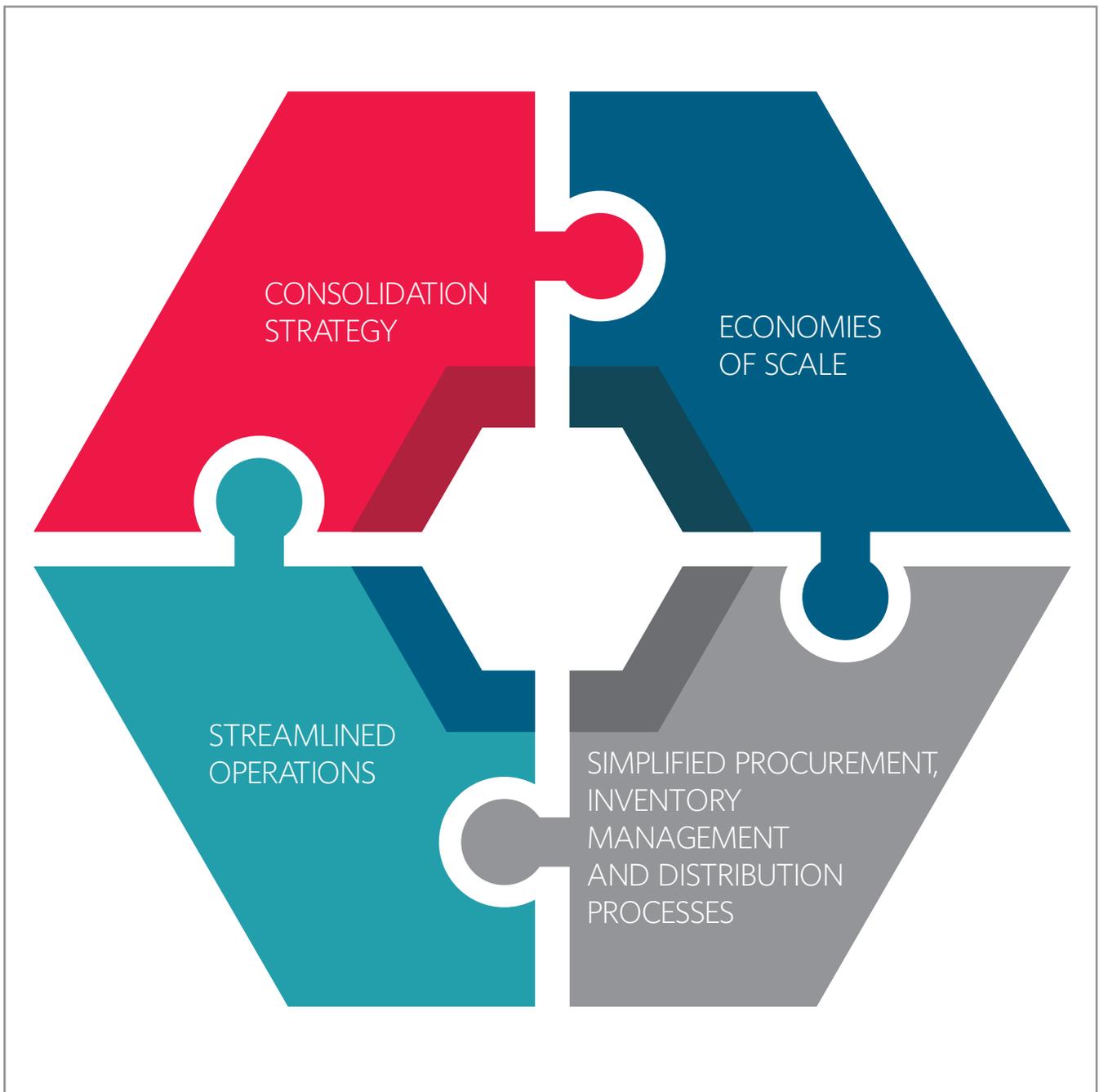


## Achieving Supply Chain Transformation through Consolidation

Effective supply chain strategies to drive down costs, improve patient outcomes and support high-margin services



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## Overview

Dramatic changes in the way that healthcare success is measured, and reimbursed, have put downward pressure on health systems' operating margins. We believe that this trend is here to stay. In the United States, a wave of aging baby boomers is driving up government-sponsored healthcare costs. That trajectory collides with record federal debt. In order to keep promises to retirees, the government must cut costs. And in healthcare, the government's "cost" is your reimbursement.

Federal cuts to reimbursements contributed to losses for 15 out of every 100 systems in 2013 alone.<sup>2</sup> Seeking ways to remain solvent, many providers took measures to reduce expenses. Yet cost-cutting is a delicate matter. It requires balancing the need to reduce spending on the one hand, with the requirements to promote patient safety, clinical outcomes and compliance with industry regulations on the other.

The following content lays out a strategy to help you achieve these ends—a strategy that has been successfully applied in most every other industry. In a word, that strategy is consolidation. And while healthcare systems, clinics and physician practices have experienced significant entity consolidation in recent years, that's not what this paper is about.

Instead, we focus on the cost-cutting strategy of consolidation as it's applied to your supply chain. These savings are born from the application of proven business practices. These include consolidation strategies, economies of scale, the streamlining of operations, and the simplification of procurement, inventory management and distribution processes.

<sup>1</sup> Boodbaum, Beth, "Streamlining the Hospital Supply Chain: Just What the Doctor Ordered," [Inboundlogistics.com](#). January, 2015.

<sup>2</sup> Kutscher, Beth, "Fewer hospitals have positive margins as they face financial squeeze," [modernhealthcare.com](#), June 21, 2014.

## Two Options for Remaining Solvent

To stay in business, let alone thrive in this rapidly changing healthcare environment, you must increase revenues and/or cut costs. As an illustration, let's assume that your healthcare system wants to add \$1 million to its bottom line. What is the best way to achieve this goal?

### Option A: Increase revenues

What would it take to increase your bottom-line earnings? Given an average hospital operating margin of 3.1 percent,<sup>3</sup> you would have to boost revenue by about \$32,000,000. To generate that much revenue, what investment would your system have to make? How much would it cost to scale existing services? Or to introduce new service lines? Northwestern Memorial Hospital, for example, hopes to spend \$24 million to add eight operating rooms to its Outpatient Care Pavilion, which opened recently.<sup>4</sup> For many smaller Integrated Delivery Networks (IDNs,) the sizable investment to add or scale services is not easily secured. Such measures are accompanied by increases in full-time equivalent (FTE) employees. Along with capital outlays for space, equipment and third-party services. More troublesome, however, is the fact that continuing to do what's not working doesn't change an inefficient supply-chain business model. Instead, it locks healthcare systems into a downward spiral, forever chasing more patients who garner less in reimbursements. Combined with status quo cost structures, this isn't a sustainable strategy.

“It's...often easier to cut costs than grow revenue, especially in an era where healthcare providers need to be prepared to make less, not more, from the services they provide.”<sup>5</sup>

### Option B: Cut costs

By contrast, shaking out \$1 million in annual savings is easier. With a reasonable investment, you can achieve an acceptable return on investment (ROI) within a few years. Moreover, today's more efficient systems can effectively lower your supply-chain operating costs. And by migrating to a cost-disrupting business model, you'll promote the long-term financial health and sustainability of your health system.

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The good news is that this strategy is within the reach of the overwhelming majority of healthcare systems—regardless of size, budget and number of locations.

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Still, an investment must be made to achieve these savings. And given the tight budgets IDNs face today, where can hospital administrators focus their cost-cutting investments to achieve maximum return without sacrificing patient care?

<sup>3</sup> Kutscher, Beth, "Fewer hospitals have positive margins as they face financial squeeze," modernhealthcare.com, June 21, 2014.

<sup>4</sup> Marotti, Ally, "Northwestern Memorial wants more operating rooms," Crain's Chicago Business Healthcare News, January 16, 2015.

<sup>5</sup> "Applying Supply Chain Best Practices from Other Industries to Healthcare," Global Healthcare Exchange, LLC, 2011, p. 2.

# Unlocking Significant Supply Chain Savings Potential

The most efficient use of a hospital's cost-cutting investment would be to apply it to its largest expense. In most cases, that line item is labor. However, in recent years, IDNs have devoted a lot of attention to staff spending. And most hospital executives are reluctant to reduce their head counts, as that can impact patient care, and ultimately reimbursement, if Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores suffer. That's why many of executives have turned their attention towards the number two item on the expense list, their supply chain.<sup>6</sup>

It's a logical move. Supply chain costs consume up to 50% of most hospital's budgets.<sup>7</sup> That includes the true cost of procurement, storage space and utilities; as well as nursing and pharmacy staff time spent on supply chain activities.<sup>8</sup>

Healthcare system supply chains are also fertile ground for savings because they are immature—about 10 years behind other industries.<sup>9</sup> That means that IDNs can benefit

by leveraging state-of-the-art supply chain solutions that are common in other industries. These advanced solutions optimize the performance of procurement, storage, inventory management and distribution systems. This explains why supply-chain operations have gained mind share among hospital executives.

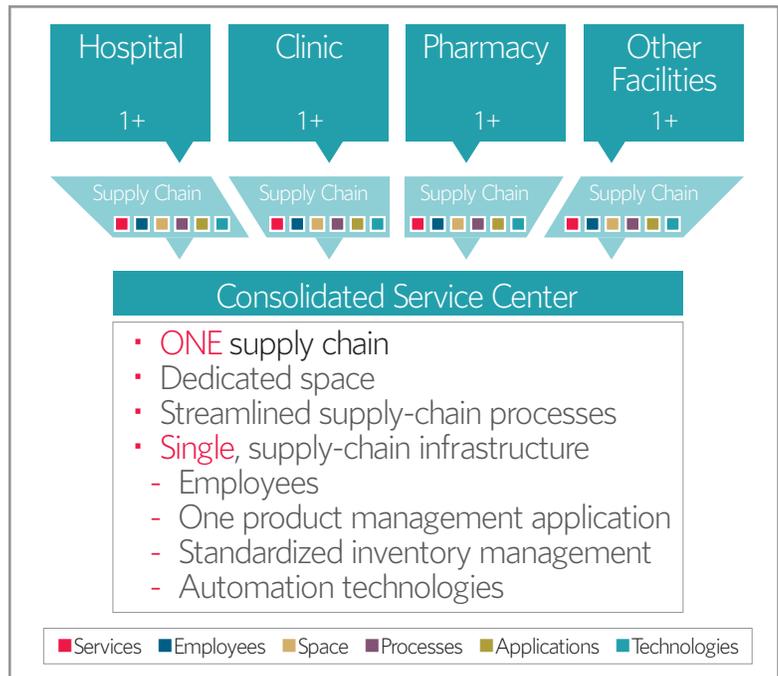
"Over 80% of healthcare supply chain executives surveyed agree [that the] supply chain is 'extremely important' to reaching profitability targets (89%) and revenue targets (83%), while 61% agree cost reduction strategies in the supply chain have been 'extremely important' in responding to customer pricing pressure."<sup>10</sup>

The bottom line is that better supply chain management can lead to cost savings of 5-15%.<sup>11</sup> And that's reason enough to pursue it. But where do you start? In our experience, an effective supply chain cost-cutting strategy is to establish a Consolidated Service Center (CSC).

## What is a CSC?

The concept of a CSC is deceptively simple. Gartner's definition for example is straightforward, stating that a CSC is, "...the aggregation of services across multiple points of care that must include primary distribution of products from a dedicated facility."<sup>12</sup> Figure 1 illustrates this concept.

That's simple enough until IDNs try to apply it to their environment. The common perception is that only "large" healthcare systems can benefit from a CSC. In practice, however, **your healthcare system's size doesn't matter**. IDNs of all sizes—from two facilities to hundreds, have successfully implemented CSCs and are deriving substantial benefits from them. Certainly, they differ on how and what they've implemented. But the fact is, that CSCs exist along a **continuum** from *basic* to *advanced*. That continuum may be best understood by detailing the operative terms above.



**Figure 1:** A Consolidated Service Center optimizes healthcare supply-chain operations.

<sup>6</sup> "Applying Supply Chain Best Practices from Other Industries to Healthcare," Global Healthcare Exchange, LLC, 2011.

<sup>7</sup> Jarousse, Lee, An, "Gatefold: Strategic Supply Chain Management," Hospitals and Health Networks, December 1, 2011.

<sup>8</sup> Jarousse, Lee, An, "Gatefold: Strategic Supply Chain Management," Hospitals and Health Networks, December 1, 2011.

<sup>9</sup> Banker, Steve, "Obamacare Transforms the Hospital Supply Chain," Forbes Online, February 18, 2014.

<sup>10</sup> "Healthcare Companies Using Supply Chain to Stay Competitive." Mhlnews.com. April 9, 2015.

<sup>11</sup> "Applying Supply Chain Best Practices from Other Industries to Healthcare," Global Healthcare Exchange, LLC, 2011, p. 2.

<sup>12</sup> O'Daffer, Eric; Mooraj, Hussain, "To CSC or Not to CSC, That is the Question for Healthcare Providers," Gartner, February 18, 2011, p. 3.



### Center

A "dedicated facility" is one form of a center. The phrase conjures an image of a multi-thousand square-foot standalone building. That's certainly the case for the University of Pittsburgh Medical Center (UPMC.) "Administrators leased a 150,000 square-foot warehouse, installed warehouse systems, hired new workers, [and] installed a WMS, and still were able to get a payback within six months based on moving the volume of approximately 10 vendors to self-distribution!"<sup>13</sup>

On the other end of the spectrum are smaller healthcare systems that establish dedicated space. This may or may not be in a stand-alone building and it may occupy as little as a few thousand square feet. Conceptually, the amount of space isn't nearly as important as the CSC role that the space fulfills.

### Service(s)

"Services" may be separated between those that support labor-centric activities, such as procurement, and those that focus on products, such as med-surg warehousing and distribution. Procurement services, whether through a group purchasing organization (GPO), self-contracting or other means, is a subject beyond the scope of this paper, which is focused on product-centric services.

For instance, once med-surg items have been procured, the CSC receives them, catalogs them in its Warehouse Management System (WMS), then stores and distributes them to recipient healthcare facilities. The implementation of a single service such as med-surg or pharmacy is illustrative of a basic CSC implementation. Smaller IDNs can use this approach to ease into a CSC business model. Managers could start small by consolidating selected products and expand their offering over time to include the full range of med-surg products.

<sup>13</sup> Banker, Steve, "Obamacare Transforms the Hospital Supply Chain," Forbes Online, 2/18/2014.

## Consolidated

Conceptually, the CSC consolidates multiple, discrete supply chains—each with their own personnel, IT systems, processes and (sometimes) stock-keeping unit (SKUs) into a single, standardized supply chain. (See examples of Product-Centric CSC Services to the right.) A good example of this is the 19-hospital, Sisters of Mercy Health System in St. Louis, Missouri.

Prior to implementing a CSC, each of its hospitals had separate IT solutions and negotiated individually for med-surg supplies.<sup>14</sup> Administrators applied the consolidation strategy to combine 19 discrete supply chains, using various IT systems onto a single IT system and supply chain for the healthcare network.

The consolidation of services may extend beyond logistics-centric activities, for instance, to the pharmacy. That's what the University of California San Francisco (UCSF) did when it built an automated pharmacy to serve the needs of three area hospitals.<sup>15</sup> (See sidebar)

This implementation underscores another key CSC element—utilization of automation technologies. By aggregating products and services into a single center, the capital outlays necessary to field automated solutions move within reach. Not only does automation promote notable efficiency gains, it can also boost patient safety. In UCSF's case, nearly 350,000 doses were prepared without error just during the phase-in period of their new robotic technology.<sup>16</sup>

Certainly robotics solutions are an important element of an efficient and safe CSC. But so too are software applications. In the CSC business model, a heterogeneous mix of supply-chain-relevant software solutions is replaced by a single application. Each healthcare facility adopts the application to provide the interface between clinical needs and the CSC. Such applications may include a WMS, pharmacy applications and other systems as well. These all facilitate the goal of aggregating a healthcare system's ordering, receiving, tracking, storing, picking, distribution and payment functions.

These benefits are intriguing. But the question remains, is a CSC right for *your* healthcare system?

## Examples of Product-Centric CSC Services

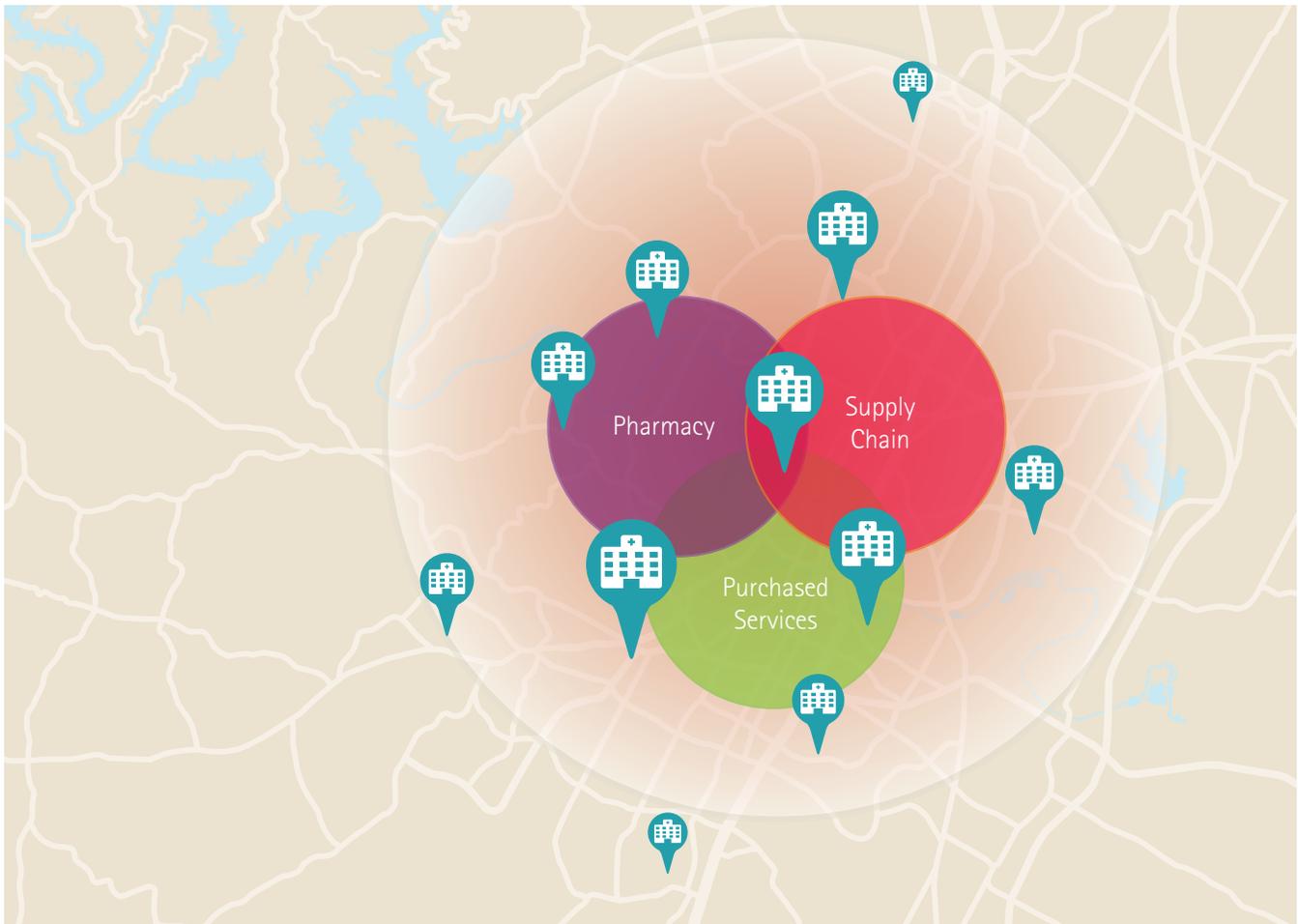
- Analytics and performance improvement
- Assembly of custom procedure trays
- Asset management (capital goods)
- Biomed equipment repair and management
- Catheterization lab supply
- Consignment inventory management
- Contracting
- Inventory management
- Lab and case cart assembly
- Logistics and distribution
- Med-surg distribution
- Pharmacy compounding
- Pharmacy distribution
- Pharmacy mail order and refill

## Case Study: Consolidated Pharmacy Services

The University of California San Francisco built a state-of-the-art robotic central pharmacy at their Mission Bay facility. Originally intending to upgrade and renovate its existing pharmacy with an investment of \$24 million, they instead built a consolidated pharmacy services center for \$15 million, excluding the automation cost. From the Mission Bay location, UCSF dispenses medications to their Mount Zion and Parnassus Heights hospitals in the city, as well as their new Mission Bay facility. The robotic pharmacy was built to improve patient safety and increase the medical center's efficiency. It also relieves UCSF pharmacists and nurses from manual tasks, enabling them to focus on delivering clinical care to patients. "Studies indicate that barcoding, computerised physician entry and development in medication-management reduce errors significantly."<sup>17</sup>

<sup>14</sup> "Mercy ROI Takes Optimized Supply Chain All the Way To Patients' Bedsides," Global Logistics Et Supply Chain Strategies, December 01, 2006.

<sup>15, 16, 17</sup> "UCSF Robotic Pharmacy, San Francisco, United States of America," pharmaceutical-technology.com. NOTE: as of the publication of the referenced article, no errors had been reported.



## Is a CSC Right for Your Healthcare System?

Many people view CSCs only as a viable solution for large healthcare systems. And for an advanced CSC implementation, we would agree. However, basic and intermediate CSC deployments can also be viable for smaller networks. Industry experts agree, stating that "...even systems with two or three hospitals could make a CSC work effectively."<sup>18</sup>

An *advanced* CSC facility would leverage fully-automated systems housed in a sizable, stand-alone facility. With a 300-500 bed hospital generating an annual supply chain spend of around \$65 million, there is a lot of opportunity for savings through consolidation, particularly in integrated hospital systems.<sup>19-21</sup>

And, a *basic* CSC requires far less spend to justify its implementation. Because it would rely upon the physical

consolidation of supply chain products, services and systems it could deliver a desirable ROI with the relatively small investment of just a few million dollars.

And while it is true that *size doesn't matter* for the establishment of a CSC, it is also true that *distance matters very much*. As the distance between a CSC and its client facilities increases, so do the transportation costs. At some point, the distance exceeds that which makes a CSC economically attractive. That "point" is about 200 miles. "IDN's located in a tight geography are more likely to succeed than those with far-flung locations which increase delivery costs. Some experts say a geographic radius of more than 200 miles does not lend itself to a self-run warehouse."<sup>22</sup>

<sup>18</sup> O'Daffer, Eric; Mooraj, Hussain, "To CSC or Not to CSC, That is the Question for Healthcare Providers," Gartner, February 18, 2011, p. 10.

<sup>19</sup> Herman, Bob, "54 Statistics on Hospital Supply Chain Efficiency," Becker's Hospital CFO, June 01, 2012.

<sup>20</sup> O'Daffer, Eric; Mooraj, Hussain, "To CSC or Not to CSC, That is the Question for Healthcare Providers," Gartner, February 18, 2011, p. 10.

<sup>21,22</sup> "Evaluating Self-Distribution: A Guide For Healthcare Executives." Health Industry Distributor's Association, p. 2.

## The Case for Implementing a CSC

Implementing a CSC changes the way that a healthcare facility operates. That brings with it a measure of pain. Fortunately, the benefits of a CSC far outweigh the temporary pain experienced in its creation. Still, in order to persuade stakeholders to adopt a new supply-chain business model, a case must be made for it. What follows are the major benefits that CSCs deliver.

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“The potential cost savings from consolidating redundant procurement processes into an operational centralized purchasing system is substantial and should be a system-wide goal.”<sup>23</sup>

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## Cost Savings

At the low end of the spectrum, a CSC contributes to supply chain savings of around 5%.<sup>24</sup> The more a healthcare network currently relies upon disparate systems, vendors and labor-intensive solutions, the greater the potential savings. These savings flow from the following areas.

### Standardization and consolidation

How many different brands and types of wrap bandaging does a healthcare system need to procure, receive, store and distribute to deliver quality care? Apparently, as many as there are doctors who express a preference. The disconnect between costs and preferred products is pervasive in the healthcare industry. “Healthcare supply is one of the only industries in which the key decision makers for the majority of supply usage (physicians) have no stake in the cost of the goods they use.”<sup>25</sup> And that’s a problem, because each product represents a separate stock-keeping unit number (SKU.) And each SKU requires its own processes and staff attention to keep in inventory.

The resources wasted on redundant SKUs alone can be significant. In fact, Gartner believes that by standardizing their medical device and med-surg products hospitals’ costs associated with these SKUs could be reduced by 10% or more.<sup>26</sup> Moreover, by consolidating into fewer, physician-approved products in each category, an IDN may qualify for volume price breaks. Add to that the greater visibility into product usage that results. This gives managers the ability to make informed decisions to better control the costs associated with a product category.

As an example, Intermountain Healthcare consolidated its wrap bandaging SKUs from 37 products from five suppliers, to 16 products from one supplier to save \$53,000 annually.<sup>27</sup> To put this savings in perspective, an IDN would have to increase revenues by \$1.7 million to achieve this bottom-line amount.<sup>28</sup>

What savings could your hospital system achieve by standardizing and/or consolidating every major med-surg product category in your supply chain?

### Automation savings and safety gains

The consolidation of supply chain functions frees up budget dollars that can effectively be invested in technology. Specifically, automation solutions in general, and for the pharmacy in particular, can be deployed to drive up efficiency, reduce errors and cut costs.<sup>29</sup>

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“The [healthcare supply chain] sector is still burdened by manual processes and a significant amount of rework. Such inefficiencies can result in ordering errors, lack of product on hand to treat patients, clinicians receiving incorrect product, and expired inventory.”<sup>30</sup>

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<sup>23</sup> “Evaluating Self-Distribution: A Guide For Healthcare Executives.” Health Industry Distributor’s Association, p. 10.

<sup>24</sup> O’Daffer, Eric; Mooraj, Hussain, “To CSC or Not to CSC, That is the Question for Healthcare Providers,” Gartner, February 18, 2011, p. 10.

<sup>25</sup> “Mercy ROI Takes Optimized Supply Chain All the Way To Patients’ Bedsides,” Global Logistics & Supply Chain Strategies, December 01, 2006.

<sup>26</sup> O’Daffer, Eric; Mooraj, Hussain, “To CSC or Not to CSC, That is the Question for Healthcare Providers,” Gartner, February 18, 2011, p. 9.

<sup>27</sup> Johnson, Brent, “A Review of Supply Chain Best Practices in Healthcare.” Intermountain Healthcare. Medline Healthcare Executive Meeting, January 21, 2009, slide 33.

<sup>28</sup> Assuming a hospital margin of 3.1 percent.

<sup>29</sup> Halvorsen, Deanne, “Evolving Pharmacy Automation,” Pharmacy Purchasing & Products, State of Pharmacy Automation, Vol. 11, No. 8, p. 4.

<sup>30</sup> Brown, Justin, “Controlling Costs in the Healthcare Supply Chain,” Inbound Logistics, January, 2014.

A WMS oversees the receipt, storage, retrieval, tracking and inventory counts of SKUs in your CSC. By standardizing upon a single inventory management solution, supply-chain professionals can closely monitor products across all IDN facilities. A WMS gives users granular visibility into their warehouse operations by collating data to deliver real-time reports. Some WMS include vital material flow control functionality. This enables automated materials handling—potentially from receipt to shipping.

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“ Supply chain processes should utilize system-wide IT platforms; maximize electronic requisitioning, order processing, automated communication and use EDI for ordering from vendors.”<sup>31</sup>

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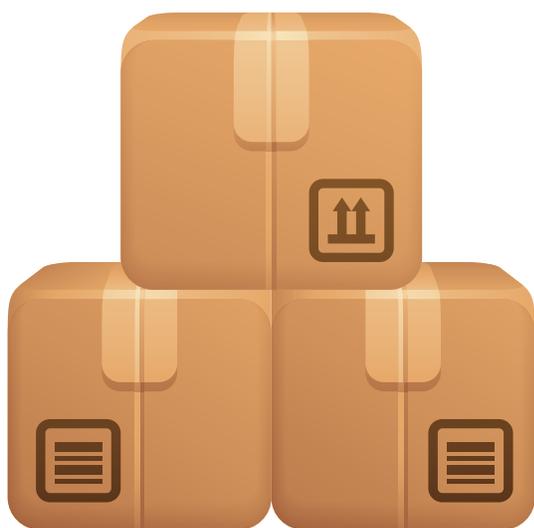
Most healthcare supply-chain systems are an intensive manual process. These manual processes are error-prone and drive up the costs of completing requisitions, purchase orders and invoices to name a few.<sup>32</sup> To combat these issues, managers have increasingly adopted software and hardware automation technologies. For the purposes of this paper, we'll focus on those technologies most relevant to a CSC.

### Lower inventory costs

A leading cause of overstocking is a “just-in-case” ordering mentality. Better to have too many, the thinking goes, than to run out when a patient needs it. While understandable, this approach leads to each individual hospital having SKU inventories disproportionately larger than necessary. The effect is multiplied for multi-hospital systems. These overages consume funds to receive, store and track them. Moreover, it leads to higher waste rates in the form of expired products.

By consolidating inventories at a CSC, managers can adopt a more efficient “just-in-time” policy. Yes, a percentage of inventory will be added to prevent running out of a SKU. However, because an efficient CSC utilizes inventory management software, procurement personnel can collect system-wide historical consumption rates and adjust their ordering behaviors over time. This allows managers to pare down inventories, reduce their inventory investment and lower waste.

Inventory consolidation is particularly impactful on pharmacies' bottom lines. For example, some expensive medications require minimum order quantities. Rather than having each pharmacy overstock a costly med—a portion of which will be lost to expiration, a CSC pharmacy could meet the minimum requires of all its client facilities with minimal overstock.



### Space Savings

In many metropolitan areas, the per-square-foot cost of hospital space is at a premium. That makes storing products there relatively expensive. In addition to this direct cost there is an opportunity cost. In-hospital storage takes up precious space that could be better used by repurposing it to offer new or expanded, high-margin services. Consequently, in-facility storage has a double impact on a hospital's budget.

By contrast, even a basic CSC liberates healthcare facility space for better use. Moreover, administrators can drive down the per-square-foot cost of storage by purchasing or leasing space in less-costly areas.

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<sup>31</sup> “Evaluating Self-Distribution: A Guide For Healthcare Executives.” Health Industry Distributor's Association, p. 10.

<sup>32</sup> Pennic, Jasmine, “5 Ways Supply Chain Can Reduce Rising Healthcare Costs,” HIT Consultant, May 13, 2013.

# Transportation Savings

Establishing a centrally located CSC reduces transportation costs. It costs less to have one large shipment delivered to a CSC than it does to have several smaller shipments made to recipient healthcare facilities. Rather than a hospital receiving shipments from multiple vendors, they can receive a daily, consolidated shipment of all required products from a full-service CSC.

Transportation savings work on the return trip as well (note the bi-directional arrows in Figure 2) Vehicles can backhaul items (medication returns, trash, laundry etc.) to the CSC to be consolidated and earn single-location pickup savings.

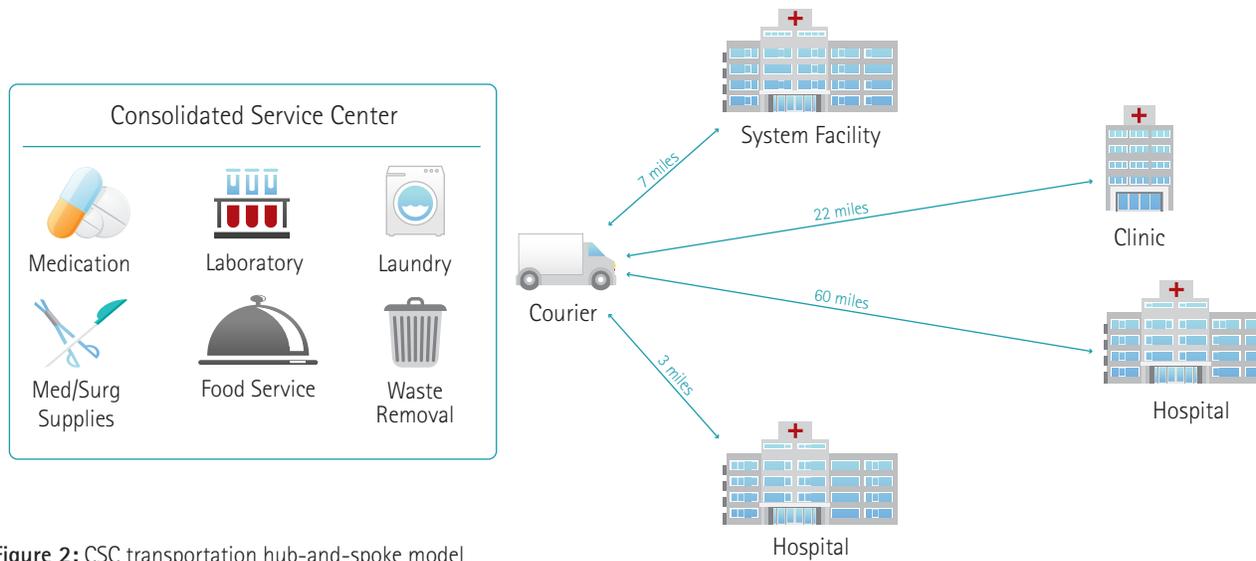


Figure 2: CSC transportation hub-and-spoke model

## Pharmacy Inventory Management (PIM) Applications

By establishing a pharmacy in a CSC, hospital systems can maximize the benefits of a PIM application. This allows pharmacists to view enterprise-wide usage and inventory levels. Consequently, they can make informed purchasing decisions and automate replenishment. This dramatically reduces the incidence of overstock. Moreover, the ability to cycle medications by expiration date, among other features, reduces the rate of expired products.

## Material Transport Solutions

Integration with material transport technologies through a WMS takes a CSC further down the automation path. Such systems could include stocker cranes, pallet/case conveyor systems, monorail systems and automated guided vehicles.

The application of automated material handling in a CSC has taken root among healthcare systems. For example, the Area Vasta Familia Nord (AVEN) in Italy implemented material handling and pharmacy-centric systems in their CSC. It serves seven hospitals totaling 6,500 beds to distribute medical devices and medications. Their CSC leverages optimized storage systems, conveyors and a WMS that includes conveyor control functionality. Gravity-flow racks support picking operations. Picks are organized into totes that their automated transport systems then pack into hospital-specific cartons. As a result, the automated warehouse processes 700 orders per day for an average of 9,000 SKUs.

# Picking Technologies

The preparation of orders for delivery can be one of the most cost- and labor-intensive processes in the warehouse. And for manual-based operations, it can also be one of the most error prone activities. Consequently, supply-chain professionals can leverage picking technologies to make a significant, positive impact upon their operations.

There are two primary warehouse **operator-based pick systems**.

1. **Person-to-Goods.** A mainstay workflow in distribution centers for decades, person-to-goods picking employed streamlined pathways enabled by routing software logic to maximize the number of SKUs picked with the minimum amount of travel time, often enabled by automated material transport. However, the rising demand for just-in-time ordering and proliferation of SKUs – particularly in ecommerce – have challenged this traditional fulfillment model.
2. **Goods-to-Person.** Some form of good-to-person picking technology has been available for years, however within the past few years the application and adoption of this approach have evolved to address the demand for rapid throughput and accurate fulfillment of a growing number of SKUs. This concept uses high-density automated storage and retrievals systems (ASRS) that deliver unit goods to a single picking station. This eliminates operator travel and enables smaller order quantities to be delivered efficiently.

There are two primary **automated picking systems**.

These are specific to the pharmacy. A centralized, CSC-based pharmacy could leverage these solutions to achieve dramatic efficiency and safety gains for intermediate or advanced centers.

1. **Automated pharmacy storage systems.** An APS fully automates the storage and retrieval of medications. The system picks item boxes and brings them to a designated operator to verify and retrieve desired doses. Once picked, the box is automatically returned to its storage space while the next order item is brought to the operator. These solutions utilize barcode scanning technology to promote patient safety and operator productivity. Inventory quantities are automatically updated in a PIM.
2. **Automated unit-dose packaging and dispensing systems.** Technicians load bulk pharmaceuticals to be packaged into individual unit doses. These are then stored and retrieved as needed to dispense to specific patients. Some systems include features that enable patient doses to be aggregated for a 24-hour period. This makes administration by nurses easier to verify and carry out.

## Case Study

While these automated solutions yield worthwhile benefits individually, when combined in a CSC their contributions can be substantial. That was certainly the case for the Penn Presbyterian Medical Center (PPMC) pharmacy. Its staff of 60 provides pharmaceuticals to 30 facilities overall: 3 other pharmacies, 2 infusion centers and 25 physician practices. Six months after implementing automated packaging and storage systems, their center:<sup>33</sup>

- Reduced inventory overhead by \$350,000
- Reduced missing doses by 40% "due to a change in the presentation to nursing"
- Reduced cart-fill times by 300% (from 12 to 4 hours by 2.5 FTEs)
- Pharmacy managers are "far more confident in the safety of our medication distribution"

<sup>33</sup> Nishaminy Kasbekar, PharmD, FASHP, "PillPick and BoxPicker from Swisslog," Pharmacy Purchasing & Products, July 2013, Vol. 10, No. 7, p. 40.



## An Efficient Supply Chain Platform to Support Future Growth

By migrating to a CSC business model, healthcare systems deploy an efficient, cost-effective and optimized platform for current and future operations. This platform can provide a path for a growing IDN to move its supply-chain operations along the continuum from *basic* to *intermediate* to *advanced*.

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“Opening a CSC creates an executive-level platform for supply chain professionals to manage all nonlabor purchases.”<sup>34</sup>

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Further, a CSC platform enables IDN facility administrators to easily:

- Add more supply-chain service lines over time (laundry, pharmacy, med-surg SKUs etc.)
- Extend existing CSC services to additional facilities. Now that health systems have started adapting to the Affordable Care Act, the construction of new facilities has picked up,<sup>35</sup> providing additional opportunities for achieving savings through consolidation.
- Support the launch of new service lines (each with their own requisite supply-chain needs.) Falling reimbursement schedules have motivated many hospitals to implement, and/or be more competitive in, “high-margin specialties.”<sup>36</sup>

<sup>34</sup> O'Daffer, Eric; Mooraj, Hussain, “To CSC or Not to CSC, That is the Question for Healthcare Providers,” Gartner, February 18, 2011, p. 8.

<sup>35,36</sup> Kutscher, Beth, “Hospitals return to building mode as new construction projects proliferate,” modernhealthcare.com, July 21, 2015.



## Next Steps

The implementation of a CSC can be complex. Processes are revised or updated and workflow-step dependencies challenged. Thus, it is essential to engage consultants with the expertise and experience to ensure a successful supply-chain-enhancing implementation.

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“It is the rare healthcare supply chain organization that has the right talent to support the strategy and execution of a CSC. This requires the provider to outsource the operation, bring that talent in through consultants in the short term, or to invest for the long term in the additional people to carry the ball for years.”<sup>37</sup>

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Swisslog hires, trains and grooms healthcare-industry experts with the knowledge and experience to implement a successful CSC. Our talented team, in conjunction with our proven technologies, can help you:

- Increase your operating margin by dramatically improving the efficiency of your supply-chain operations
- Design and complete a proof of concept, and implement your CSC
- Standardize and centralize your software, hardware and automation systems to maximize the value your CSC delivers through our
  - Warehouse management solutions
  - Pharmacy inventory management solution
  - Material handling transport solutions
  - Picking solutions
  - Automated pharmacy storage solutions
  - Automated unit-dose packaging and dispensing solutions
- Promote patient safety and better outcomes
- Increase and improve compliance with regulatory requirements

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<sup>37</sup> O'Daffer, Eric; Mooraj, Hussain, "To CSC or Not to CSC, That is the Question for Healthcare Providers," Gartner, February 18, 2011, p. 12.

## About Swisslog Healthcare Solutions

Swisslog Healthcare Solutions is the leading supplier of automation and software solutions for material transport, medication management and warehouse distribution in healthcare facilities. Swisslog has installed facility-wide and pharmacy automation systems in more than 3,000 hospitals worldwide, including more than 2,000 in North America. Denver-based Swisslog Healthcare Solutions offers total system design, manufacturing, installation and customer support – providing an integrated solution for lean workflow and operations that enhances information access, patient safety and cost efficiency.

### Contact us

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Swisslog Healthcare Solutions  
[healthcare.us@swisslog.com](mailto:healthcare.us@swisslog.com)  
US: 800.764.0300  
Canada: 877.294.2831 | 905.629.2400

[swisslog.com/healthcare](http://swisslog.com/healthcare)

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