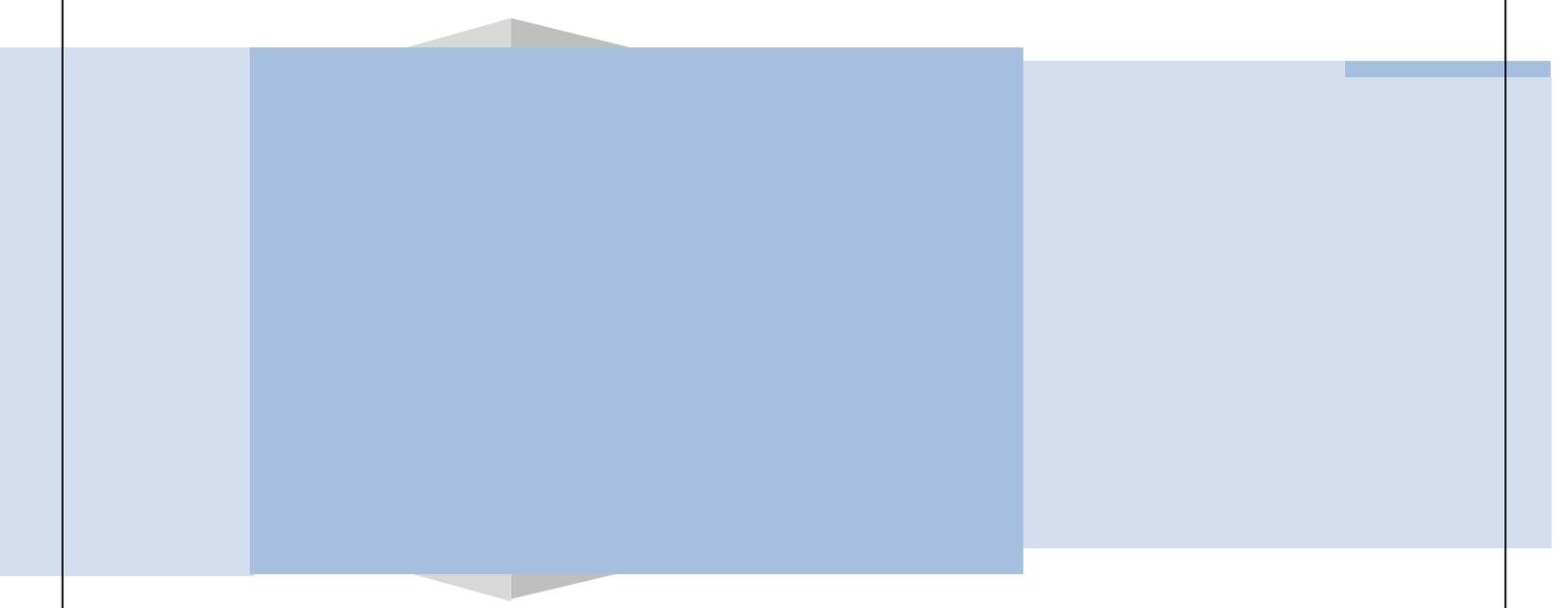


HEALTH CARE SECTOR ADVANCES

The Value of Group Purchasing - 2009: Meeting the Needs for Strategic Savings

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A Study Conducted by:

Health Care Sector Advances, Inc.

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Executive Summary

The Value of Group Purchasing – 2009

Overview

Group purchasing is a principal strategy by which companies in many sectors, especially healthcare, have sought to achieve cost containment, improve the quality of goods and services and allow staff to focus their efforts on activities more suited to specialized training. This examination, entitled, ‘**The Value of Group Purchasing – 2009**’ empirically studied how hospitals and related systems across the United States regard their utilization of group purchasing organization (GPO) services, savings, satisfaction and overall value. The hypothesis herein is that GPOs play a significant role in supporting the administration’s efforts to find major efficiencies in the provision of health care and by doing so keep costs low. Twenty eight hospital systems, representing 429 hospitals were surveyed as to their commitment to purchasing from GPO contracts and assessment of value.

This study finds that significant cost savings have been and can be further realized in U.S. national health care expenditures from the health care group purchasing industry. Specifically, **this study estimates that GPOs save the U.S. health care industry \$36 billion dollars annually in price savings and over \$2 billion dollars in savings associated with human resources uncommitted to the purchasing process.**

Survey respondents noted that GPOs drive significant savings for both prices of goods acquired and total costs associated with the purchasing process. Few hospitals would be able to take on the expense associated with hiring new staff dedicated to contracting. This duplication of personnel would be wasteful, inefficient, and, in all likelihood, ineffective. In the absence of GPOs, collaborative purchasing efficiencies, to bring together hospitals and systems, would also be required. GPOs assure efficient contracting, price reductions as a result of consolidating volumes of materials to influence supplier price levels, and contribute to a sustained level of high quality suppliers in the marketplace. GPOs are a key part of the value chain that results in high levels of hospital performance in cost, safety and clinical outcomes.

The \$36 billion in annual GPO direct price savings is distributed as follows:

- \$6.8 billion in price savings for the calendar year for hospital pharmaceuticals.
- \$8.5 billion for savings relating to medical/surgical (non-physician preference item) purchases.
- \$1.9 billion in attributed savings in the \$10.4 billion cardiology implant marketplace, either directly or indirectly by providing members with GPO purchased goods or reference pricing from directly engaging the marketplace. Over half of U.S. hospitals and systems use GPO pricing as the benchmark for starting their own negotiations for physician preference items – the most expensive items that they purchase. Similarly, over half report the desire to improve GPO contract penetration.

- \$840 million in attributed savings in the \$7 billion dollar orthopedic implant marketplace (either directly or indirectly by providing members with GPO reference pricing for directly engaging the market).
- \$17.96 billion in attributed savings to “other clinical” products, computers, food, janitorial, office products, etc.

Hospitals were also queried regarding the expenses associated with additional human resources needed to carry out these functions if there were no GPO present.

Savings beyond product pricing

- \$1.8 billion in GPO in attributed human resource savings for hospital purchasing nationally by buffering hospitals from the need to comprehensively carry out strategic sourcing, contracting and other key GPO activities for inpatient pharmacy, general medical products, orthopedic products, other clinical products and housekeeping products. For large systems, similar additional workforce expenditures of as much as \$600,000 per system would be necessary. Thus total workforce savings for hospitals and systems would exceed \$2 billion dollars annually.

GPOs buffer hospitals from a variety of risks in the marketplace that are necessary to achieve effective clinical performance and improve safety. Participants value GPO efforts to monitor and manage drug shortages as well as identify and support contracts for safety products. GPO core competencies include strategic sourcing (e.g., identifying products services and suppliers), developing requests for proposals and their evaluation), obtaining best and final offers, and implementing and monitoring contracts.

Since hospitals and systems utilize GPO pricing as reference pricing to enter the market (to achieve savings beyond GPO savings and with GPO pricing representing the ceiling from which they negotiate) GPO influenced savings actually extend *far beyond* the estimated \$36 billion in total savings.

Background on GPOs, Study Objective & Methodology:

GPOs

GPOs play an important part in helping hospitals and other health care providers across the country with bulk-buying power thereby enabling them to purchase products and services at lower costs than they could realize individually buying goods and services. GPOs develop contracts for their hospital or health care provider members and customers to access a highly dispersed and diverse supplier marketplace. GPOs realize savings and efficiencies by aggregating purchasing volume and using that leverage to negotiate discounts with manufacturers, distributors and other vendors.

The purchasing entities are characterized by core competencies associated with supply chain management activities. They reduce the risks associated with new suppliers’ competencies and their products. GPOs work with their members to assure improvements, safety, efficacy and clinical outcomes. These competencies and capabilities require highly trained employees whose efforts also provide savings to hospitals and systems in the form of reduced full-time employees needed to carry out these critical management tasks.

Objective & Methods

This study provides an important window into hospital and system expectations both traditional and expanded GPO services. The objective of the study was to determine hospital attributed savings to GPO participation and document the extent to which GPO contracting activities provide participants with information to engage the marketplace – both through GPO contracting and through hospital and system contract efforts. The examination was also designed to:

- Assess hospital strategies for utilizing GPO opportunities and determine the extent to which these strategies are valued and realized.
- Understand how hospitals and the systems in which they reside carry out key purchasing functions
- Determine the savings in reduced labor to GPO participants as a result of GPO participation.
- Assess the importance of key GPO functions – including pricing, contracting, physician preference and management, tools provided to members and networking opportunities.
- Determine GPO participant satisfaction with GPO services.
- Understand how costs of acquisition would increase if GPOs were not involved in hospital purchasing.

Methodology

In this survey 28 hospital systems, representing 429 hospitals were queried as to their commitment to purchasing from GPO contracts for commodities, pharmaceuticals, physician preference items such as orthopedic implants, and capital equipment (e.g., beds, etc.), as well as the savings achieved by levels of commitment (i.e., percentage of contract purchased off a GPO contract). The study is unique in that it considers the extent to which GPOs reduce transaction costs associated with the employment of supply chain personnel for a variety of categories of products at both the hospital and system level. It also documents the various added value strategies associated with hospital/system GPO expectations, including outsourcing, utilizing GPO price as a benchmark for individual hospital contracting, and utilizing GPO pricing to obtain custom contracting.

The study did not focus on all products purchased by hospitals – but rather those key to the clinical endeavor including inpatient pharmacy, general medical items, orthopedic implants, cardiology implants, and a wide range of clinical products.). Respondents were asked about their total percent of all goods purchased through GPOs and estimated savings. U.S. hospitals have approximately \$310 billion in non-labor expenses – much of which could theoretically be purchased through a GPO. Respondents purchased only 72.8% of all their goods through GPOs with an anticipated 18.7% in average savings. This figure, applied to the full non-labor expenditures, suggests as much as \$42.2 billion dollars of savings attributed to GPO purchases. GPOs, however, do not uniformly provide their participants with access to a full range of purchased products and services (e.g., utilities and building supplies) or with access to all medical/surgical, pharmaceutical or capital products. Consequently, reducing the range of purchased products and services not carried by GPOs by 20% of all non labor expenditures – an overall GPO savings is estimated at \$36 billion dollars nationally. This figure is consistent with the mid-range of other recent academic estimates.

The Value of Group Purchasing – 2009

List of Tables

Table 1: Characteristics of Hospitals, Systems, and Purchasing Patterns & Savings

Table 2: Decision Making for Purchasing

Table 3: Reported Purchasing Strategy

Table 4: GPO and Hospital Responsibility for Purchasing

Table 5: Meeting Member/Customer Expectations for Traditional Activities

Table 6: Meeting Member/Customer Expectations for Expanded Activities

Table 7: Table 3: GPO Role in Purchasing Strategy

Table 8: Purchasing Patterns and Satisfaction

Table 9: GPO Meeting Expectations for Traditional and Expanded Services by Level of Contract Utilization

Table 10: Workforce Savings (FTE) Attributable to GPO Participation

BACKGROUND

The current economic downturn has significantly increased the pressures felt by hospitals and other health care providers crippled by revenue reductions and the cost of caring for the uninsured. For nearly 100 years health care group purchasing organizations (GPOs) have assisted hospitals and health care providers reduce their non-labor costsⁱ. This has been accomplished by helping them meet their goals of strategically contracting, sourcing and procuring goods and services so that they may better care for their patients. Next to labor, the cost of goods and purchased services account for the second-largest dollar expenditure in the hospital setting.ⁱⁱ

Hospitals, however, see GPO purchasing as just one, among several alternative strategies, for meeting their strategic procurement goals. Hospitals go to market for goods and services in many different ways – and in different ways for different kinds of products. The strategies surrounding hospital purchasing are, as we shall see in this report, wide-ranging – at times supplementing GPO services – and at other times actually substituting for such services.ⁱⁱⁱ In fact, hospitals report using their GPO contracts for, on average, only 72.8 percent of their goods and services needs.

Some hospitals attempt to purchase mostly from their GPO. Others differentiate between product types such as pharmaceuticals, capital, commodities and expensive physician preference items. Thus while it is very important to understand the impact of GPOs – it is also important to understand how that impact is achieved and why the potential market for GPOs is not the actualized market for GPO purchasing. Furthermore GPO impact should not be assessed “merely” on the basis of a hospital’s spend through GPO contracting. Rather, one must understand how hospitals set out to source and purchase their products to truly understand the impact and value that GPOs provide to the health care system.

Our work here is consistent with earlier work by Schneller^{iv} and Burns and Lee^v that documented the substantial cost savings, savings from lower prices, and overall satisfaction associated with GPO participation. A 2008 survey by Medical Distribution Solutions, Inc. documents both high levels of hospital satisfaction with GPOs as well as hospital intentions to purchase increased volumes through GPO contracts.^{vi} This study supports that GPOs bring value and satisfaction to hospitals.

Overall satisfaction measures, however, do not provide a full signal of the value associated with GPOs. Hospitals, to different degrees, have inconsistent expectations regarding their GPOs – in areas such as lowered prices for products, contract efficiency and flexibility, management of physician preference items, on-site provision of tools for improving supply chain management and for networking. While Schneller^{vii} identified the lack of value attributed to many of these “added service” areas, Burns and Lee^{viii} have recently characterized the discrepancy between satisfaction by hospitals with GPO services and satisfaction with such services. Satisfaction for the expanded range of GPO services, however moderate, frequently exceeds hospital attribution of importance of such services.^{ix}

As we assess findings in this study, it is important to recognize that GPOs were originally formed to bring together buyers and sellers to create a more efficient marketplace. Thus while GPOs missions will vary,^x it is likely that in assessments of GPOs respondents narrow their sights to GPO performance to the extent that GPOs meet their goal to reduce transaction costs. GPOs are first and foremost valued for fulfilling sourcing needs and averting the variety of market, strategy and demand related-risks associated with entering the market for thousands of goods on their own.

To provide a more analytical context to these questions Schneller and Smeltzer pointed out that there are four dominant models for hospital and system engagement with GPOs that require further elaboration:

Type 1 – GPO dominated purchasing – characterized by high GPO involvement in Product selection and High use of GPO contracts.

Type 2- Strategic Outsourcing of Contracting – characterized by low GPO involvement in product selection and High use of GPO contracts

Type 3 – Strategic manipulation of purchasing – characterized by High GPO involvement in Product Selection and Low levels of GPO contracts.

Type 4 – Hospital/IDN dominated purchasing – characterized by Low involvement of GPO in product selection and strategic sourcing and low use of GPO contracts.

Understanding that there are different strategies is important for assessing GPO satisfaction, success and value. As Burns and Lee have pointed out, for overall purchasing, “hospitals that use the alliance’s pricing as a benchmark ceiling to negotiate their own deals are less likely to report savings and satisfying benefits” from their GPO.^{xi} Similarly, hospitals that purchase the larger proportion of their physician preference items through GPOs appear to be more satisfied with their savings.^{xii} Within this context, it is important to remember that while a hospital or system may have an intended strategy for carrying out its purposes, there may be a significant gap between a hospital’s or system’s intended and realized strategy.^{xiii}

As we shall see in the analysis, satisfaction with GPOs is consistently high among Type 1 and Type 2 hospitals. They require relatively fewer competencies for strategic sourcing and contracting than they now possess. While many of these hospitals are relatively small, Type 1 and 2 hospitals are found across the spectrum of hospitals and systems. And acquiring such competencies, in the absence of a GPO, would be, without doubt, very expensive. Similarly Type 3 and Type 4 hospitals, while having made investments in directly engage the marketplace, rely heavily on GPO presence to bring stable pricing to the medical materials environment.

GPO contracting (with most contracts having a three year term) provides GPO members with stability in pricing over the course of a contract. As a result hospitals have the ability to engage in more accurate budgeting activities and to buffer themselves against increases in the costs of goods. With such stability they can also anticipate the impact that the costs of goods will have on the hospital as well as specific kinds of admissions to the hospital. To the extent that GPOs

carry out scrutiny of supplier competencies and capabilities, hospitals are relieved of the difficult task of assessing supplier risk. GPO contracting also can act to smooth out flux in marketplace pricing – buffering hospitals against short-term price changes such as those recently affecting certain raw materials markets.

An unintended consequence of GPO pricing is the provision of hospitals and systems, which choose to purchase outside of GPO contracts, with pricing information for directly negotiating contracts on their own behalf (especially types 3 and 4 above). While savings associated with such activities are rarely attributed GPO contracting, GPO contracting facilitates a diverse and active marketplace for a wide range of products – including costly physician preference items (PPIs). We agree with a recent study that depicts GPO members and customers as having choice to “make their own decisions about which goods and services to obtain.”^{xiv} But beyond this they provide their members and customers with options – for purchasing through their GPO or on their own.

There are GPO savings associated with reduction in labor costs surrounding the strategic sourcing, contracting process, and the total acquisition of products. While GPOs act as the agents of their member hospitals and systems for purchasing, it would be a mistake, save in rare instances, to characterize GPOs as organizations those hospitals turn to “outsource” their purchasing. Even those hospitals that utilize GPOs for a majority of their purchases employ individuals to facilitate the purchasing process. Yet few hospitals or systems would find themselves adequately staffed to assume the full range of GPO functions. However the extent of GPO savings to hospitals and systems, associated with reduced full time equivalent employees, has not been systematically studied and leads to underestimation of the full value that GPOs bring to members/customers - beyond the significant savings estimates we’ve found, associated with GPO savings from pricing.

The Value of Group Purchasing - 2009 assesses how 429 hospitals, within 28 systems utilize and gain benefit from GPO presence in the marketplace. While it assesses the estimated savings that hospitals accrue directly through GPO purchasing, it also assesses the savings achieved through the mix of GPO and hospital/system specific strategies. The report, thus, contributes to the question of levels of GPO penetration in the health care purchasing marketplace.^{xv}

The US health care system, at the point of entry into the second decade of the 21st century, however, does not mirror, in terms of structure, size nor needs the health care system that existed at the founding of the first group purchasing organizations. Indeed, as a result of mergers, acquisitions, and the increased centralization of hospital management, the industry must be understood through the eyes of both hospitals as well as the systems to which they belong. Thus the findings are frequently presented to illuminate how value accrues to hospitals and/or the systems to which they belong.

I. HOSPITAL AND SYSTEM CHARACTERISTICS: SAVINGS, SATISFACTION AND VALUE

This section considers the savings, satisfaction and value reported by the systems and hospitals contributing to the study. The average hospital for which data are presented had 380 beds in service and over 20,000 annual inpatient admissions. Hospitals, however, varied significantly in size. The respondent hospitals tend to under-represent smaller US hospitals. The average hospital supply expenditure was over \$62 million dollars with the largest hospital in the response pool spending over \$230 million annually for supplies. Collectively the systems account for over 3 million admissions each year.

Systems – size, admissions and supply expenditures. The vast majority of hospitals belong to systems, which, depending upon their strategy, competencies and capabilities contribute to their efficiencies in purchasing. The response pool contained systems ranging in size from two hospitals to systems with over 100 hospitals and as many as 18,000 beds in service with system, supply expenditures of over \$1.3 billion dollars and almost 700,000 annual inpatient admissions. Within hospitals belonging to systems there is frequently a high level of centralization of the purchasing function. Reflecting the great variability in hospital complexity and mix of medical and surgical conditions treated, hospital supply expenses per adjusted patient discharge vary substantially across the hospitals and systems studied. While the average hospital reported such expenses at \$1791, it is difficult to tease-out the factors contributing to differences in expenditure. Thus the analysis in this study focuses on estimations of savings attributable the purchase of specific item categories including physician preference items (PPIs) such as orthopedic and cardiology implants, medical surgical suppliers, etc. It also assesses overall estimates of savings.

Both hospitals and systems appear to take on various aspects of the purchasing function on the basis of their internal competencies and capabilities. The report reflects their attribution of such competencies and capabilities at the hospital and corporate levels. In some systems hospitals take on the full range of purchasing functions – whereas in others the purchasing function is clearly a system level activity.

Supply expenditures, goals and overall GPO savings. Supply expenditures are related to a large number of factors including the hospital's mix of patients and services, efforts taken to achieve savings, and internal efficiencies. Attesting to the increased strategic nature of supplies, the majority of hospitals reported having clearly defined goals for managing their supply chain activities as well as success in meeting their goals. The hospitals studied reported supply expense as a percent of net revenue at 14%. The systems reported supply ranging from 14% to 18% of total expenditures. This reflects the diversity of hospitals by both size and mix of patients and procedures within systems.

The hospitals varied greatly in their overall GPO utilization for purchasing through their GPO. While the average hospital purchases almost 73% of goods through their GPO, the range of GPO purchasing effort includes hospitals that purchase only 30% of purchase through GPOs

to those that purchase well over 90% of all products through the GPO. This attests to the presence of very different purchasing strategies across hospitals and their willingness to take on the wide range of purchasing functions and transaction costs associated with purchasing. Attribution of overall savings from GPO purchasing is 18.7%. Applied to the calendar year hospital expenditures for pharmaceuticals and medical surgical products at over 99 billion dollars, GPO generated savings would be in the neighborhood of 19 billion dollars. However, as discussed below, GPO contributions to savings varies across product lines.

GPO contributions to savings across product lines. Table 1 further clarifies hospital and system selective utilization of GPO contracting to meet their own needs and perceived marketplace influence with suppliers of different types of products.

Pharmaceuticals. GPOs make a dramatic contribution to purchasing of pharmaceuticals, a major expense item to hospitals. The average hospital purchases 88% of its pharmaceuticals through a GPO with an attributed savings of 15% over what it would achieve in the marketplace purchasing through its own contracting. It has been estimated that United States hospital market for pharmaceuticals was 38.1 billion dollars in 2007. With an attributed savings of 15 percent, GPOs may well account for as much as 6.8 billion dollars in savings nationally.

Medical/Surgical products. The size of the medical surgical marketplace for hospitals, not-broken down into components, is approximately 61.4 billion dollars in calendar year 2007. However, as discussed below, hospitals attribute different levels of GPO savings to different kinds of items – making it difficult to precisely estimate savings to hospitals across the nation as a result of GPO contracting. Eighty two percent of general medical items are purchased through GPOs with a savings of approximately 19 percent. If all items achieved this level of savings through GPO contracts, there would be a savings of over 9.5 billion attributable to GPOs. The estimation of GPO savings across the medical surgical marketplace is 20% with attributed savings at 8.5 billion dollars.

Physician preference items (PPIs). Physicians (principally surgeons) have an extraordinary influence on a variety of expensive products purchased and utilized in surgery. Among the most expensive of these products are implanted devices utilized in orthopedic (hip and knee) surgery and cardiology (pacemakers and stents). In 1996 the cost of hips and knees, alone, was over 11 billion dollars – a significant percentage of the aforementioned 61.4 billion dollar marketplace. For those hospitals purchasing PPIs through GPOs (Table 2), estimated savings are 15 percent for orthopedic implants (hips, knees, shoulder, hands, feet, spine and arthroscopy) and 17 percent for cardiology physician preference items (pacemakers, stents and valves).

What is noteworthy here is that while many hospitals purchase PPIs directly from suppliers, those that choose to purchase these items through their GPO attribute significant levels of savings for all levels of products – and high savings for PPIs specifically. Given non-disclosure clauses in many hospital contracts with PPI suppliers, it is difficult to assess the extent to which such direct contracting has an overall affect on savings across the nation.

- There is an estimated \$1.9 billion in attributed savings in the \$10.4 billion cardiology implant marketplace, either directly or indirectly by providing members with GPO purchased goods or reference pricing from directly engaging the marketplace. Over half of U.S. hospitals and systems use GPO pricing as the benchmark for starting their own negotiations for physician preference items – the most expensive items that they purchase. Similarly, over half report the desire to improve GPO contract penetration.
- There is an estimated \$840 million in attributed savings in the \$7 billion dollar orthopedic implant marketplace (either directly or indirectly by providing members with GPO benchmarking or reference pricing for directly engaging the market).

Table 1: Characteristics of Hospitals, Systems and Purchasing Patterns, Satisfaction & Savings

CHARACTERISTICS	Mean	Std. Dev.
Average hospital supply expense as percent of net revenue	18.4	9.5
Average system supply expense as percent of net revenue	16.0	8.3
Average number of hospitals in the system	17	30
Materials purchased through GPO	Mean Percent	Std. Dev
Percentage of all materials purchased through GPO	72.8	16.5
Savings attributed to GPO	Mean Percent	Std. Dev.
Percent savings through GPO contracting	18.7	14
Goals for Purchasing	Mean Percent	Std. Dev.
Clearly defined goals and objectives for supply chain*	4.3	0.8
Ability to meet goals**	4.0	0.9
Materials purchased through GPO by type of material and GPO attributed percent savings	Mean Percent	Std. Dev
Percent of GPO Purchase Inpatient pharmacy (a)	88.7	15.2
Estimated GPO Savings	20.4	15
Percent of GPO Purchase General medical/surgical(b)	81.8	18.9
Estimated GPO Savings	20	23.3
Percent of GPO Purchase Orthopedic implants (c)	34.1	31
Estimated GPO Savings	12.6	7.6
Percent of GPO Purchase Cardiology (d)	47.7	34.4
Estimated GPO Savings	17.4	10.7
Percent of GPO Purchase Other clinical products	71.3	22.9
Estimated GPO Savings	13.3	10.8
Percent of GPO Purchase Housekeeping/cleaning	77.0	21.4
Estimated GPO Savings	18.7	19.0
Centralization of Purchasing function ***	3.5	1.3
Overall satisfaction with GPO +	4.1	1.0
GPO affect on cost of acquisition		
Percent Increase in cost of acquisition with no GPO for hospital	3.1	4.6
Percent Increase in cost of acquisition with no GPO for system	19.7	46.8
Additional FTEs needed at the hospital level with no GPO	9 FTE	1.8 FTE
Additional FTEs needed at the system level with no GPO	15 FTE	6.0FTE

* 1=No clearly defined goals 5=Clearly defined goals

**1=Not able to meet goals 5=Able to meet goals

***1= Highly Decentralized 5= Highly Centralized

+1=Highly Dissatisfied 5=Highly Satisfied

II. SUPPLY DECISION MAKING AND GPO STRATEGIC ENGAGEMENT

Respondents were questioned regarding how individual hospitals and their system structure supply chain contracting activities and engage GPOs in their purchasing strategies. For the majority of the respondent organizations, decisions on contract utilization, carrying out GPO vs. non-GPO contracting, and compliance monitoring takes place at the system level (Table 2). For many of the respondent organizations, however, contracting activity, including the identification of new products and the determination of non-physician item vendors is similarly a system and hospital level responsibility. Decisions regarding vendors for physician preference items (PPIs) and capital purchases, on the other hand, are frequently made at the hospital/operating unit level. Thus while many systems have attempted to embrace centralization and improve their ability to act as “operating companies,” for many, purchasing functions remain at the local level.

Table 2: Decision Making for Purchasing – Hospital vs. System Level Contracting Activity

CONTRACTING ACTIVITY	Mean	Std. Dev.
Hospital Vs System Function *		
Decision on contract Utilization	4.1	1.2
Sending out non-GPO bids	3.7	1.5
Identification of products, services and supplies	3.4	1.3
Decisions regarding non-physician preference items	3.2	1.3
Monitoring contract compliance	4.2	1.1
Determination of PPI Vendors	3.0	1.3
Initiating and managing the value analysis process	3.5	1.4
Decisions on capital item purchases	2.8	1.4

Understanding savings attributed to GPOs requires an in-depth knowledge of hospital strategy for purchasing. Hospitals have options as they engage the market for supplies and services – (1) purchasing through an outsourced agent such as a GPO, (2) self contracting utilizing GPOs pricing as starting points for self negotiation and/or (3) working with their GPOs to achieve custom contracts. Table 3 reveals that while the majority of the hospitals and systems report utilizing GPOs as part of an “outsourcing” strategy – reducing the hospital’s transaction costs for sourcing goods, developing requests for proposals, evaluating proposals, and engaging in actually contracting. At the specific product category level, however, hospitals are much more measured in their utilization of GPOs.

When referencing “all products,” commodities and pharmaceuticals, hospitals and systems aim to improve the penetration of GPO contracts. For capital and physician preference items, however, the number desiring outsourcing is substantially reduced. For all categories of materials, however, hospitals and systems utilize GPO pricing as benchmarking and utilize GPO contract pricing to achieve custom contracting for their organizations. This may reflect GPOs increasingly working with individual members/customers to achieve best pricing given a member’s unique ability to standardize on a manufacturer’s product or to determine that a group of products are “equivalent.”^{xvi} It is also noteworthy that of all of the areas where hospitals report “intended strategies” for increased GPO penetration, physician preference items receive the lowest score.

Table 3: Reported Purchasing Strategy

PURCHASING STRATEGY FOR	% Expressing a Strategy to Outsource to GPO	%Use GPO as Starting Point for Negotiation	% Utilize GPO pricing to Seek Custom Pricing	%Desire to Improve GPO Contract Penetration
All products (C4a)				
Hospital	76.5	35.3	50.0	88.9
System	68.4	42.1	47.1	100.0
Commodities (C4b)				
Hospital	77.8	33.3	38.9	88.2
System	78.9	44.4	44.4	100.0
Pharmaceuticals (C4c)				
Hospital	82.4	29.4	44.4	89.5
System	83.3	35.3	47.1	94.4
Capital Equipment(C4d)				
Hospital	35.5	40.0	52.9	58.8
System	47.1	52.4	58.8	62.5
All PPI (C4e)				
Hospital	37.5	50.0	43.8	56.3
System	35.3	57.1	58.8	58.8

While respondents frequently reported that it is their strategy to “outsource” a good deal of their purchasing activity to their GPOs, they also report being moderately active in the purchasing process. Table 4 reflects respondents’ assessments of their own involvement in GPO contracting activities. While across all items they are likely to see a purchasing function responsibility as more of a GPO than hospital or system activity (the mean score across all activities is 3.6 with a score of 5 representing outsourcing of the item), the strongest role for GPOs is the identification of products, services and suppliers, and the development and sending out of bids/RFPs. Hospitals and systems see GPOs as “partners” or “collaborators” in their purchasing. In somewhat different terms, hospitals and systems are continuously participating in purchasing functions, if not actively, at the level of oversight.

Table 4: GPO and Hospital Responsibility for Purchasing

RESPONSIBILITY FOR FUNCTION +	Mean	SD
Identify products, services and supplies		
Med/Surg	3.9	1.1
Pharmacy	3.7	1.3
Develop and send out bids or RFP		
Med/Surg	3.7	1.4
Pharmacy	3.6	1.4
Eliminating unacceptable proposals		
Med/Surg	3.5	1.6
Pharmacy	3.5	1.5
Evaluating Proposals		
Med/Surg	3.4	1.6
Pharmacy	3.3	1.5
Optimize Proposals		
Med/Surg	3.7	1.3
Pharmacy	3.4	1.4
Obtain best and final offer		
Med/Surg	3.3	1.5
Pharmacy	3.4	1.5
Finalize Award		
Med/Surg	3.6	1.6
Pharmacy	3.7	1.4
Implement Contract		
Med/Surg	3.4	1.5
Pharmacy	3.4	1.5
Launch Contract		
Med/Surg	4.1	1.1
Pharmacy	4.0	1.3
Monitor Contract		
Med/Surg	3.4	1.2
Pharmacy	3.6	1.2

+1=Not a GPO Role 3 = Equally a GPO Hospital/System Role 5= Mostly a GPO Role

III. VALUATION OF GPO SERVICES & ACTIVITIES

GPOs provide their members/customers with a wide range of traditional services and activities, principally focused on achieving improved pricing (Table 4) as well as an expanded range of services and “tools” to facilitate physician preference item management, support for the purchasing function, and networking with colleagues to share “best practices” (Table 5). Regarding traditional activities, as suggested in our previous research, members/customers highly value traditional GPO activities.^{xvii} Indeed, an expectation for excellence in pricing is consistently identified as the highest area for importance for GPO performance – especially for medical/surgical products, pharmaceuticals, and commodity items.

Table 5: Meeting Member/Customer Expectations for Traditional Activities

TRADITIONAL GPO ACTIVITIES	IMPORTANCE OF GPO*	EXPECTATION SCORE+
Pricing (overall)	4.4	3.6
Lowest prices on med/surg products	4.9	3.8
Lowest prices on pharmacy products	4.9	3.9
Lowest prices on PPIs	3.6	2.7
Lowest prices on commodity items	4.9	3.9
High guaranteed savings	4.2	3.4
Financial returns – administrative fee	4.2	3.7
Managing supplier terms & conditions	4.2	3.6
Contracting (overall)	4.4	3.7
Providing contracting flexibility	4.2	3.7
Providing breadth of portfolio	4.6	3.9
Identifying new products	4.2	3.5
Support contract management	4.4	3.6

*1= Not at all Important 5= Extremely Important

+1= Does not Meet Expectation 5= Exceeds Expectation

Similarly GPO contracting is highly valued with the highest score appearing for the GPO provision of breadth of its portfolio. The lowest level of expectation is for GPO provision of pricing on physician preference items which, as we shall see later in the discussion, represents an area that many of respondents have chosen, themselves, to manage. Reflecting this, in all instances, except for physician preference items, GPOs are meeting their member’s expectations. Nonetheless, as discussed in later sections of this report, those utilizing such contracts report substantially higher levels of satisfaction with GPO efforts for PPIs.

Table 6: Meeting Member/Customer Expectations for Expanded Activities

EXPANDED GPO ACTIVITY	IMPORTANCE OF GPO*	EXPECTATION SCORE+
Physician Preference Item Management (overall)	3.7	3.3
Provide support for local PPI negotiation	3.6	3.4
Low price on PPI products	3.5	3.0
Help engage physicians on product utilization	3.3	3.1
Support assessment of competing products	4.0	3.3
Assist in Value Analysis Team Activities	3.6	3.4
Provide clinical analytical tools – peer benchmarking, etc.	4.1	3.5
Tools (overall)	4.1	3.4
Provision of on-site implementation resources	3.9	3.3
Provide supply chain analytic tools – spend mgt, etc.	4.3	3.3
Support order management	3.7	3.4
Identifying new products	4.2	3.5
Support contract management	4.4	3.6
Networking (overall)	3.9	3.6
Facilitate supplier relationships, supplier performance assessment and risk management.	3.7	3.5
Facilitate networking with peer groups – share best practices	4.1	3.7

*1= Not at all Important 5= Extremely Important

+1+ Does not Meet Expectation 5= Exceeds Expectation

IV. HOSPITAL AND SYSTEM STRATEGIES FOR ACHIEVING SAVINGS

As demonstrated in Table 3, relatively few hospitals or systems have made the choice to outsource all of their purchasing to a GPO for a majority of the products. Indeed, hospitals report mixed strategies; utilizing some combination of outsourcing to the GPO, utilization of GPO pricing as an important benchmark for entering the marketplace themselves, or utilizing their GPO’s services to achieve custom contracting. Tables 3 and 7 also reveal that both hospitals and systems report having purchasing strategies to utilize GPOs, in concert with other strategies, for procurement of physician preference items. Table 3 also reveals their intention to more fully utilize GPO contracts – especially in areas where GPO contract penetration has been lagging.

Savings attributed to GPO contracts must be understood within the context of how hospitals actually utilize both GPO contracts and GPO marketplace activities. Table 7 suggests that while hospitals may report having strategies advocating purchasing physician preference items through GPOs (Table 3), a significantly smaller number of hospitals actually make such

purchases for clinical preference items. The reported behaviors reflect a number of factors associated to a belief that there is an advantage to be gained though self or custom contracting, in using GPO pricing as a benchmark, working with their GPO to achieve custom contracting. Perhaps an unanticipated consequence of GPOs providing support for value analysis and other standardization efforts may be to signal to others their own potential to more successfully engage the marketplace for price concessions independently of the GPO. Furthermore, GPO willingness to assist in local negotiations and their provision of benchmarking and reference pricing (the price at which a product is sold just below its closest competitor product) may facilitate hospital and systems engaging in non-GPO contracting.

Table 7: GPO Role in Purchasing Strategy (Itemized)

	% PRINCIPALLY UTILIZE GPO CONTRACTS	% HAVE GPO ASSIST IN LOCAL NEGOTIATION	% USE GPO FOR “REFERENCE PRICING”	% USE GPO PRICE DATA AS BENCHMARK
Category of PPI				
Cardiology (pacemakers)	16.7	16.7	8.3	20.8
Cardiology (stents)	29.2	8.3	8.3	20.8
Orthopedics (hips)	19.2	15.4	15.4	23.1
Orthopedics (knees)	19.2	15.4	15.4	23.1
Spine	19.2	11.5	11.5	15.4

To assess success in realizing strategies, respondents were queried about their overall strategies for utilizing GPOs in purchasing physician preference items as well as about their savings associated with such items. Respondents with high levels (>75% of all purchasing through their GPO) of overall utilization (Table 8) were characterized by significantly higher levels of GPO contract utilization in inpatient pharmacy, general medical items, orthopedic implants, cardiology, other clinical products and housekeeping. Thus overall contract utilization appears to be a solid marker for higher levels of contract utilization in all supply areas. While high contract use hospitals are also characterized by lower supply expenses as a percent of net revenue than their lower contract utilizing counterparts as well as lower costs per adjusted patient discharge (not show in table), the extent to which these findings are attributable to participation in GPO contracts or to other size and case mix factors is not clear.

Reflective of intended strategy being aligned with achieved strategy, high contract utilizing hospitals report only somewhat higher levels of satisfaction with their GPOs. In somewhat different words, low utilizers tend to feel that their expectations meet their strategic intent for GPO utilization. Curiously the hospitals with low expenses per adjusted discharge have relatively high percent of expenses (toward the higher end of national benchmarks) for supplies as a percentage of net revenue.

Table 8: Purchasing Patterns and Satisfaction

DIFFERENCES IN ITEM AREA PURCHASING AND SATISFACTION BY HIGH AND LOW CONTRACT UTILIZING HOSPITALS	HIGH LEVEL OF CONTRACT UTILIZATION (>75%)	LOW LEVEL OF CONTRACT UTILIZATION (≤ 75%)
Percent Purchased on Contract		
Inpatient Pharmacy (B1Aa)	90.5	87.1
General Med (B1Ab)	92.2	72.1
Orthopedic Implants (B1Ac)	36.1	19.9
Cardiology (B1Ad)	48.3	23.3
Other Clinical Products (B1Ae)	84.1	60.4
Housekeeping (B1Af)	84.2	70.4
Satisfaction for HI/Low Contract Use		
Overall GPO Satisfaction	4.3	3.9

Table 9 reveals that those with low levels of contract use are minimally less likely to report that GPOs do not meet their expectations. This suggests that it is not utilization of GPO contracts that drives member satisfaction – but rather the hospital or system’s alignment of goals for the GPO with the GPO’s performance. Low GPO contract utilizers, however, are less likely to see GPOs as meeting their expectations for financial returns for administrative fees. Perhaps the most striking difference is associated with networking – where the high contract utilize respondents value the opportunities that GPO’s bring them more than do their low utilizer counterparts.

Table 9: GPO Meeting Expectations for Traditional and Expanded Services by Level of Contract Utilization*

EXPECTATION FOR:	<u>HIGH LEVEL OF CONTRACT UTILIZATION (>75%)</u>	<u>LOW LEVEL OF CONTRACT UTILIZATION (<75%)</u>
Traditional GPO Services		
Pricing (overall)	3.8	3.4
Lowest prices on med/surg products	4.1	3.6
Lowest prices on pharmacy products	4.0	3.8
Lowest prices on PPIs	2.7	2.8
Lowest prices on commodity items	3.9	3.9
High guaranteed savings	3.7	3.1
Financial returns – administrative fee	4.1	3.3
Managing supplier terms & conditions	3.9	3.3
Contracting (overall)	3.8	3.6
Providing contracting flexibility	3.8	3.6
Providing breadth of portfolio	4.1	3.7
Identifying new products	3.6	3.5
Support contract management	3.8	3.4
Physician Preference Item Management (overall)	3.3	3.3
Provide support for local PPI negotiation	3.2	3.6
Low price on PPI products	3.3	2.8
Help engage physicians on product utilization	3.1	3.1
Support assessment of competing products	3.4	3.2
Assist in Value Analysis Team Activities	3.3	3.5
Provide clinical analytical tools – peer benchmarking, etc.	3.3	3.6
Tools (overall)	3.5	3.4
Provision of on-site implementation resources	3.4	3.3
Provide supply chain analytic tools – spend management, etc.	3.3	3.4
Networking (overall)	3.4	0.8
Facilitate supplier relationships, supplier performance assessment and risk mgt.	3.6	0.8
Facilitate networking with peer groups – share best practices	3.2	0.8

*Figures in all cells represent level to which the GPO is meeting the hospital/system satisfaction for each item.

1= Not meeting expectations 5=Exceeding expectations

V. REDUCING TRANSACTION COSTS THROUGH PERSONNEL REDUCTION

GPOs provide members with specialized competencies and capabilities in carrying out strategic sourcing and contracting activities. Burns and Lee point out, however, that there is disagreement over the extent to which GPOs yield savings by allowing hospitals and systems to reduce personnel.^{xviii} Indeed, hospitals and systems continue to have noteworthy investments in full time equivalent (FTE) personnel involved in the strategic sourcing activities. Tables 3 and 6 reveal the extent to which GPO and hospital/system functions are duplicative. Given the extent to which hospitals strategically purchase through their GPOs, their needs for such personnel should be significantly reduced. Table 10 identifies the current employment of individuals involved in materials sourcing, contracting and contract management by various product areas and the estimated additional hires that would be necessary if the hospital assumed the functions now performed by the GPO.

For the product areas identified, there would be a 129% increase in staff at the system level (from 11.6 to 26.6 FTE) and 115% more staff at the hospital level (from 7.9 to 17.1 FTE). At current market rates for competent individuals the additional cost for a hospital would be approximately \$368,000 and, at the system level \$600,000.

Table 10: Workforce Savings (FTE) Attributable to GPO Participation

PRODUCT AREA	CURRENT FTE AT SYSTEM LEVEL	CURRENT FTE AT HOSPITAL LEVEL	IF NO GPO ESTIMATED ADDITIONAL FTE AT SYSTEM LEVEL	IF NO GPO ESTIMATED ADDITIONAL FTE AT HOSPITAL LEVEL
Inpatient Pharmacy	2.0	1.4	3.3	1.8
General Medical	2.4	1.4	3.1	2.1
Orthopedic implants	1.8	1.1	2.1	1.6
Cardiology	1.9	1.1	2.1	1.5
Other clinical products	2.0	1.8	2.5	1.7
Housekeeping	1.5	1.1	1.9	1.5
Total	11.6	7.9	15.0	9.2

DISCUSSION

Group purchasing organizations have been a feature of the US health care system for almost^{xix} 100 years but remain largely unknown. Hospitals and systems continue to vary, significantly, in their utilization of GPO contracting. In areas where there is disciplined standardization and processes driving agreement around products, such as pharmacy, GPO utilization is consistently high. Similarly, hospitals and systems recognize that savings that might accrue around individual purchasing on commodities, on a “spot basis,” require efforts that, across the larger mix of products, are probably best left to GPO purchasing.

The Value of Group Purchasing – 2009 survey results suggest that those with lower levels of contract utilization, especially in areas such as general medical products, housekeeping and “other clinical products are likely to have higher expenses per adjusted discharge than do their high GPO use counterparts.” While we have not teased out the full set of factors explaining a difference in supply costs for low levels of GPO contract use, such hospitals would be wise to review their current strategy and its implementation. For every thousand admissions, a hospital underperforming in this area could save as much as \$400,000 and a system could save almost \$900,000. These are, indeed, significant savings in a very difficult economic climate.

The Value of Group Purchasing – 2009 has had a very unique focus – bringing together issues of savings achieved through estimates of price savings, savings associated with fewer FTEs required in the purchasing function, as well as satisfaction with GPO engagement by both hospitals and systems. The research confirms what many industries have known for many years – that it is critical to link performance to one’s strategy – and to monitor such performance on a continuous basis. While future studies from this research will employ modeling to more fully explore the dimensions of savings and satisfaction for different kinds of hospitals, it is important to note, here, that the overwhelming majority of hospitals attribute high value to GPOs reducing their risks in purchasing in the marketplace including monitoring the market for drug shortages, identifying and supporting safety products and managing failure by suppliers to adhere to terms and conditions. These are functions that are clearly beyond capabilities any one hospital or even most systems.

Finally, and perhaps of greatest importance, is the near unanimity that respondents would like to see a greater utilization of GPO contracts and services. Their enthusiasm for taking advantage of the full range of opportunities suggests that they are highly reflective regarding the functions that they value as part of their repertoire of competencies and capabilities.

APPENDIX 1 - THE SURVEY AND METHODOLOGY

The Strategic Value of Group Purchasing Survey - 2009 was designed to document the strategies that characterize hospitals and systems as they seek and secure the materials necessary to provide excellence in patient care. The survey respondents, directors of materials management for US hospitals, are queried regarding the (1) presence of purchasing strategies within their hospital and any system to which their hospital may belong and (2) their estimations of the ability of GPOs to meet those expectations. Thus, unlike efforts to merely solicit estimations of satisfaction – the goal here was to understand satisfaction within the context of expectations. Thus one would anticipate findings that reflect different levels of satisfaction with core GPO strategic sourcing and contracting efforts as well as with other services.

Hospital and system expectations and strategies, of course, do not always correspond to hospital performance around their strategic intent. A hospital or system, for example, may report its goal to purchase a large percentage of its needed products through GPO contracts but experience uneven results in meeting such a goal. As we have pointed out almost a decade ago, hospitals engage very selectively in when and how they choose to utilize GPO contracts and pricing and when they choose to utilize such pricing to engage in custom contracts through their GPOs or through unique contracts.^{xx}

A second goal of the survey was to estimate the extent to which GPOs provide hospitals and systems with services from which they derive satisfaction. Burns and Lee's important assessment has demonstrated that GPOs produce (1) significant cost savings and lower product prices and (2) appear to be satisfied with their alliance relationships.^{xxi} Our goal is not to replicate these findings in detail – but rather to clarify the conditions under which such savings occur and satisfaction is achieved.

Methodology. The survey was designed by Health Care Sector Advances, Inc. in collaboration with Mathematica Policy Research, Inc. Various issues considered in the survey were reviewed by a group of industry experts nominated by the Health Industry Group Purchasing Association. The survey was completed for 28 systems representing 429 hospitals. Data was collected at both the hospital and system level. Hospitals and systems were not selected on the basis of their membership in any one GPO. Appendix Table A1 reflects the GPO representation of respondents.

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- ^{ix} Burns and Lee, Ibid., pp. 210-211.
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- ^{xii} Ibid., p. 212.
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- ^{xx} Sechneller, Eugene. *The Value of Group Purchasing in the Health Care Supply Chain*, op.cit.
- ^{xxi} Burns and Lee, op.cit.