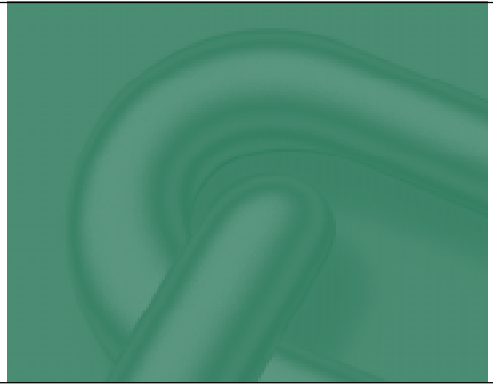

THE VALUE OF GROUP PURCHASING IN THE HEALTH CARE SUPPLY CHAIN

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INTRODUCTION TO GROUP PURCHASING

The purpose of this White Paper is to scrutinize key writings and research on the cost of hospital contracting and the role of group purchasing organizations (GPOs).[a] A recent series of case studies conducted by Novation, the Supply Company of VHA and UHC, on the value of group purchasing will be used to determine the factors associated with contracting cost. At a time when regulations such as the Balanced Budget Amendment and pressures associated with managed care are reducing hospital margins and jeopardizing the viability of many hospitals, understanding how and where efficiencies will emerge is critical. With the proliferation of new pharmaceutical products and emerging technologies, increased in-patient acuity, and a sustained competitive environment, it is important that hospital management understand the potential for improving organizational effectiveness by advancing a strategic vision for the supply chain function.

Group purchasing is a principal strategy by which companies in many sectors, especially health services, have sought to achieve cost containment, improve the quality of goods purchased, and allow staff to focus their efforts on other activities. The recently released Health Industry Group Purchasing Association (HIGPA) report stated that goods and purchased services accounted for the second-largest dollar expenditure (55% labor and 45% non-labor supplies, services and capital equipment) in the hospital setting. Therefore, achieving a better understanding of the health care supply chain is key to the management of a health care delivery organization. It is noteworthy that 72% to 80% of every health care (acute care setting) supply dollar is acquired through group purchasing. The "bottom-line" rationale for group purchasing is to achieve: (1) lower prices, (2) price protection, (3) improved quality control programs, (4) reduced contracting cost, and (5) monitoring market conditions. Estimates place the GPO market for hospitals and nursing homes at between $148 and $165 billion dollars and growing to $257 and $287 billion per year by 2009.[1]

[a] *An organization whose primary product/service is the development of purchasing contracts for their membership to access. GPOs derive a significant portion, if not all, of their revenue from supplier administrative fees. Their membership may be comprised of affiliate sub-groups and health care delivery facilities that are charged annual or monthly fees or by simply signing a membership form (in these cases, the GPO covers all of its expenses and derives all of its income from administrative fees). Their membership is typically a mixture of for-profit and non-for-profit facilities and the GPO may be national or regional in scope. HIGPA has pointed out that GPOs cover virtually everything hospitals, nursing homes, and other health care providers require offering discounted prices on supplies and equipment related to almost every aspect of a health care facility.*

While the HIGPA report documents the many products and services that GPOs offer their members, it reveals that GPO members purchase a significant proportion of their goods through direct negotiations with suppliers. These observations add credence to the contention that today's most pressing supply chain issue, for suppliers[2] as well as for group purchasing organizations,[3] is contract compliance by members. At the present time, there are no precise estimates of the cost savings generated by GPO contract compliance. The work reported in this paper makes a contribution to understanding the value of group purchasing by scrutinizing the costs of contracting with and without group purchasing.

In multi-hospital systems, the purchasing function continues to have the focus at the individual hospital level, with inconsistent approaches toward system-wide corporate purchasing and negotiation. In addition to contract portfolios, GPOs offer information sharing, clinical and operational benchmarking, and value analysis assistance that could strategically differentiate GPO members in their markets. Moving health care organizations to take advantage of these GPO products and services is dependent on rising above the belief that securing price savings for products is the sole or unique benefit of GPO participation.

BACKGROUND ON GROUP PURCHASING

A 1996 survey of 131 group purchasing firms (principally non-health) carried out by the Center for Advanced Purchasing Studies (CAPS) at Arizona State University[4] revealed an average GPO annual dollar saving of 13.43% with an impressive average return on investment of 767 percent. The CAPS study also confirmed that executives identified price savings as the principal rationale for group purchasing. Data reported in Business Week[5] and HIGPA[6] reveal the substantial savings associated with health sector group purchasing. It is estimated that group purchasing saved hospitals $12.8 to $19.2 billion or 10% to 15% of total purchasing costs.[b] The promise of group purchasing for achieving cost saving appears to meet GPO membership goals for price savings.[7]

[b] *The projected increments in hospital and nursing home group purchasing will be fueled by growth in the elderly population, new technologies, the emergence of entirely new lines of pharmaceuticals, and a focus on managing the care of patients throughout episodes of care. These estimates of savings, however, are grounded in very macro measurements of the total cost of goods purchased by health care organizations and gross estimates by purchasing executives regarding savings.*

Despite the fact that seven GPOs account for 85% of the U.S. hospital market, the substantial reconfiguration of the U.S. health care industry has raised issues about the future role of GPOs. Frequently cited by GPO executives, as threatening to their industry, is the rise of Integrated Delivery Networks (IDNs), which, like their GPO counterparts, attempt to provide value by seeking to secure low prices for their facilities.[8] The breadth of these organizations has grown so substantially that today almost 300 IDN's are reported to have the scale necessary for group purchasing.

Almost half of the members of GPOs are also affiliated with or owned by an IDN.[9] It is not unusual for IDN executives to report they find it convenient to use the GPO quoted price as the ceiling from which they can enter into negotiations with suppliers or to re-enter negotiations with other GPOs. While the purchasing activities of IDNs have been discussed as threatening to GPOs, this activity comes as no surprise to supply chain experts. A study of 450 CEOs and 159 purchasing and supply professionals concluded that because of the high dollar volume that could potentially be spent in these areas, it will be crucial for purchasing and supply professionals to track the performance of suppliers."[10]

Rather they report that product standardization and entering into GPO contracts were the most effective cost reduction strategies.

One of the ways to track performance is by comparing the GPO performance to one's own network-associated purchasing power in the marketplace. A 1999 survey of hospital materials executives revealed almost unanimous (96%) commitment to using the GPO to reduce supply expenses and improve operating margins. The survey also reported that 68% would compare prices to GPO contracts to verify market and price competitiveness. It is interesting that respondents did not report that the outcomes of such comparative efforts led to substantial cost reductions, nor did they report the cost of engaging in such comparative activities. Rather they report that product standardization and entering into GPO contracts were the most effective cost reduction strategies.[11] Independent comparative shopping for best price continues to be a behavior to gain confidence in the value of GPO membership.

THE VALUE OF GROUP PURCHASING CASE STUDIES

Novation conducted the Value of Group Purchasing Case Studies to determine: (1) the cost of hospital contracting, (2) the cost avoidance of using group purchasing contracts, (3) member expectations of group purchasing, and, (4) operational performance measures of purchasing. This was accomplished by day-long on-site interviews at ten multi-hospital systems across the United States. The study sites represented 55 hospitals with varying levels of participation with group purchasing with more than $600 million combined annual purchases. Novation engaged BD Healthcare Consulting and Services to conduct the interviews and data collection.

Departmental interviews were conducted with seven departments within each study site: pharmacy, cardiology, materials management, radiology, laboratory, surgical services, and food and nutrition. Respondents were questioned about their perceptions of GPO value; how their department, the hospital and the broader system utilize the GPO; and on their own measures/benchmarking of procurement. They were also asked to provide information that detailed the costs and activities associated with their contracting costs with and without group purchasing. Senior management within the GPO was also interviewed to assess their expectations for group purchasing.

Departmental use of Group Purchasing Contracts

Betz, Executive Director of HIGPA, contends that the most successful compliance programs allow GPO members the choice to utilize or not utilize contracts, as contracts fit their needs - but reminds them that there is added value for utilizing contracts. Greg Firestone President of National Contracts Inc. contends that contract compliance is (1) an effective way for group purchasing to provide value to suppliers for their administrative fees and (2) help drive costs out of the system.[12]

Table 1 indicates the range in group purchasing contract usage by department across study sites. It should be noted that Pharmacy had the lowest gap variance from highest contract usage to lowest contract usage. In general, it was observed that Pharmacy had the highest departmental contract participation across all study sites.

	Study Site	Number of Facilities	APD's*	Annual GPO Purchases
1	Baptist Health Little Rock, AR	8	264,502	$66,881,839
2	Baylor Healthcare System Dallas, TX	7	894,927	$142,916,367
3	Baptist Health System San Antonio, TX	6	325,910	$68,710,588
4	Medical University of South Carolina Charleston, SC	1	155,095	$24,012,922
5	Memorial Hermann Healthcare System Houston, TX	12	786,739	$177,749,413
6	Pinnacle Health System Harrisburg, PA	7	232,023	$50,981,982
7	Rush-Presbyterian St. Lukes Chicago, IL	7	555,454	$45,710,585
8	UCLA Healthcare Los Angeles, CA	5	164,318	$53,237,832
9	University Hosp. Univ. of New Mexico Albuquerque, NM	1	134.044	$20,215,943
10	University Med. Center Southern Nevada Las Vegas, NV	1	169,281	$19,672,635

**APD's = Adjusted patient days*

Table 1
Group Purchasing Contract Usage

Contracts	Study-Site Highest Number of Contracts Used	Study-Site Lowest Number of Contracts Used	Study-Site Average Number of Contracts Used	
Pharmacy	192	138	167	87%
Medical	65	26	47	72%
Surgical	63	17	41	65%
Capital Equipment	58	18	37	64%
Anesthesia/Respiratory	49	23	31	63%
Radiology	33	10	16	48%
Orthopedic	31	11	24	77%
Laboratory	25	9	20	80%
Facilities	25	2	7	28%
Cardiology	23	10	17	74%
Food and Nutrition	19	2	6	32%
Business Products	17	1	10	57%
TOTAL	600	267	423	71%

Source: Value of Group Purchasing Case Studies

Contracting Costs:

Entering into a GPO contract is not cost-free to a hospital department. Table 2 reveals the cost of self-contracting in dollars and hours per contract. The cost per contract was determined by taking the labor hours per contract multiplied by the annual salary of the staff involved in the contracting effort. The average cost avoidance with using group purchasing by department was also determined and showed an average cost avoidance per contract of $1,367.

Table 2
Hospital Cost of Contracting and
Cost Avoidance with Group Purchasing

Contracts	Hospital Cost of Self-Contracting Per Contract	Hospital Cost using GPO Per Contract	Cost Avoidance with GPO Per Contract	Hospital Time Self-Contracting (In Hours) Per Contract	Hospital Time with GPO (In hours)	Time Cost Avoidance with GPO (In hours)
Radiology	$5,707	$4,046	$1,661	188.2	126.7	61.5
Laboratory	$3,325	$2,070	$1,255	135.8	85.4	50.4
Operating Room	$3,021	$1,410	$1,611	111.3	54.0	57.3
Pharmacy	$2,429	$1,324	$1,105	89.2	46.5	42.7
Cardiology	$2,287	$1,193	$1,094	90.6	46.5	44.1
Food and Nutrition	$1,927	$ 451	$1,476	71.0	17.8	53.2
Average Contract Cost	$3,116	$1,749	$1,367	114.4	62.8	51.6

Source: Value of Group Purchasing Case Studies

Table 3 shows the activities involved in contracting, the average cost associated for such activity, and the cost avoidance of using group purchasing. It is difficult to judge whether the search for best price actually yields a better price and offsets the average cost avoidance of $1,367 per contract when using group purchasing.

Cost Avoidance with Group Purchasing:

If group purchasing did not exist, it would cost a hospital $353,147 annually to perform the same function. The annual cost avoidance per hospital with using group purchasing is $154,927. It is noteworthy that many hospitals are part of larger multi-hospital systems, and the savings opportunities are more significant for the broader health care system because purchasing has not been consolidated to achieve economies of scale.

Table 3
Cost Avoidance with Group Purchasing Per Contract

ACTIVITY	Hospital Self-Contracting Cost	Hospital Contracting Cost with GPO	Cost Avoidance	
Determine Product Requirements	$265	$174	$91	34%
Determine Product Usage	$251	$120	$131	52%
Department Meetings User Input	$208	$109	$99	48%
Access Supplier lists	$68	$20	$40	59%
BID or RFP Preparation	$379	$14	$365	96%
Send Bid or RFP	$40	$2	$38	95%
Respond Suppler Questions	$150	$48	$102	68%
Analyze Bid Proposal	$295	$101	$194	66%
Conduct Product Evaluation	$520	$450	$70	13%
Decision Product Selection	$180	$143	$37	21%
Implementation Contract	$633	$462	$171	27%
Record Retention	$25	$16	$9	36%
Monitor contract compliance	$70	$65	$5	7%
Monitor Market Competitiveness	$33	$26	$7	21%
Total	$3,116	$1,749	$1,367	44%

Source: Value of Group Purchasing Case Studies

Table 4
Hospital Contracting Cost and Cost Avoidance with Group Purchasing

(Costs based on average 340 GPO contracts per hospital or 1700 contracts for five hospital system)

	Self-Contracting Cost Per Hospital *(340 contracts)*	Cost Avoidance with Group Purchasing Per Hospital	Self-Contracting Cost Multi-Hospital System *(Five hospitals) (1700 contracts)*	Cost Avoidance with Group Purchasing Multi-Hospital System *(Five hospitals) (1700 contracts)*
Cost Per Contract	$3,116	$1,367	$15,580	$6,835
Total Cost of Contracting (340 X Cost Per contract)	$1,059,440	$464,780	$5,297,200	$2,323,750
Annual Cost (average term 3 years)	$353,147	$154,927	$1,765,733	$774,583

Member Expectations of Group Purchasing:

In addition to understanding contracting cost avoidance, it was important to determine the member expectations of group purchasing. Overwhelmingly departmental level management and senior executives reported "best price for best product" as their principal expectation for group purchasing.

The second and third most frequent expectations were cost analysis and attaining leverage with suppliers. Senior management also expected to use GPO expertise to optimize use of their resources and provide a benchmark for purchasing decisions. In addition, executives thought GPO's helped drive standardization throughout the system. These responses are consistent with the literature identifying the role that GPOs play in assisting their members in achieving best prices.

VALUE OF GROUP PURCHASING FINDINGS:

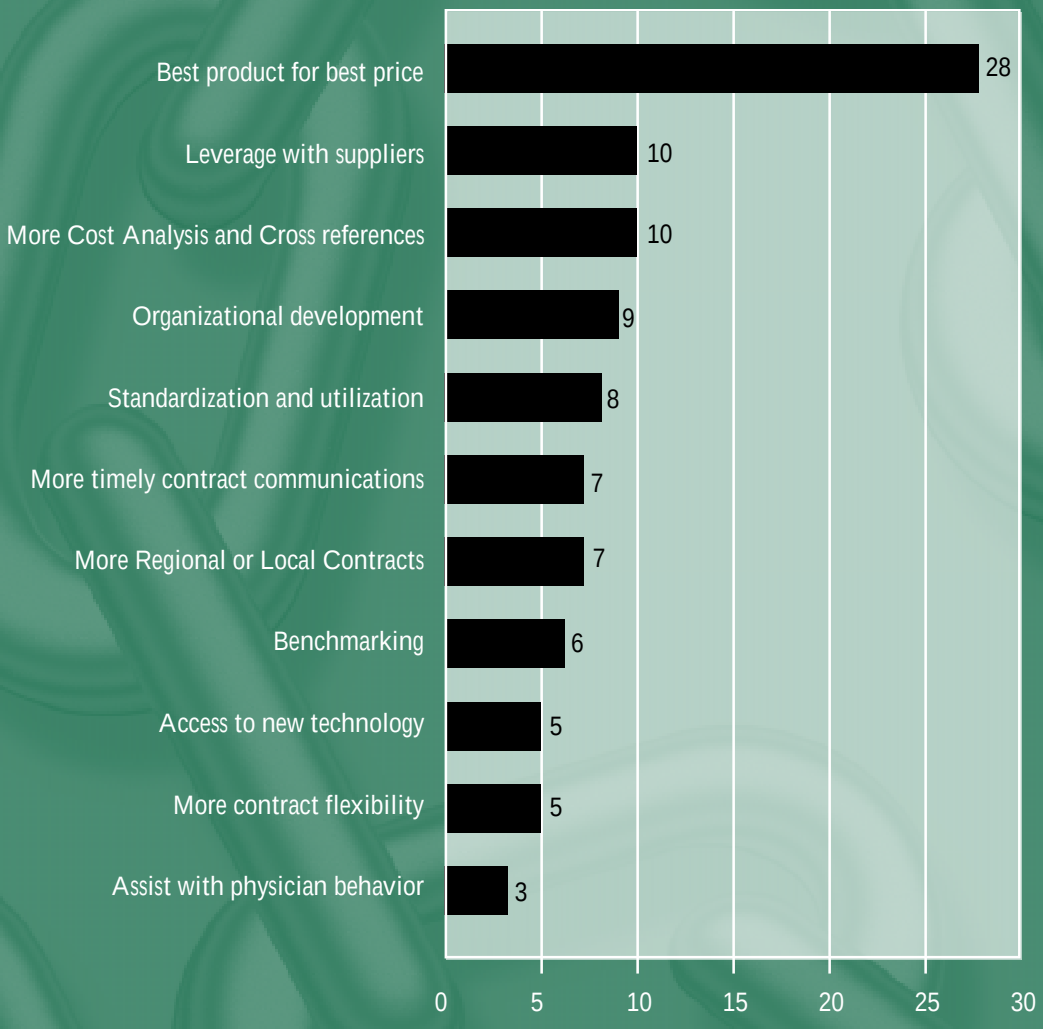
Three distinct philosophies on contract utilization with group purchasing were found among department managers interviewed:

1. Contracts were viewed as valuable and allow resources to concentrate on operational and clinical issues.
2. Group purchasing contracts were viewed individually based on perceived departmental value and savings based on cost of conversion to alternative products.
3. Contracts were considered starting points for the health care organization's own negotiation.

It is critical to recall that participants frequently use group purchasing to monitor price. Interviews revealed that most respondents did not have an understanding of the cost of contracting and did not routinely study their own costs associated with purchasing - thus their ability to truly understand the actual cost of a contract and goods purchased was limited.

The findings below do not include cooperative returns, manufacturers incentives, and resources which provide additional value to members.

Figure 1
Expectations for Group Purchasing



Pharmacy Model

Perhaps the most striking observation between departments pertained to pharmacy - in respect to both the number of contracts utilized and their confidence in group purchasing. Pharmacy departments reported they did not see contract negotiation as optimizing use of their resources. Table 5 identifies reasons pharmacists support group purchasing as well as the reasons their counterparts outside of pharmacy attribute to pharmacy compliance. Both pharmacists and their non-pharmacist counterparts attribute pharmacy contract compliance to the pharmacist's expertise in standardization and belief in group purchasing price advantage. Pharmacists were more likely than the non-pharmacists to believe that engaging in contracting is not a good use of clinician time.

MEASURING OUTCOMES OF PURCHASING PRACTICES

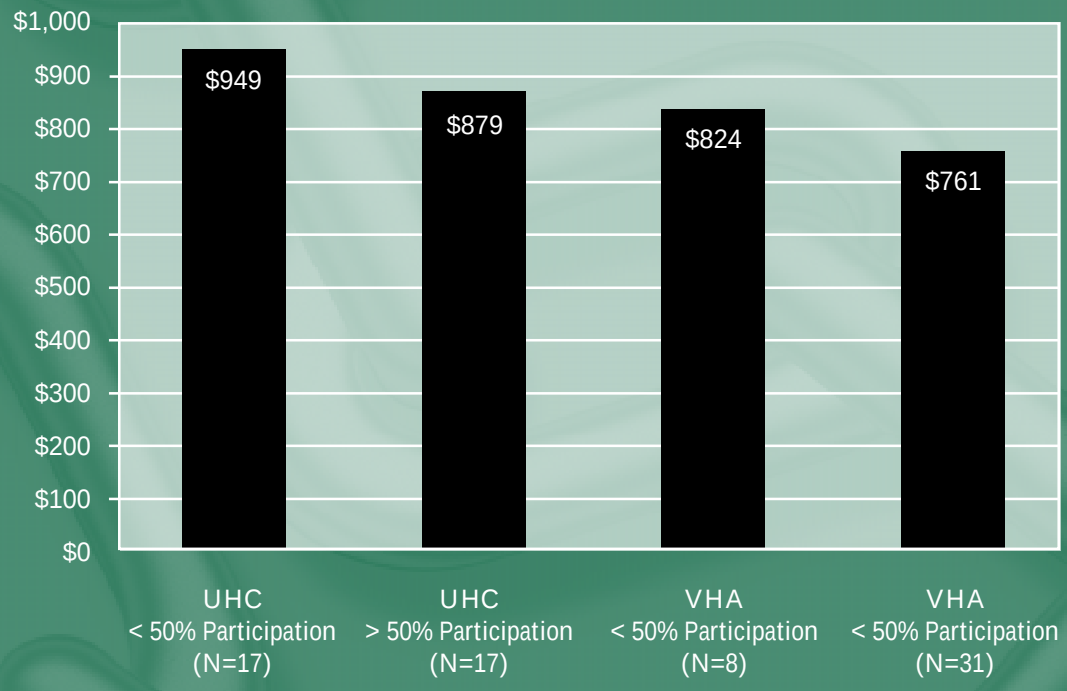
The Value of Group Purchasing Study was also conducted to determine if performance measures such as benchmarking were used to measure purchasing outcomes. Benchmarking, as a process, involves comparisons - "the assumption that an organization will improve its own performance if it copies an organization that exhibits the best performance, product, or process." [14] Carr and Smeltzer have carried out research to better understand benchmarking [15] [16] and have found a positive relationship between benchmarking and firms' performance. They also found positive relationships between benchmarking and engaging in strategic purchasing in small and large firms.

In 1997, University HealthSystem Consortium (UHC) and VHA collaborated on a Purchasing Process Benchmarking Survey with 46 UHC hospitals and 41 VHA hospitals. Results indicated a lower total supply expense per adjusted discharge with the organizations that had a higher use of group purchasing. Organizations with more that 50% contract participation with group purchasing were compared to organizations that used less than 50% contract participation. Data presented excluded Pharmacy and dietary products.

Table 5
Reasons Why Pharmacy Departments
Have High GPO Contract Compliance

Reasons for compliance	Reasons Pharmacists Believe They Comply With Contracts	Reasons Other Departments Believe Pharmacists Comply With Contracts
Engaging in search for better price is not good use of clinician's time	47%	23%
Pharmacist expertise with standardization and formularies	21%	23%
Pharmacists believe GPO price is advantageous	16%	15%
Other	16%	16%
Don't Know	—	23%
Total	100%	100%

Figure 2
Total Supply Expense
Per Adjusted Discharge (weighted per case mix index)
versus GPO Participation



Conclusions from the survey suggested benchmarking and improvement efforts should be targeted on supply-related expenses including:

1. Creation of an organizational cost management focus.
2. Establishment of performance measures and the provision of feedback.
3. Creation of end-user accountability for supply cost management.
4. Increasing involvement of key physicians.
5. Implementation of incentives and gain sharing programs to increase results.
6. Identification of acceptable products and the control of information on new ones.
7. Increasing the use of group purchasing.
8. Concentrating on areas with the largest opportunities for improvement.
9. Using key suppliers as partners in the cost management initiative.

In a separate study, the VHA West Coast developed a "Materials Management Report Card and Data Collection Tool" to support performance improvement and benchmarking. What is significant about this tool is its concentration on materials management beyond "line item" price.[17]

Participants in this project recognize that benchmarking indicators provide an important basis for managing realistic expectations for improvement. The report recommends that organizations come together to (1) conduct self-audit of performance against each category means and best performance; (2) contact better performing organizations to discuss processes and procedures that contribute to their success; (3) share results with participating organizations and; (4) apply findings as baseline for improvement efforts.

Figure 3
Indicators of Performance

Demographics • Case Mix Index (Hospital and Medicare) • Total Hospital Supply Cost • Total Hospital Purchased Services Cost	Materials Management • Materials Management "Influenced" Supply Cost Ratio • Materials Management "Influenced" Supply cost per $1 of Labor • Materials Management Hourly Rate
Organizational • Total Hospital Supply Cost/ Adjusted Discharge • Total Hospital Supply Cost/ Operating Expenses	Department Specific • Total Hospital Surgical Service Supply Cost Per Procedure • Total Cath Lab Supply Cost Per Procedure • Laundry and Linen Pounds Per Adjusted Patient Days

ADVOCATING COMPLIANCE

Manufacturers and suppliers recognize that both GPO and IDNs cannot always secure commitment from their membership on specific items. GPOs must assist in the development of an environment in which unit price is not the only measure of their value. Furthermore, IDNs must develop system integration to deliver compliance.

GPOs and IDNs will find new competition for their business as new technologies and agencies of exchange concentrate buyers to reduce expense and transaction costs. Advocating compliance requires that GPOs become customer-centric. Today's end-user is a pharmacist, physician, nurse, or administrative employee of a department who gathers information from a variety of modalities. These strategic constituents frequently have very different understandings of the factors associated with the various products involved in the delivery of health services. Physicians, for example, frequently report that those who advocate GPO commitment undervalue the positive aspects of intensive involvement with manufacturers and their representatives. Reflecting on the health care industry, Hauser and Lanigan have argued that "the emerging business model for health purchasing in the 21st century is the "connection company" that relates to various customers (patient, physician, administrator, etc) not simply as a supply need, disease, or condition, - but holistically as a complex amalgam of wants and needs. [18/19] Pressures on GPOs will continue to mount and new opportunities will emerge as health care leadership comes to grips with the implications of the shift from measures associated with discharges to measures that reflect costs and outcomes associated with episodes of care. Purchasing success will require tools and strategies that track and meet the needs of the customer/patient over a longer period of time and in multiple settings, including the home.

Compliance requires executive commitment. A recent survey of CEOs reveals that procurement organizations should provide strategic advantage and revenue enhancement. Interviews with executives suggest that health care organization administrators have not yet embraced this position for the purchasing function. Failure to articulate a vision for the value attached to purchasing leads to managerial decisions "by default." A.T. Kearney's[20] recent attention to this

issue concludes that creating advantage revolves around "building a mindset that procurement counts." Strategies associated with this include the development of joint product-development teams between suppliers and hospitals that "move beyond sharing information to sharing ideas, collaborating on how and where products or components are made, or how services might be redefined for mutual advantage." GPOs emphasize "total supply chain management," the overall process by which products are ordered, delivered, inventoried, paid for, used, and disposed of.[21]

GPO compliance requires facilitation and linkage of clinician supplier relationships.

GPO compliance requires facilitation and linkage of clinician supplier relationships. Clinicians have established strong relationships with suppliers who manufacture a wide variety of products such as prostheses and pacemakers. Without an institutionally shared vision for purchasing and standardization, efficiencies will not evolve in the clinical arena. Clinical leadership that embraces a vision of improved patient outcomes as a result of standardization will lead to the ultimate success. Schneller has argued that health sector executives must become skilled in selecting physician collaborators who have a strong appreciation for resource utilization and collaboration: "While healthcare delivery organizations may be able to tolerate some percentage of physicians who have little appreciation for ongoing change processes, failure to develop 35% to 40% of the medical staff who will be strong collaborators in both resource management and corporate development will be a prescription for organizational failure." [22]

GPO success will be dependent upon their ability to harness an integrated business/clinical perspective to improve organizational performance. By achieving an organizational focus, GPOs can shape the environment in which their members become accountable for optimal resource utilization by achieving integration across departments, establishing and enforcing performance measures and assuring that incentives are in place to achieve system level efficiencies. In this context, structural changes will be necessary in both the membership organization and the GPO that includes building new ties to the supplier community. Schneller has written that health care executives frequently feel uncomfortable in an

environment that necessitates advanced business skills in supply management and information technology.[23] Executive education in total health care supply chain management will be necessary to establish an environment where leadership has the vision to move the purchasing team from a focus on the "product" as the center of attention toward system-wide purchasing initiatives that incorporate many of the components of market strategy.

As health care organizations downsize, employees must seek ways to "work smarter" -allotting their time on those activities that truly make a difference in both cost and patient outcome. Understanding where compliance "makes a difference," as recognized in pharmacy, is an important step that health care organizations must take in the near future. In a customer focused organization, where customers actually promote change, purchasing leaders will be required to give extensive time to the various constituencies with which they interact on a day to day basis. To avoid cost increases, this will require the redirecting of time away from everyday purchasing activities toward satisfying customer needs.

This is an era of enormous change for the entire field of supply chain management. Purchasing for health care organizations has always been an extraordinarily complex process - struggling to meet the needs of management, key business stake-holders, clinician partner preferences, and patients. To date, the enormous push to achieve standardization and manage for improved outcomes has achieved only modest success.

Across the health care industry, there are numerous forces attempting to employ new technologies and business models to impose a new discipline on the organizations and professionals that come together to make up health care. In "E-Commerce Coming to Health Care Industry" the Wall Street Journal depicts purchasing in the typical hospital as an antiquated process in which multiple customers independently access suppliers, distributors, and hospitals-with the GPO being only one of a number of customers. The new supply chain is different by virtue of providing an online market in which a wide variety of customers, hospital departments, physician offices and even GPOs access an online market-a virtual new exchange system. Our analysis suggests that while E-commerce and B2B models will have a striking influence on how health care manages its supply chain, the role of knowledgeable

exchange agents, especially GPO's, will not disappear-but become even more important. In such an environment, achieving a level of discipline in supply chain may even be more complex than in the past. Group purchasing organizations have been the centerpiece for reducing the burdens associated with effective supply chain management. Strategies that advocate full use of group purchasing have potential to shape improved efficiencies and effectiveness in the changing health care industry.

DISCUSSION

A very wide range of contract usage characterizes the multi-hospital systems scrutinized in the Value of Group Purchasing Case Studies. With few exceptions, GPO members are not willing to take as a matter of faith that membership automatically leads to their principal expectation - lowest possible price. Rather these organizations test the marketplace for achieving lower prices for goods and engage in contracting behavior that, while costly, is believed to help achieve organizational goals. And to the extent that each of the sites studied are not tightly integrated into collective systems for purchasing, there appears to be substantial intra-member variance in GPO contract utilization. Further study will be necessary to determine just how such intra-system compliance affects overall system cost and success.

The recent HIGPA report argues that GPOs present an opportunity for membership choice and flexibility. This contention is tempered, however, by the observation that in "their capacity as brokers and facilitators, GPOs walk a fine line, balancing their members' desire for flexibility and freedom to suit their needs with suppliers' desire for standardization and increased market share.[24] The case studies reported upon in this paper reveal that the tension between flexibility and standardization is not systematically managed across the hospitals and systems studied. Pharmacy departments, as discussed above, recognize the value of compliance with contracts and have institutionalized mechanisms for achieving standardization. Leadership is not consistent in other areas - with few models being advanced to achieve effective supply chain management. Yet the savings associated with contract compliance, as demonstrated in this report, are profound in terms of both time and cost avoidance.

The growing body of literature on clinical outcomes is rapidly becoming baseline knowledge for clinical and insurance decision making. This now has the potential to serve as the intellectual capital to drive standardization and, subsequently, purchasing behavior. As this progresses, the purchasing profiles of clinical departments should begin to look a great deal more like pharmacy departments, with data on outcomes strongly informing purchasing decisions. Sarpog's[25] recent research on pharmacists engaged in P&T committees revealed that the vast majority of respondents had received training or continuing education in either pharmacoeconomics or outcomes research in the last two years. Progress in applying such information outside of pharmacy may be accelerated by developing a series of continuing education experiences in clinical economics and decision making for managers in clinical departments and their allied physician leaders.

Maltz and Ellram have identified the duality associated with purchasing within complex organizations. On the one hand, purchasing involves locating and screening suppliers, structuring and requesting proposals, negotiating final agreements, and monitoring ongoing relationship.[26] At the same time, purchasing professionals also need to develop clear set of expectations regarding outcomes and performance objectives associated with the supply management function while recognizing that many specific decisions regarding purchasing may take place throughout the organization. Within this context they suggest that "someone in the organization must always oversee and monitor the purchase of outside goods and services, analyze options, select suppliers, and monitor ongoing performance."[27] Giving continued attention to the activities of the GPO to which one belongs is an obvious aspect of doing good business and recognizes that the purchasing function cannot be totally outsourced. The Value of Group Purchasing Study, however, did not reveal organizational recognition or management of the complexity of purchasing nor specify how the modern tools for supply chain management are best employed to improve organizational effectiveness.

Conclusions:

Disciplined models for achieving compliance with GPO contracts can not emerge without (1) executive commitment to excellence in purchasing, (2) a recognition of the legitimacy of clinician supplier relationships, (3) developing an integrated business/clinical organizational focus, (4) assuring the employment of advanced business skills in supply chain management and information technology, and (5) advancing an organizational focus in which everyone "works smarter" to optimize resources for the task at hand. Such a model for compliance retains fidelity to price as a principal goal for the GPO - but assures that the GPO activities will have an ongoing fit with the organizations they serve.

[1] *David Hewitt, "The Consortium Option," Purchasing and Supply Management, January 1995, p. 32. Cited in Michael R. Leenders and Harold E. Fearon, Purchasing and Supply Management. Boston. Irwin, McGraw-Hill, 1997, p. 69.*
[2] *Synthia Laura Molina, "A Cure for Contract Compliance," Health Industry Today, Volume 61, (7), July 1998.*
[3] *Robert Betz, "Vendor Perspectives on Compliance," Repertoire Magazine.*
[4] *Thomas E. Hendrick. Purchasing Consortiums: Horizontal Alliances Among Firms Buying Common Goods and Services: What? Who?,Why?, How?. Tempe, Arizona. Center for Advanced Purchasing Studies, 1997.*
[5] *Rod Stodgill II, "Attack of the Health-Care Colossus," Business Week, May 20, 1996, p. 40.*
[6] *HIGPA. The Role of Group Purchasing Organizations in the U.S. Health Care System, A report prepared by Muse & Associates for HIGPA. March 2000.*
[7] *Marketing Supply Costs Market Research Report, Novation, September 1999, p.10.*
[8] *Gary Appel, "The IDN/GPO Relationship: Its evolution in an era of direct contracting advantages," The Health Strategist, Volume 6, No. 6, July 1999, p.2.*
[9] *Ibid., p.5.*
[10] *Op.Cit. HIGPA. p.2.*
[11] *Op.Cit. Marketing Supply Costs Market Research Report, Novation.*
[12] *Greg Firestone quoted in Betz, Op.Cit.*
[13] *Ibid.*
[14] *Amelia S. Carr and Larry R. Smeltzer, "The Relationship Among Purchasing Benchmarking, Strategic Purchasing, Firm Performance and Size," The Journal of Supply Chain Management, Fall 1999, pp. 51-59.*
[15] *C. Bogan, and M.J. English, Benchmarking for Best Practices: Winning Through Innovative Adaptation, McGraw-Hill, New York, 1994.*
[16] *Amelia S. Carr and Larry Smeltzer, "The Relationship of Strategic Purchasing to Supply Chain Management," European Journal of Purchasing and Supply Management, 1998.*
[17] *VHA West Coast Materials Management Report Card, Summer 1999.*
[18] *Mark R. Huwich and Edward P. Lanigan. In Vivo, September and October 1999.*
[19] *A.T. Kearney. Leveraging the Strategic Nature of Procurement*
[20] *Ibid.*
[21] *Ibid.*
[22] *Schneller, op.cit., 26.*
[23] *Ibid.*
[24] *Op. Cit. HIGPA.*
[25] *Daniel Frank Sarpong, "Application of Pharmacoeconomics and Outcomes research in Formulary Decision Making, Drug Benefit Trends, Volume 11 (8) 1999.*
[26] *Arnold Maltz and Lisa Ellram, "Outsourcing Supply Management," The Journal of Supply Chain Management, Spring 1999, p.12.*
[27] *Ibid., 12.*

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