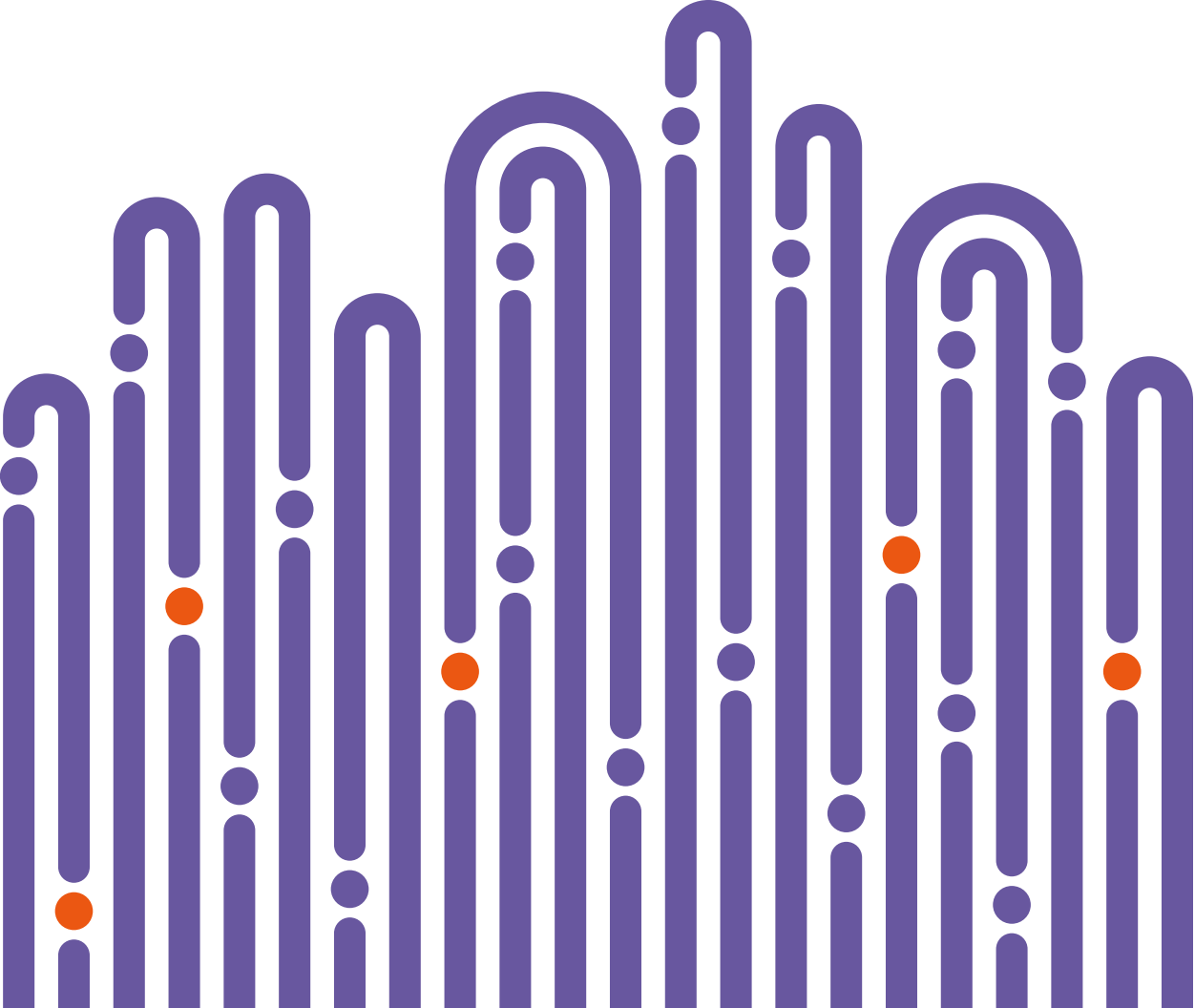


Efficiency unchained:
moving beyond price
improvement to supply
chain operational excellence



Executive summary

Health care organizations urgently need to venture beyond price improvement to focus on efficiency. To achieve operational efficiency, health systems must support the core functions of sourcing and contracting, procurement, inventory management, and distribution with the infrastructure of a cohesive strategy, clean data, knowledgeable experts, functional technology, effective suppliers and aligned leadership. With this infrastructure in place, health systems can effectively take on the challenge of addressing the category that represents up to 40 percent of their operating budgets: supply chain expense.

Reducing product pricing is often the starting point for cutting costs. But price improvements alone often will not deliver the totality of savings health systems need to stay healthy. Supply chain managers must be able to pull negotiated pricing through the entire supply chain to the point of purchase to actually implement the savings. In addition, supply chain managers must identify areas of high labor or wasted effort that can be targeted

for improvement. Thus, the focus on making operations more efficient is greater than ever. When implemented correctly and tracked with appropriate key performance indicators (KPIs), operational efficiencies can lead to sustainable cost reduction for health systems.

This white paper introduces an efficiency framework and the various points within supply chain that can benefit from improved efficiency. In addition, the efficiency framework points to the critical components of an efficient supply chain.

Consider this: approximately 37 percent of all health system purchasing transactions are truly automated, which means that 63 percent are manually transacted. That 63 percent translates to staff within the health system calling, emailing and sending faxes to place orders and then manually seeking confirmation on these orders to ensure their organization receives critical supplies at the negotiated prices. Think of how many operational efficiencies are missed within these numerous manual instances.

Efficiency defined

We recognize efficiency when we see it. But we also know that efficiency means different things to different people—particularly when it comes to health care supply chain managers.

“As a result of decades of engagements with top health systems, we’ve recognized that health systems vary widely in their supply chain operational sophistication,” notes Steve Downey, group senior vice president of supply chain

operations at Vizient®. “In some organizations, a supply chain manager merely tries to tame rogue spend. In others, recent mergers or acquisitions present supply chain managers with challenges in acclimating new locations, procedures and people to the existing supply chain.” However Downey adds, “Every health system has one thing in common: gaining organizational efficiency is paramount to achieving supply chain optimization.”

Moving beyond price to efficiency

Strategies to reduce health care supply costs get a lot of attention, and it feels great to walk away from the negotiating table with a hard-dollar win for your organization. However, keep in mind that the negotiated price win may only scratch the surface of possible savings.

When considering the impact of supply chain operations on the health system, it is commonplace for supply chain managers to look to the largest buckets of spend to identify immediate savings opportunities. This is understandable because in many cases, the dollars are enormous and the bottom-line price improvement is easy to determine. However, managing price alone rarely delivers enough savings for a health system to remain financially healthy. This is where efficiency and managing

supply operations to more effectively deliver results become critical.

“In my experience, the contract is just the beginning of savings, not the end,” said Bejan Shamsy, senior vice president, procure-to-pay solutions at Vizient. “A hospital must receive the lower contract price at the point of purchase, or there is no savings. We see, on average, an unattended process buying at the correct price less than 40 percent of the time. With focus, health systems can buy at the correct price over 90 percent of the time. Everything must align in a transaction for the savings to be realized.” Shamsy concludes that getting the right contract price and lowering the total acquisition cost for supplies are key to optimizing a provider’s supply chain operations.

A value multiplier

Opportunities to improve efficiency exist to the very core of your supply chain process. And they apply every time you search for the right product, place an order, receive and distribute a product, work with a supplier or clinician, or make any kind of informed decision based on available data.

From a supply chain perspective, implementing sustainable operational efficiencies is more challenging than decreasing supply costs because achieving these efficiencies requires an additional level of analysis, coordination and often, investment.

In addition, the operational improvement return on investment can be challenging to calculate. But the reward is worth the effort; improvements in efficiency, such as more clinical time, reduced procurement expenses and improved care quality, are felt throughout an organization—even by the patients. A single operational improvement often results in a ripple effect that is experienced organizationwide, making improvements in efficiency a value multiplier.

Elevating the importance of efficiency

The shift from volume-based to value-based care has health systems digging deep for new ways to save. In addition, an increasing amount of public resources are dedicated to health care—while at the same time, that care is now more costly to provide. In the past 10 years, annual health care spend increased from \$2.1 trillion to \$3.3 trillion annually, representing 17.9 percent of the total U.S. gross domestic product, according to the Centers for Medicare & Medicaid Services.^{1,2}

The health care landscape is rapidly evolving, elevating the urgency for supply chain managers to move beyond price to be more efficient and establish processes that deliver consistent results. This means delivering operational improvements, from sourcing and contracting, to procurement, to inventory management and distribution. It also means that these core supply chain functions must be appropriately supported by a unifying strategy that incorporates people, technology, partnerships and data.

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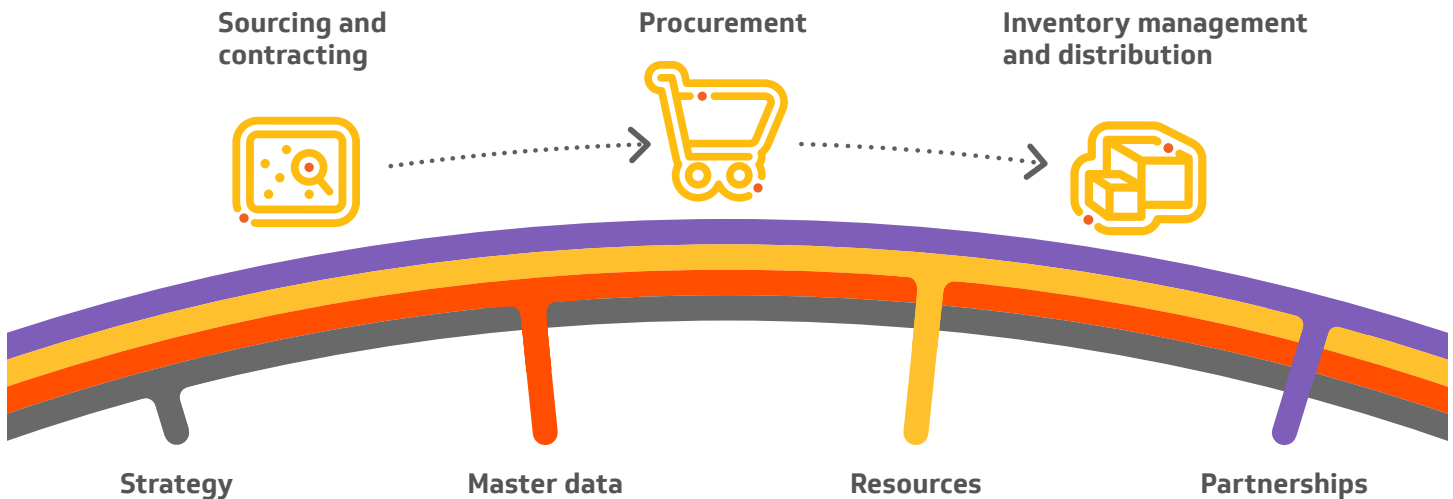
¹ Centers for Medicare & Medicaid Services website. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>. Updated January 8, 2018. Accessed July 30, 2018.

² Centers for Medicare & Medicaid Services website. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/NHE-Presentation-Slides.pdf>. Accessed July 30, 2018.

The Vizient efficiency framework

To help supply chain managers recognize the interconnectivity of supply chain functions and the underlying components of a truly efficient supply chain, we created the Vizient efficiency framework. “We are focusing heavily on efficiency as a critical component of the overall supply chain because it is vitally important to the future

success of our members,” said Downey. “We designed this framework to help health systems consider what actions are necessary within each segment to achieve and sustain efficiency. Our solutions target specific areas to assist members where they need it most.”



Masters of supply chain efficiency free up clinical time, reduce expense and improve the quality of care by supporting the critical functions of sourcing and contracting, procurement, inventory management and distribution with a

cohesive strategy, clean data, resources (knowledgeable experts, functional technology) and partnerships (effective suppliers, aligned leadership).

Supply chain managers will quickly recognize the critical functions of sourcing and contracting, procurement, inventory management and distribution in the efficiency framework because these functions are fairly consistent across health systems. How these functions operate system to system may vary significantly, and the level of sophistication within the underlying components that deliver efficiency often varies widely. However, every health system will benefit from:

- Establishing and refining its operational strategy
- Improving the quality and processes to manage supply chain data
- Hiring and developing functional expertise
- Implementing functional technologies
- Developing effective partnerships with vendors and clinicians

In a truly efficient supply chain, four common components of infrastructure support supply chain functions:

Strategy—A clear indication of where you are now and where you want to be gives your health system a much better probability of achieving improved operational efficiency. When Vizient begins a member supply chain assessment, for example, our experts use a compendium of best practices and key metrics to gauge where the member organization falls along a supply chain maturity continuum. This step is critical for our experts to establish an honest assessment of how your supply chain is performing today and a clear vision for where you need to go. It's important to remember that having a goal is not the same as having a strategy. Goals become strategies when they are pressure-tested for feasibility and milestones are established based on known benchmarks. In addition, to achieve the intended outcome, supply chain goals need to align with the health system's overall strategy.

Master data—Nothing will hinder supply chain improvement efforts faster than conflicting data. It is critical to have a single source of truth, often referred to as the “master data” set, from which to effectively manage your supply chain. In supply chain management, one of the key elements of a supply chain leader’s master data is the item master (also known as the item file).

The frequent mergers within health care, including health care suppliers, multiplies the challenge of maintaining a clean item master file. In many cases, adding enough people to maintain the item master is cost-prohibitive. As a result, health systems increasingly look to technological solutions to maintain the quality and integrity of their critical data. (For insights on best practices in data management, access the white paper: “[The Gold Standard for Item Master Management: Good data is where great supply chain begins](#)”).

Vizient research shows that approximately 30 percent of the average item master contains bad data. Therefore, an item file of 60,000 unique records would have 18,000 records that contain bad data. This creates incredible downstream disruption that impacts the health system’s financial and clinical systems, creating more work and costing hundreds of thousands of dollars annually to cleanse the bad data. The good news is that addressing data issues can actually increase revenue and drive down cost.

Resources—Two resource categories are necessary to achieve supply chain operational efficiency: people and technology.

Having knowledgeable experts directly links to the quality and efficiency of your supply chain operations. Where your people demonstrate strengths, your supply chain will

reflect those strengths. Conversely, where your people struggle, your supply chain will suffer. Ideally, people will have strong interpersonal skills and a working knowledge of the functional technologies that are required to do the job. Within areas of an organization’s supply chain where operational improvements are planned, people may need additional hands-on, in-house training or source supplemental knowledge and advanced technical skills from outside the organization.

While knowledgeable experts are critical to effectively manage the supply chain function, health systems must supplement their expertise with technology; specifically, automation capabilities that quickly and easily plow through menial tasks so that staff can focus on more important work.

For example, health systems spend an incredible amount of time placing and chasing orders, and managing price discrepancies with suppliers that do not have electronic data interchange capability. Your technology should highlight price discrepancies and provide a quick and easy mechanism for identifying the root cause of the discrepancy. The combination of people and technology supports and pulls price improvement initiatives through the supply chain to deliver your anticipated savings.

Strategic partnerships—Introducing third-party solutions and new ways of doing things are critical to efficiency. No organization achieves “best-in-class” operational supply chain status without helping hands. Vendors are experts in their fields and spend every business day honing their crafts. You stand to gain great efficiencies by taking advantage of what they have to offer. Doing so offers the potential to improve operations while freeing up people to work on higher value, more strategic initiatives.

Investing in efficiency

Improving efficiency often requires some investment

There are several ways to determine if and when looking outside your health system for assistance is the answer, but perhaps the greatest question to ask yourself is this: What is the cost to my system if I don’t invest in efficiency?

Here are some additional questions and thoughts to help determine when the time is right for investing in efficiency:

- When is the investment in efficiency measurable, in terms of effort, time and cost?
- When does it become more expensive, in terms of effort, time and cost, to maintain the status quo than it does to invest in efficiency?
- What are the trade-offs between technology, process improvement and head count?
- What clinical utilization improvements do you stand to gain by increasing efficiency? For example, how will patient care be affected if clinicians are focused on patient care instead of searching for supplies?

Measuring efficiency

Because of the complexity built into today's health care systems, managing and measuring efficiency has become an industry unto itself. "The materials management information systems commonly used by hospitals today originated from the manufacturing sector and were designed to manage simplified transactions and pricing structures," said Shamsy. "They were never designed to handle the intricacies and complexities of the transactions and pricing in health care today."

Despite the complexity, health systems must be able to track and measure performance over time—and KPIs play a critical role. Vizient advisory teams employ approximately 125 metrics to establish a baseline during member assessments, according to Larry Bramble, a principal who leads the Vizient supply chain management and materials management consulting group. However, members need to take a "low-hanging fruit" approach to make measurable progress. Often this means starting with your organization's biggest pain point.

"Prioritize your greatest opportunities, and establish three to five KPIs to implement and continuously monitor," Bramble said. "Shortly thereafter, if you start to demonstrate measurable efficiency gains from these metrics, you can comfortably focus on additional metrics."

Specific KPIs are available to measure all parts of the supply chain operation. However, setting your own KPI's

based on your organization's individuality is extremely important.

"If you've seen one health system, you've seen one health system," Bramble said. "Health systems vary based on headcount, capabilities and technological aptitude. Sometimes it is optimal to establish your own baseline based on your historical data and measure success from that point."

Common key performance indicators

While health systems and their measurement needs vary greatly, a few common KPIs include:

- Inventory turns
- Group purchasing organization (GPO) contract penetration (percentage of orders placed through a GPO contract)
- Percentage of purchase orders sent electronically
- Purchase order line items per buyer
- Number of three-way match exceptions

Establishing a culture of efficiency

It is critical to establish a culture of efficiency to make operational gains stick long term and set the stage to continually uncover more. A culture of efficiency begins with your senior leadership team, which must set an example for everyone else to follow.

A comprehensive approach often works best, according to Bramble. This includes the alignment of people, processes, technology and performance metrics.

People: Ensure that people are aligned correctly, and consider the appropriate roles, responsibilities and assignments of each.

Processes: Document all functional processes, such as process flows and/or value stream maps, along with an integrated model for the end-to-end supply chain operations.

Technology: Properly train individuals in the effective use of all technologies and software to ensure you maximize their value. (e.g., contract database management (CDM), materials management information system (MMIS),

enterprise resource planning (ERP), inventory management, and accounting systems).

Performance metrics: Measurement ensures that your team is doing things correctly and that improvements can be sustained. This includes KPIs, dashboards and scorecards.

Regular communication about where everyone stands with their assigned tasks and goals is crucial for success, according to Michael Costante, vice president and general manager of supply chain operations at Vizient. "I'm a big believer in bringing the entire team together for regular pop-ups and huddles to tie organizational goals and optimization efforts to what each person does every day," he said. "As a supply chain leader, it's easy to take for granted that everybody on the bus is in the right seat and knows where the team is going—and that's not always true. Dock employees might not know about a burning platform leaders have around a cost savings initiative from an organizational level, or they might not understand that census is down and how that affects the organization overall from a financial perspective."

Factors to assess

Below are some additional questions to enable leaders and their supply chain teams to assess where a department stands today—and help determine when the time is right to invest in efficiency:

1. Do we have an honest and clear assessment of current supply chain operational capabilities and shortfalls?
2. Do we have a formal, multiyear strategic plan to guide supply chain transformation, and is that plan aligned with the organization's strategic plan?
3. Do we have a single, reliable source of master data informing the organization's financial and clinical systems?
4. Have we established the right key performance indicators to help us reach our goals, and do we update and publish a dashboard on a regular basis?
5. Could we (and how difficult would it be) to pull the data we need to have meaningful conversations with leadership and clinicians to influence the health system's purchasing behavior?
6. Do we have the right people with the right skill sets and aptitudes in the right roles to support our supply chain initiatives?
7. Is investing in and employing the latest technology to support our supply chain functional experts a part of our strategic plan?
8. Are we evaluating vendor capabilities to leverage their expertise to achieve our supply chain goals?
9. Are we effectively partnering with clinicians on value analysis-related discussions? Are those discussions documented and implemented as discussed, and are we contracting on the correct products so that they are readily available?
10. Do we have the necessary information to influence what we buy and how we use those products to make meaningful savings, product standardization and clinical outcome improvements?

If your team's response is "no" or "I don't know" to any one of the questions above, consider an efficiency assessment to determine exactly where your organization stands and where to start making improvements.



As the nation's largest member-driven health care performance improvement company, at Vizient we invest heavily in solutions to optimize supply chain operations for our members. To learn more about how we can support your efficiency initiatives or to schedule a supply chain operational assessment, contact us at (800) 842-5146 or supplychain@vizientinc.com.



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As the nation's largest member-driven health care performance improvement company, Vizient provides network-powered insights in the critical areas of clinical, operational, and supply chain performance and empowers members to deliver exceptional, cost-effective care.