Future of Strategic Supply Chain:

GPO Optimization in Today's Healthcare Environment

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Introduction

Healthcare procurement has evolved from earlier transactional/tactical models to new enhanced and robust approaches. This discussion topic includes the hospital/Group Purchasing Organization (GPO) relationship and examples of future enhanced strategic procurement models, and will detail market trends, industry enablers, and benefits. This white paper concludes with a case study review by PwC, outlining leading practices with one of its client hospitals and the benefits achieved by our client from that engagement.

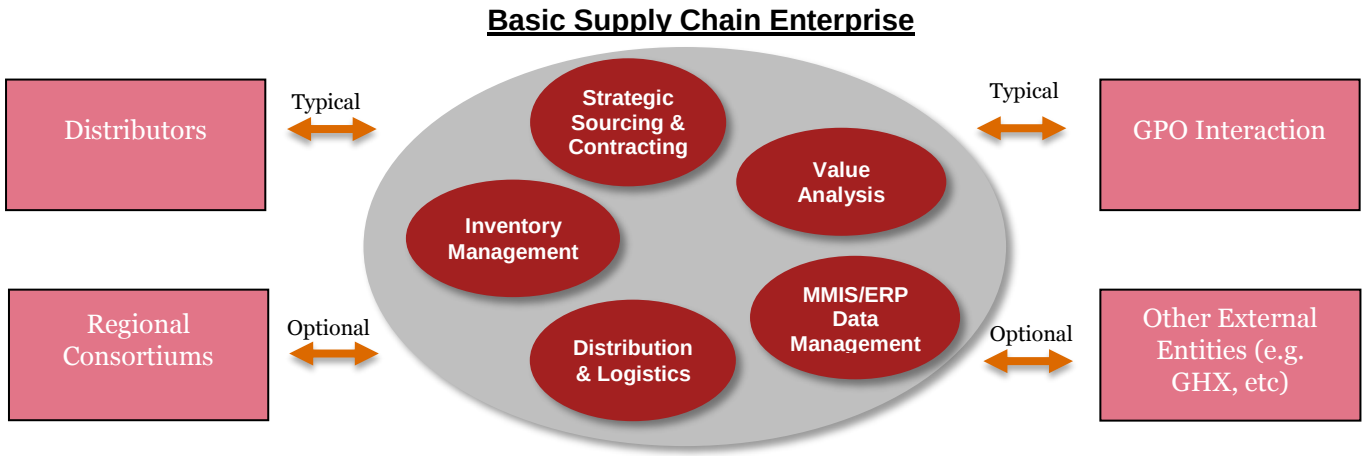
Hospital Procurement

Current State

Hospital procurement is one of the hot topics in hospital boardrooms across America. Procurement models/activities of the past, such as tactical or transactional models, mostly revolved around "procurement policies and procedures, processing purchase requisitions, dispatching orders, receiving order acknowledgement, product delivery or receipt, and ultimately payment to the supplier."[1] Although these transactional activities still occur on a day-to-day basis, evaluation of hospital procurement has now changed to include bidding, contracting, negotiation and procurement of most supplies, equipment and services required for maintaining operations and effective patient care in a timely and cost effective manner.[2] Additional duties may include:

- Capital and Minor equipment
- Leases and Rentals
- Service Contracts
- Parts and Accessories and Services
- Storage and Distribution

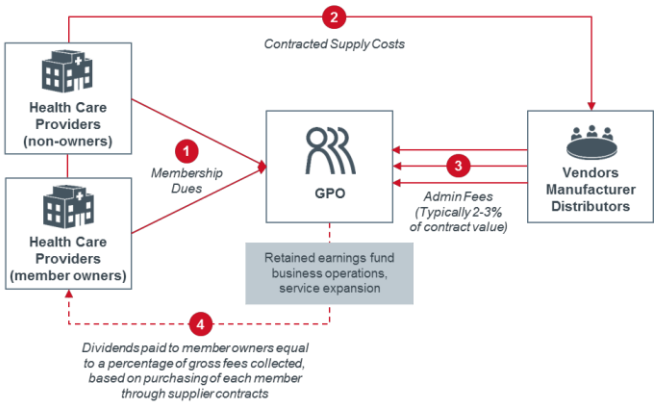
In today's complex, demanding environment, Materials Management departments are required to be more than a buffer between the many hundreds of vendors. Below is a model for many hospital purchasing departments.[3]



[1] John P. Willi, MBA, CPCM, C.P.M., A.P.P., CMRP, FARHMM, "Strategic Sourcing in Healthcare." May 2012
[2] "John Hopkins Purchasing Department: Mission Statement," http://www.hopkinsmedicine.org/purchasing/geninfo/mission.html
[3] GHX Provider and Supplier Customers Identify Eight Key Trends of the Future Healthcare Supply Chain", Feb 2015

Group Purchasing Organizations

The Group Purchasing Organization (or GPO) is defined as an organization created to leverage the purchasing power of a group of businesses/hospitals/healthcare systems to obtain discounts from vendors based on the collective or group buying power of its members.[4] In most cases, Group Purchasing Organizations (GPOs) have been integrated in a hospital's procurement process. Nearly all hospitals and health systems have been key partners with GPOs in strategies for sourcing and purchasing drugs, devices, and other supplies and services. Below is a typical GPO/Hospital/Vendor model:



In recent years product pricing and service expenses have risen as much as 10% while GPO margins have increased or stayed the same.[5] In theory, GPOs should be one of the many catalysts for lowering supply costs since they have the benefit and leverage of negotiating prices on behalf of many healthcare institutions. However in today's purchasing environment, GPOs are increasingly having to address the following challenges:

- Rise of regional and local purchasing alliances and consortiums
- Industry consolidation, increased buying power
- Increasing professional supply chain staff
- Increasing movement to self-contracting and self-distribution
- Improved automation and technology (e.g. ERP, spend analytics, eSourcing, data and pricing visibility)

GPO History

"GPOs date back to 1909, when the Hospital Superintendents of New York first considered establishing a purchasing agent for laundry services. In 1910, the first GPO was created, the Hospital Bureau of New York. During the last quarter of the 20th century, the importance of GPOs grew as hospitals were faced with rising expenditures due to phenomenal advances in care and an aging population, as well as falling reimbursements from both the government and private sector payers. For many decades, healthcare GPOs grew slowly in number, to only 10 in 1962. Medicare and Medicaid stimulated growth in the number of GPOs to 40 in 1974. That number tripled between 1974 and 1977. With healthcare costs rising sharply in the early 1980s, the federal government revised Medicare from a system of fee-for-service (FFS) payments to Prospective Payment System (PPS), under which hospitals receive a fixed amount for each patient with a given diagnosis. In 1983, the institution of the PPS focused greater scrutiny on costs and fostered further rapid GPO expansion. Over 95% of total GPO purchase volume and alignment of these affiliates and cooperatives are tied to 4 major GPOs – Vizient, Premier, HealthTrust Purchasing Group, and Intalere. – given the rapid merger and acquisition activity over the past 10 yrs. Importantly, 97 percent of all not-for-profit, non-governmental hospitals participated in some form of group purchasing."

-Healthcare Supply Chain Association, "A Primer on Group Purchasing Organizations"

[4] "Frequently Asked Questions," last modified 2011, http://www.supplychainassociation.org/?page=FAQ
[5] Lichtenberger, S, et al., "How Sourcing Excellence Can Lower Hospital Costs," Health International, 2010, 10: 18-29.

- Inability of the group to address specific local needs

Market Trends

Movement to Strategic Sourcing

As current healthcare models are becoming less economically suitable, many organizations are looking for new ways to control costs. Hospitals are turning to their procurement and sourcing department in efforts to help lower their costs rapidly. As previously mentioned, GPOs have been a key player in helping hospitals manage their purchasing and leverage vendor discounts. Today, we are seeing a shift away from GPOs, in key spend categories, and an increase in strategic sourcing, where hospitals build their own purchasing model and are more involved in data analytics and contracting.

As hospitals consolidate, gain greater scale, and become responsible for longer-term outcomes and costs, it makes sense that they should implement modern procurement practices and manage the supplier network more strategically. Moreover, powerful global trends in healthcare, such as resource scarcity, demographic shifts, value-based purchasing and medical technology breakthroughs, are also forcing hospitals to rethink their approach to sourcing and supply chain strategies.

According to a national survey conducted at Wharton School of Business, hospitals reported routing 70.6% of purchases through national GPO contracts in 2005. [6] By 2014, purchases routed through national GPO contracts declined significantly to 55.9%. In 2014, the majority of purchases that did not go through the national GPO agreements were believed to be self-contracted. Nevertheless, GPOs continue to play a critical role in streamlining purchasing as 86% of hospitals and health systems use their GPO relationship to purchase 50% or more of commodity items. By adopting an enhanced strategic sourcing model, hospitals are looking to continuously optimize their purchasing activities (data collection, spend analysis, market research, contracting, etc.) which does not limit them to completely cut ties with their contracted GPO. In fact, we find that as the procurement function matures, the relative importance of broader, non-price levers increases, and procurement's role expands to manage the total value in each category.

With better communication and pricing visibility across health systems, smaller hospitals are forming regional and national buying consortiums, whether independently or with the support of their GPO relationship. Opting out of a GPO potentially allows hospitals to not only cut costs but also generate revenue by selling the contracts and price points they negotiate to other hospitals. For example, health systems such as the Mayo Clinic and Johns Hopkins Hospital are taking this outreach approach.

Another market trend is GPO-like or GPO-affiliated organizations (e.g. SharedClarity, Excelerate, etc.) attempting to carve out specific niches within supply chain, with the promise of greater levels of sourcing and supplier synchronization built upon review of evidence-based medicine. Those organizations will face a myriad of challenges. For example, how will they better define themselves in the future? Will they be more research based or end up being mini-GPOs? These companies seem to be announcing a tolerable shift away from traditional GPOs.

Industry Enablers

As mentioned above, there is an apparent shift in hospitals moving towards a strategic sourcing model, which are enabled by several factors. One key driver has been technology. New solutions are helping hospitals gain greater visibility to spend, improve the efficiency and effectiveness of procurement, and better manage supply costs and tiered contracts. Today, healthcare Information Technology (IT) companies such as Aptitude, Curvo, Valify, and Coupa are providing cloud based solutions to bring visibility to supply chain cost and utilization, making sourcing more efficient and effective, and enabling the movement to create a strategic sourcing model.

As a result of technology becoming an important factor for driving change, new strategies, not previously considered by hospitals, are being deployed.

[6] 2014 National Survey: Hospital Supply Chain Executives' Perspectives on Group Purchasing from Wharton School, Univ of PA, commissioned by AHRMM/AHA

Data Analytics: New data analytics capabilities (e.g. harnessing Big Data), reporting, tools and solutions have greatly facilitated the shift away from proprietary GPO solutions that address predictive analytics, product variation, utilization and contract compliance. For example, contract management solutions such as PeopleSoft Supplier Contract Management, which are integrated with ERP systems, are helping to drive this shift. Healthcare entities will now have the improved ability to focus on gaining transparency into supply product cost, service delivery, and business outcomes

Other Drivers

1. **Purchased Service Integration:** Organizations may choose to claim service integration as a core competency and consider managing those contract services themselves or bring those functions back in house.

2. **Physician Relationships:** Healthcare entities will be able to enhance their alignment of products that may be best for specific needs, how much a product should be used for particular patients, and which patients are more likely to benefit from the products. This will ultimately help organizations tailor their services and resources to specific health practitioners.

What are the Steps to Achieve Strategic Sourcing?

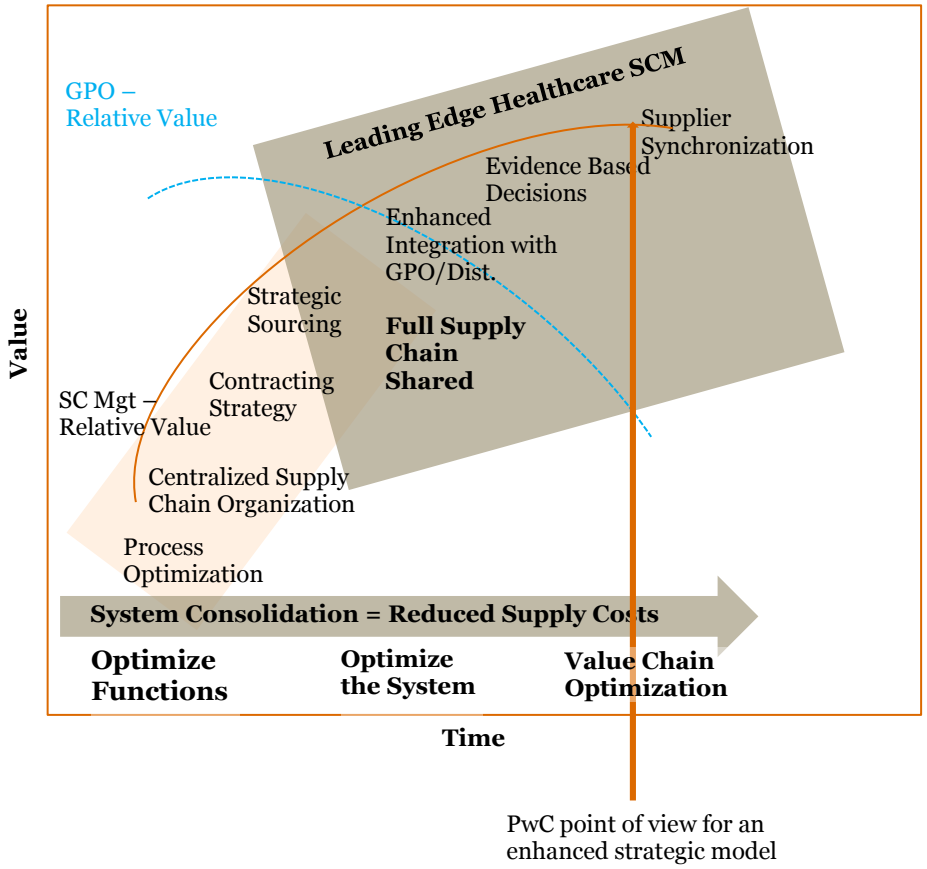
In order to build an effective strategic sourcing model, there are a few steps that hospitals are taking to optimize and enhance their procurement. Healthcare organizations must understand that creating a successful strategic sourcing model will require building their sourcing skills over time and focusing on handling materials by training staff appropriately, as well as creating outlets to seek and understand new ideas. Before deciding on an effective strategic sourcing model or a GPO/sourcing organization, we would encourage clients to take a step back and articulate the procurement strategy or vision, quantify the opportunity and sources, clarify the capabilities needed, rethink the operating model, and then refine the medium and long term roadmap.

The first step after developing a strategic model for your organization, is establishing a central procurement department that concentrates on improving their basic sourcing skills and developing an infrastructure that will support their organization as they expand. At this level the department starts by becoming familiar with how their "basic" products are sourced. The key here is for procurement departments to become familiar with volume and cost and implement a total cost approach that will help achieve best value and limit risk for their end-users. Essentially this allows hospitals to better understand their spend analysis and build tools that they can use once they are faced with more complex products.

Other steps that will need to take place are the following:

- Increased need to commit to fewer vendors to attain lower acquisition cost
- Recruit appropriately educated, experienced personnel who are able to influence change and support a more professional supply chain organization
- Align sourcing with contract management and supplier relationship management processes
- Need for end-to-end technology platform that leverages cost, quality, and outcomes information from financial and clinical systems
- More resource intensive: Increased automation needed to offset the added costs of adding relevant, skilled staff to strategically address critical spend categories
- Increase sourcing events/bid frequency: More time to negotiate local agreements and perform evaluations
- Consolidation of vendors

The graphic below shows a "maturity model", which reflects where an organization may fit on the scale of operating with an enhanced strategic sourcing program. This is a good indicator of what activities need to take place to advance the program.



PwC point of view for an enhanced strategic model

Critical questions

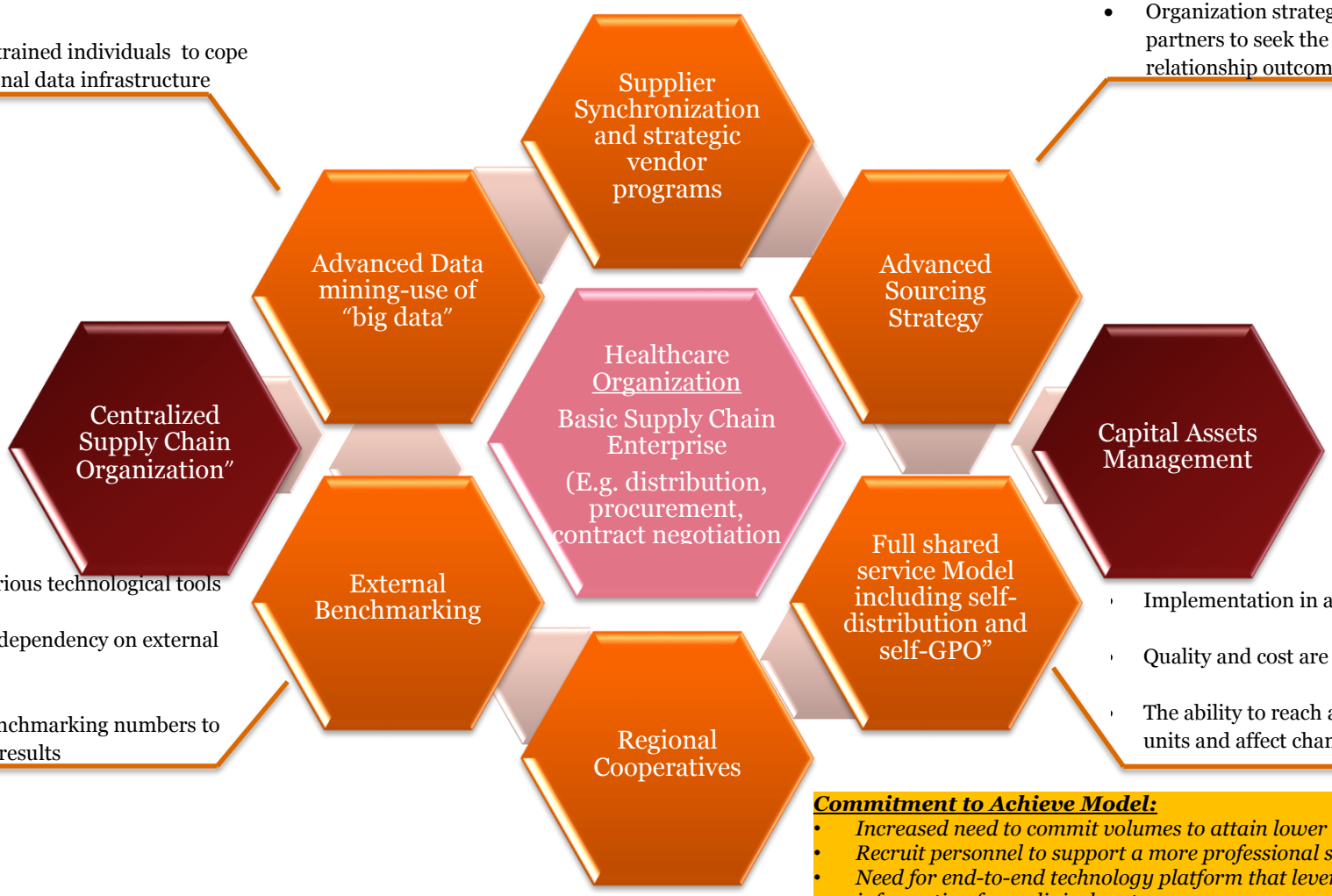
- **What does the hospital's supply chain look like in 5 years?**
- **How does the relationship of the hospital, their GPO and distributor change as they move along the curve?**
- **What processes need to be set in motion now to achieve the goal?**
- **In the context of health reform, market forces and the technological revolution, how can the hospital organization innovate to reinvent the supply chain?**

Enhanced Strategic Sourcing Program Model[7]

Below is model of an enhanced strategic sourcing program. The model shows basic functions along with emerging and enhanced program activities.

- Smart organization able to utilize data tools
- Employing trained individuals to cope with additional data infrastructure

- Increasing procurement function within the organization
- Organization strategic alignment with partners to seek the best business relationship outcome



- Utilizing various technological tools
- Decreasing dependency on external sources
- Utilizing benchmarking numbers to drive home results

- Implementation in all departments
- Quality and cost are agreed upon items
- The ability to reach across all business units and affect changed within the

Commitment to Achieve Model:

- *Increased need to commit volumes to attain lower acquisition cost*
- *Recruit personnel to support a more professional supply chain organization*
- *Need for end-to-end technology platform that leverages utilization information from clinical systems*

[7] GHX, "Provider and Supplier Customers Identify Eight Key Trends of the Future Healthcare Supply Chain", Feb 2015

Benefits and Challenges

As summarized in the chart below, there are both benefits and challenges when implementing an enhanced strategic sourcing program.

Benefits	Challenges
Increased oversight over all practice activities	Depending on maturity model placement, potentially long timeline to have a fully developed program
Reduction of Non-Labor Expense (20-30%)	More stakeholders to satisfy
Improvement of Hospital / Physician relationship	Investment into building a defined infrastructure
Ability to negotiate better terms for contracts	Ability to attract effective talent to the organization
Ability to "touch" the rest of the organization and not be the Materials Management silo	Inflated staff for organization to manage
Better utilization of data analytics	Allocation of supply chain cost and alignment of differing incentives
Driving clinical savings in the organization and greater sustainable ROI (along with lower costs and risks)	Effectively communicating to more vendors and other services
Supply Chain becomes part of strategy decisions, and becomes a pro-active annual plan and priority	The organization effectively integrating Supply Chain as a strategic department
Improved customer relationships	Maintaining relationships over an extended period of time

Strategic Sourcing Transformation of a Large Academic Medical Center

Background

PwC partnered with a $7.7 billion academic medical center to identify opportunities for cost savings in the procurement activities of the organization. The focus of PwC's partnership was to deliver a self-contracting plan to transition the client to a strategic sourcing program, and in turn realize significant savings through transformational change.

The integrated global health enterprise system operated with a total of 2,667 contracts in their purchasing alliance contracting strategy. The composition of these contracts was 59% GPO, 39% self-contracting as a system, and 2% local by facility/hospital. PwC's goal was to capture the ability to drive value in terms of understanding the relationship between a standard GPO offering and self-contracting. The remainder of this section details our explanation of the client-specific transition towards strategic sourcing and the development of our roadmap for the hospital to transform their sourcing activities and achieve sustainable savings.

Client Challenge

Our client desired to investigate the value of decreasing their dependency on GPOs for the procurement needs of the hospital while maintaining effective patient care in a timely and cost effective manner. PwC was engaged to understand the client's sourcing processes, assess the challenges of the hospital's current GPO model, and identify opportunities for cost savings through a strategic sourcing transformation. PwC conducted an

assessment with the hospital system to help them understand their options and how they were positioned in the market.

Through our analysis, several challenges were recognized within the hospital's current-state purchasing area that could potentially cause difficultly in the transformation to a strategic sourcing model:

- The supply chain structure was fragmented and localized at each facility which allowed for potential difficulty in achieving system-ness and leveraging brand and buying power.
- Procure to pay had pricing errors and was more tactical and transactional focused versus strategic customer focus.
- Lack of a single contract management system to house all contracts created a potential difficulty in understanding the full picture of the contract portfolio, expiration schedule and impact on item master pricing.
- Two paralegal departments created a possibility for a bottleneck at the legal process which could result in the inability to execute a contract in a timely manner.
- Finally, the systems utilized by the hospital across the organization needed to be consolidated to ensure spend and contract data was aggregated properly.

PwC Solution

We began our assessment by using high-level benchmarks to identify potential cost-savings opportunities and helped our client understand the value levers that drive a successful strategic sourcing transformation. Some of the key value levers are detailed below:

- ***Volume***
- ***Governance Model***
- ***Commitment***
- ***Change Management***

To go beyond the standard GPO model, our client must leverage these keys areas to realize the full benefit of a strategic sourcing program. These value levers helped our client understand the weaknesses in their current state sourcing strategy and allowed us to present recommendations to form a unified strategy.

Strategic Options and Impact Assessment:

Strategic Options	Definition	Impact Assessment
Full Self-Contracting Model	**No leverage of GPO – complete strategic sourcing of all supply, purchased services, and capital spend requirements**	• **Organization - High** • **Savings Optimization - High** • **Speed to Value - Medium** • **Operational Readiness - High** • **Governance - High** • **Overall Impact – High**
Self-Contracting Model with GPO Augmentation	**Strategically leverage GPO on selected spend categories**	• **Organization - Medium** • **Savings Optimization - High** • **Speed to Value - High** • **Operational Readiness - Medium** • **Governance - High** • **Overall Impact - High**
Full GPO Model	**Maximize GPO utilization – as much spend as possible through GPO**	• **Organization - Low** • **Savings Optimization - Low** • **Speed to Value - Medium** • **Operational Readiness - Medium** • **Governance - Medium** • **Overall Impact – Medium**
GPO Cooperative	**Complete sourcing of all spend requirements – leverage joint brand and spend for negotiating leverage**	• **Organization - Medium** • **Savings Optimization - High** • **Speed to Value - Medium** • **Operational Readiness - High** • **Governance - High** • **Overall Impact - High**
Status Quo	**Maintain current practices of organization choice for spend decisions and optimization**	• **Organization - Low** • **Savings Optimization - Low** • **Speed to Value - Low** • **Operational Readiness - Medium** • **Governance - Low** • **Overall Impact - Low**

PwC collaborated with the hospital team to develop and deliver a strategic sourcing model encompassing a self-contracting plan. We identified over 100 non-labor cost reduction initiatives and provided strategies for each initiative to achieve the targeted savings opportunities. This plan would allow the hospital to take the steps towards an enhanced strategic sourcing program and continue as a leading brand in the healthcare landscape.



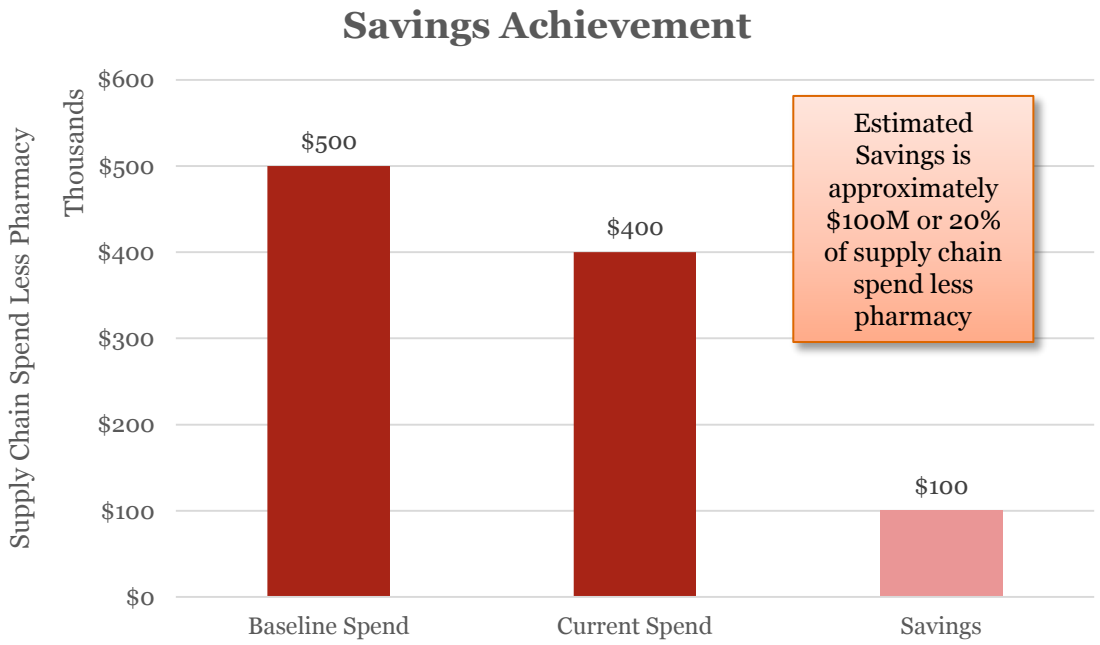
A strategy and direction were set, and big picture decisions were made around what the strategic sourcing program would look like and what aspects the hospital would take on. The future state was outlined over a multi-year timeframe and the alignment of people, processes and organization was established. The plan outlined the organization going live with the first wave of their strategy to advance to the self-contracting model and the second wave would be implemented approximately 18 months after wave one. Flexible and opportunistic, this plan allowed the hospital to be able to expand further towards strategic sourcing in the future.

Impact[8]

Through PwC's direct support and assessment, the health system experienced:

- **Cost-Reduction Opportunities:** Realized savings of $80-100 million across all non-labor expenses.
- **Increased Staff and Responsibilities:** Increased sourcing department to 27 FTEs to take on extra sourcing and procurement responsibilities
- **Beating GPO Contract Pricing:** The hospital system is consistently beating GPO contracts on price by 10-15%; the organization has more control over their procurement costs and are more involved in data analytics and contracting
- **Data Analytics:** An ability to understand various data metrics and form assumptions and solutions along with utilizing various tools to closely monitor procurement activities
- **Increased Oversight and Control:** Continuously driving sustainable clinical savings for the organization into the foreseeable future

[8] October 2015 interview with client contact



Conclusion

The future of supply chain may include healthcare organizations being less dependent on GPOs while investing and building enhanced strategic sourcing programs. As demonstrated throughout this paper, there are enablers that exist in the current healthcare industry that are giving stakeholders the ability to make decisions around improving their sourcing procurement functions, increasing their staff skill set to meet functions that were once held by GPOs, and improving savings strategies for products as well as services. If implemented under proper conditions, an enhanced strategic sourcing program can yield savings between 15-25% along with improving relationships among all departments and staff in the organization. Unfortunately, for healthcare entities, it is becoming increasingly harder to operate under constraints that take away the ability to negotiate to obtain the best possible contract for the network. Choosing to enhance your sourcing department may not be an option, but a must to be viable in future industry.