves, GHX is a leader in digital transformation with solutions that span care points, spend categories and the procure-to-pay cycle for a next-gen supply chain.

GHX aims for 100% automation of invoices and payments, leveraging an AI-driven platform to dismantle data silos. The goal is to empower supply chains as strategic enablers focused on informed, cost-effective decisions tailored to each patient's needs.

Conclusion

The six priorities outlined for high-reliability supply chains provide a comprehensive roadmap for healthcare leaders and supply chain professionals and implementing them can be critical for building financial resilience ensuring sustainability and achieving success in CQO objectives.

The next step for supply chains to become an HRO involves a strategic focus on implementing these priorities. This includes investing in technologies that support greater spend under management, orchestrating demand to guide purchasing decisions, enforcing rigid formulary control, enhancing data integrity, embracing automation and integration, and fostering a culture of data-driven decision-making. Collaboration with trading partners, adoption of industry standards and a commitment to continuous improvement are crucial aspects of the journey toward high-reliability supply chains.

» Visit **ghx.com/marketplace** to learn more about how GHX can support the six priorities for high-reliability organizations.