

Hospital Impact—How Main Line Health chipped away at supply chain costs

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The supply chain has long been a prime cost-reduction target for hospital and health system leadership.

It represents close to a third of a hospital's overall operating expense, and it's predicted to surpass labor as a hospital's greatest expense by 2020, according to a blog [post](#) from Definitive Healthcare. This focus has intensified as provider operating margins continue to dwindle and as the pressure rises to reduce costs while maintaining quality.

Even with the ongoing efforts to reduce supply costs and streamline supply chain processes, a new [analysis](#) from Navigant suggests U.S. hospitals could cut billions of additional dollars from their supply chain budgets, without affecting quality.

According to the study, hospitals nationwide could reduce their supply expenses by an average of 17.8%. This equates to an annual cumulative savings of \$23 billion, or \$9.9 million per hospital—funds that an individual hospital could spend to, for example, employ 150 nurses a year, or purchase 4,000 cardiac defibrillators or five da Vinci robots.



Rob Austin

A deeper dive into the data reveals additional noteworthy results:

- Lower supply spending isn't negatively impacting quality, with hospital-acquired condition and value-based purchasing scores slightly better at facilities with more efficient supply expenditures.
- Savings opportunities exist for all types of hospitals and are relatively equal across characteristics such as hospital size, regional location, and whether facilities are urban or rural, for-profit or not-for-profit, or system-based or standalone.

Learning from the leaders

The study suggests that the top 24% of 2,331 hospitals analyzed could spend \$23 billion less on supply chain products and related operations, processes and procedures. This begs the question for the remaining 76% of hospitals: what are the strategies top performers are implementing to efficiently manage supply budgets while maintaining high-quality outcomes?

It's no secret that healthcare lags behind other industries when it comes to using evidence-based data to drive successes. Yet this is exactly what top performers are focusing on: leveraging data analytics to reduce variation in pricing, product usage and clinical outcomes. With this information, hospitals are better equipped to:

- **Engage physicians** to help support strategies that standardize use of implantable devices proven to produce clinically equivalent outcomes at a lower cost.
- **Consolidate suppliers and contracts** for like items, particularly with products needed for routine procedures.
- **Optimize utilization** of the type and frequency of products used, based on specific patient circumstances and cases.
- **Automate technology**, such as requisitions, purchase orders, invoices and other manual supply chain processes that can lead to documentation errors.

Main Line Health, a five-hospital health system based in the western suburbs of Philadelphia, was focused on reducing variation when it set out to develop a sustainable model to bend the Medicare cost curve while maintaining high-quality outcomes.

Guided by the Institute of Medicine's STEEEP principles (STEEEP represents six aims for care delivery: safe, timely, effective, efficient, equitable and patient-centered), Main Line Health deploys a "systemized" approach for reviewing products, services and technology across its five hospitals. The goal: optimizing patient outcomes while reducing unnecessary utilization.

Key to the approach is the system's clinician engagement process, which focuses on using actionable data and proven best practices to determine the optimal types of products to use and associated contracts, based on a combination of cost and clinical outcomes.

Take antibiotic bone cement, which is commonly used in orthopedic procedures such as hip and knee replacements. After analyzing clinical evidence supporting limited use of antibiotic cement based on surgery type, Main Line Health's supply chain and executive leadership engaged their physician partners to standardize appropriate utilization across the system. The result was an 80% reduction in antibiotic bone cement use, leading to 45% savings—all with clinically equivalent patient outcomes.

It's clear that many hospitals have the appropriate strategies and processes in place to improve supply chain efficiencies while continuing to offer the highest levels of care. Health systems with the highest performing supply chains have been able to combine strong data analytics, collaborative clinician engagement and deep subject matter expertise to drive care delivery improvements to the benefit of the communities they serve.

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