

An HSRC-ASU White Paper

HEALTH SECTOR SUPPLY CHAIN RESEARCH CONSORTIUM



Department of Supply Chain Management
W.P. Carey School of Business
Arizona State University
Tempe, Arizona 85287

Repositioning Supply Chain in Health Care Systems

By HSRC-ASU Staff

Bushra Rahman, MBA, MHSM

Eugene Schneller, PhD, Co-director

Natalia Wilson, MD, MPH, Co-director

Howard Zuckerman, PhD (Consultant)



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About HSRC-ASU

The Health Sector Supply Chain Research Consortium (HSRC-ASU) is a research group within the Department of Supply Chain Management at the W. P. Carey School of Business at Arizona State University. The Consortium was founded in 2004 to bring together health sector organizations and academic researchers to conduct research on topics related to the strategic management of the health care supply chain. HSRC-ASU embodies:

- **Research** – We engage in cutting-edge research on the health care supply chain.
- **Thought Leadership** – We function as a boiler room for new ideas to drive excellence and innovation in the health care supply chain.
- **Collaboration** – Our research is developed through collaboration with member organizations representing multiple stakeholders across the health care supply chain.
- **Industry Guidance** – HSRC-ASU research is responsive to industry needs and provides guidance and opportunity to raise the standard of management and policy practice surrounding the health care supply chain.

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David Bean, Scottsdale Healthcare
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Doug Hawthorne, Texas Health Resources

If you have comments on this paper or would like to learn more about HSRC-ASU please contact us at contacthsrc@asu.edu. Our website is wpcarey.asu.edu/hsrc-asu

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Executive Summary

Supply chain strategies and operational resources have been demonstrated to be relevant to an organization realizing its competitive capability. For individual hospitals, and the health care systems (referred to as “systems” in the paper) in which they reside, supplies, which constitute the second largest cost after labor, have generally been managed at a local level with a strong focus on transactions associated with order fulfillment. Systems are increasingly recognizing the value that supply chain management can bring to their organizations and have moved to reposition the supply chain function at a strategic level in the organization.

This paper reports on interviews with fourteen senior supply chain managers and 7 senior system leaders regarding the repositioning of supply chain into the executive suite of their systems. Key aspects of this repositioning include recognition and validation of repositioning by outside advisors, the touting and dissemination of the value of the supply chain function by senior system leadership, and system readiness for such repositioning. This last aspect is reflected in the hospitals truly having achieved “systemness” as reflected by centralization of key supply chain functions including strategic sourcing, contracting, GPO utilization, supply chain IT (ERP Systems) and distribution related strategies.

In the systems studied, supply chain value was attributed to its successful support of the organization meeting its mission and strategic goals as well as buffering the organization from financial risk. Gains associated with improved relationships with medical staff and buffering the organization from clinical risk, although recognized, were acknowledged at a lesser degree than improved business function performance.

Also discussed are the principal attributes associated with the new breed of supply chain leaders. Included are their attainment of advanced education in business and supply chain management and their considerable skills in relationship management with internal and external channel partners such as group purchasing organizations and distributors.

This paper contributes to the growing awareness of the importance of strategically managing the supply chain function and building a competent and capable supply chain management workforce.

"Lasting success will go to the companies that can anticipate, time after time which capabilities are worth investing in, which should be sourced, which should be cultivated and which should be discarded, which will be the levers of supply chain control and which will be controlled by others."
Charles Fine, Clockspeed

Background

Many industries have distinguished themselves by excellence in supply chain management. Examples range from America's largest employer the retailer Wal-Mart to high technology companies such as Dell and IBM. IBM frequently attributes its ability to change as a company to strategic attention to its supply chain. MIT's Charles Fine writes that:

"Lasting success will go to the companies that can anticipate, time after time which capabilities are worth investing in, which should be sourced, which should be cultivated and which should be discarded, which will be the levers of supply chain control and which will be controlled by others".¹

In order to anticipate the capabilities that Fine writes about, one must recognize the range of factors that truly impact one's environment and must be able to decipher the factors that warrant strategic consideration.

Supply chain strategies and operational resources have been demonstrated to be relevant to an organization realizing its competitive capability.^{2,3} When supply chain "practice is significantly associated with competitive capability, and when competitive capability is supported by such supply chain management practice, it will have a significant influence on performance improvement."⁴ Moving from a transactional to a strategic view of the supply chain requires both organizational insight and organizational action. Merely recognizing that "materials matter" is not sufficient to redefine the role for supply chain management or to drive organizational change. Organizations must hire the appropriate individuals who can envision, orchestrate and manage change, and the function they assume must be redefined and repositioned to drive change both within the organization and with the organization's strategic constituents. Organizations in the process of such repositioning recognize "the influence of organizational power in developing and shaping organizational structure and meeting the goals for the repositioned function."⁵

Supply chain efficiencies and performance are common and important denominators in all hospital admissions as virtually everything one touches in a hospital has a supply chain linkage. Activities associated with purchasing, the movement of supplies and utilization, have escalated to become the second largest cost after labor to hospitals. The performance of the supply chain can make a difference in a hospital's financial and clinical performance. Yet recognition of the value of excellence in supply chain management and strategic consideration of the supply chain has been slow in coming to the health sector. Difficulty in engaging physicians to achieve product standardization to support effective purchasing for expensive physician preference items (e.g., hip and knee implants), which may constitute half of a hospital's supply spend, means that desired savings do not quickly drop to the bottom line. Managing the broad materials environment, where suppliers and other trading partners can improve overall performance, can become a hospital's competitive advantage in working with payors and patients seeking the best treatment at the best cost in an era of value based clinical purchasing.

¹Charles Fine. *Clockspeed. Winning Industry Control in the Age of Temporary Advantage*. (New York: Basic Books, 1998)

² Soo Wook Kim, "An Investigation on the direct and indirect effect of supply chain integration on firm performance." *International Journal of Production Economics* 119 (2009) 328-346.

³JR Carter and R Narasimhan.. "Is Purchasing Really Strategic?" *International Journal of Purchasing and Materials Management* 32 (1996) 20-28

⁴ Kim, op. cit., p.330

⁵ Darrell Burke, Ebrahim Randeree, Nir Menachemi and Robert G. Brooks. "Hospital Financial Performance: Does IT Governance Make a Difference?" *The Health Care Manager* 27 (2008) 71-78

Three important factors for strategic positioning of the supply chain identified during research include:
1) recommendation or reorganization of supply chain by hired consultants,
2) support and facilitation by a senior leader in the hospital, and
3) “systemness”, defined in this study as the ability to have all participating units in the system work collaboratively in making and implementing strategic decisions.

Methodology

The information collected in this report reflects the responses to semi-structured interviews with 14 senior health care supply chain managers and 7 senior system leaders. The sample was a reputational sample developed by input from group purchasing organizations, distributors, information technology companies, and consultants who were familiar with systems that had elevated supply chain to an executive position. Input was additionally obtained from three major retained executive search firms that had carried out searches for individuals for senior supply chain roles.

The interview questionnaire was developed with the assistance of an advisory group (Appendix 1). The majority of interviews were conducted in one-hour conference calls where a senior researcher and at least one other member of the research team were present. Interview responses were placed into spreadsheets and examined, using the constant comparative method, for emergent themes associated with repositioning.⁶

Study findings and emergent themes are presented and discussed below in four sections:

Section 1: Strategic Positioning of the Supply Chain

Section 2: Association of Strategic Positioning of Supply Chain and Organizational Performance

Section 3: Metrics

Section 4: Role and Performance Attributes of Supply Chain Leaders

Demographics

The systems included in the study ranged in size from 3 to 28 hospitals. Total annual system revenue ranged from \$1-7 billion.

Although titles varied across organizations, individuals interviewed were generally at the vice president level. Scope of responsibility and accountability was both tactical and strategic within their organizations. The majority had MBAs and health care backgrounds, but lacked clinical backgrounds.

The Study

Section 1: Strategic Positioning of the Supply Chain

Study Findings

Discovered in the course of this research were three important factors for strategic positioning of the supply chain: 1) recommendation for reorganization of supply chain by hired consultants, 2) support and facilitation by a senior leader in the hospital/system, and 3) “systemness”, defined in this study as the ability to have all participating units in the system work collaboratively in making and implementing strategic decisions. The impetus for attention to supply chain importance and strategic positioning was frequently attributed to forces outside of the system, especially advice received from consulting firms. Sometimes these firms were brought in for broad engagements regarding improved

⁶ For an extensive discussion of the constant comparative method see: <http://www.qualres.org/HomeCons-3824.html>

Barriers to repositioning of supply chain included:
1) the culture of individual hospitals, 2) a lack of leadership to push this change, 3) physician dynamics, 4) a lack of understanding of the supply chain, 5) no understanding of the need for change, 6) worries about the cost of conversion of the supply chain position from operational to strategic and 7) incomplete centralization and the fracturing of “systemness,” brought about as a result of mergers and acquisitions.

organizational performance and, at other times, to specifically address supply chain potential. Such engagements provided vision for the supply chain function, especially job descriptions for the senior supply chain manager. The impetus for repositioning of supply chain was frequently related to the recognition by a senior executive that the system really knew very little about the opportunities associated with enhanced supply chain practice. The ability to move forward with supply chain repositioning was related to the evolving “systemness” of an organization.

As discovered in the study, barriers to repositioning of supply chain were many. They included the culture of individual hospitals, a lack of leadership to push this change, and physician dynamics. Also included was a lack of understanding of the supply chain, a lack of understanding of the need for change, and worries about the cost of conversion of the supply chain position from operational to strategic. Incomplete centralization and the fracturing of “systemness,” brought about as a result of mergers and acquisitions, also proved to be barriers to success.

Once repositioning had occurred, our study results indicated that the hierarchy and reporting structure of supply chain were not standard across different organizations. The advanced supply chain leadership was closely associated with the C-suite and in some cases actually in the C-suite. The most common job title was vice president of supply chain although this was not consistent. Reporting generally was to the Chief Financial Officer (CFO) but in other systems reporting was to the Chief Administrative Officer (CAO), Chief Executive Officer (CEO) or even Chief Medical Officer (CMO).

Supply chain successes were touted in different ways in different systems. In some cases internal publications would highlight initiatives. Contributions of supply chain success were presented in key executive and director meetings, such as leadership councils. A supply chain initiative may be brought to the hospital/system board, executive retreats, or even a medical staff meeting. In some systems, staff throughout the hospitals was aware of supply chain’s role. In others, broad knowledge and involvement was more limited. Supply chain leader views of the use of group purchasing organizations (GPOs) and distributors were quite consistent. GPOs and distributors were assessed strategically. GPOs were viewed and utilized as a tool not as a supply chain strategy. GPO data and benchmarking were highly valued and utilized services. In the case of distribution, there was an overall movement to better understand the costs and strategic contribution of distribution and not just the price. There was strong consideration of insourcing versus outsourcing and targeted utilization of the distributor. In some cases, there was self-distribution or active development of that ability.

Data from our senior leadership interviews illuminated important senior leadership views of the supply chain role and potential for the organization including: 1) reliability in assuring that safe, high quality, and needed products were available, 2) ability to drive cost down, 3) ability to work to impact utilization and waste, 4) relationship management, 5) ability to change behavior and 6) ability to work with vendors to see how they could help the organization.

Discussion

Discovered in the course of this research were a set of predisposing, enabling and reinforcing factors that both uniquely and frequently in concert provided for strategic positioning of the supply chain. The aforementioned role of consultant recommendations as enabling change should not be underemphasized. These hired consultants recognized the opportunities and provided legitimacy for restructuring and associated self-reflection

and action on such advice thus enabling change within the organization. One interviewee indicated that as a result of a consultant's indication of the savings potential through supply chain, he was given authority for supply chain matters over individual hospital presidents. "Signature authority," he pointed out, "was tricky but the system CEO supported this." Another interviewee pointed out that senior management does not make related decisions without consultation with supply chain leadership. A CEO interviewee, to whom the supply chain vice president reports pointed out: "We have a three pronged vision – being data driven to achieve quality; cost disciplined; and more results oriented in our use of clinical products. Supply Chain is part of the discussion on the front end." These comments, linked to the earlier recommendations by outside consultants, suggest the legitimacy and empowerment provided by "referent authority." And while it is impossible to assess the extent to which consultant recommendations reflected already existing senior management sentiment, it appears that without the consultant assistance, change would have not been nearly as easy.

The senior leader champion enabled the change and sustained it through ongoing reinforcement of the concept of supply chain excellence. The role of senior leadership can be viewed in a larger context of transforming an organization from "good to great." Collins defines a great organization as one that "delivers superior performance and makes a distinctive impact over time."⁷ In moving from good to great, Collins identifies several key issues and stages that form the basis of this journey. For example, such a transformation calls for leadership that does what needs to be done for the organization, displaying a fierce resolve to do whatever it takes to make good on the ambition of greatness. To illustrate, senior leaders in our study organizations knew that their hospital CEOs would likely resist giving up responsibility for supply chain management and turning it over to a new system level supply chain officer. Further, these leaders knew that their medical staffs would likely resist efforts to consolidate supply chain functions and foster standardization. Nevertheless, these system leaders went ahead with the repositioning because they saw it as necessary for the betterment of the organization. They understood the importance of "staying the course" and, as discussed below, reinforcing the decision through their continued empowerment of supply chain leadership.

Clearly organizations that go about such repositioning can be described as self-reflective – seeking not only advice on how to position the supply chain function, but also how to understand the supply chain function from an organizational perspective. Senior leaders recognized that they had to "get the right people on the bus and the wrong people off the bus." Following Collins' "who before what," in multiple cases, a new supply chain leader was hired from outside the organization. These new leaders were then charged with the responsibility to figure out "where to drive the bus."

Yet another component of Collins' formulation is that of the "flywheel," wherein a relentless push, in one direction, slowly builds momentum, achieves better results that, in turn, attract resources and commitment. In an iterative process, the organization gradually moves from good to great. Our interviews provided any number of illustrations of improvement in operating results and enhanced ability to attract human and financial resources.

While certainly not a comprehensive review, presented here is examination of the repositioning of supply chain management as part of an overriding organizational objective.

"Systemness" both predisposed and enabled these organizations to restructure supply chain by continually providing the infrastructure for success and continuing ideology for

⁷ Jim Collins. Where are you on your journey from Good to Great? Diagnostic Tool Developed by Jim Collins. Accessed August 3, 2010 at: <http://www.jimcollins.com/tools/diagnostic-tool.pdf>

repositioning. The organizations involved in this study were fairly homogeneous in their level of “systemness.” The vast majority of interviewees invoked “systemness” as key to their success and the drive for “system implementation” an important aspect of their appointment. Virtually all interviewees pointed out that the drive to become an operating company was essential to the repositioning of the supply chain function, and embedded within the definition of “systemness” is “everyone being aboard.” One respondent pointed out that system alignment had made his job easier. “Systemness,” he pointed out, is “a cultural transition that embraces the idea that best practices will be adopted and implemented by all across the organization.” In this sense, as another respondent pointed out, it is a “cultural mindset.” Thus while hospitals within a system may have their own CEOs and even embedded supply chain employees, the orientation by those in the operating unit is toward the corporate commitment and strategy for supply chain as a facilitator of further integration.

Perhaps most supportive evidence of the importance of “systemness” were reports of barriers or break downs to effective supply chain management as the result of new CEOs coming into system hospitals without a full understanding of the centrality that supply chain plays. This is consistent with earlier case study research carried out by the Health Sector Supply Chain Research Consortium (HSRC-ASU) relating to difficulties in achieving collaboration in the absence of overall system member commitment to a centralized supply chain strategy.⁸ An important implication here is that senior executive recruitment requires careful assessment of fit between candidates and system attributes and the candidate’s ability to successfully manage to achieve corporate level strategic initiatives and to successfully avert the tendency for local goals to displace goals associated with the greater good of the system.

Finally, utilization of GPOs and distributors as a tool is very consistent with Fine’s contention that firms continually question the functions that they perform and the advisability of taking advantage of their own core competencies as well as the core competencies of others to achieve success in a competitive environment.⁹

Section 2: Association of Strategic Positioning of Supply Chain & Organizational Performance

Study Findings

Important areas evaluated in this study were the level of system centralization and views by both the supply chain leaders and senior executives of how supply chain strategy supported the organization. It is noteworthy that the systems studied had been engaged in system-wide supply chain leadership for different periods of time and with different levels and measures of success. Thus it is difficult to benchmark the temporal road to success.

When queried about the extent of centralization present in their organizations (Table 1), supply chain leaders indicated a relatively high level of centralization for both the system and supply chain functions. However, management of distribution and inventory management lagged behind centralization of sourcing and procurement functions.

⁸ Centralization of the Supply Chain Function-Case study at Catholic Health Initiatives, HSRC-ASU,2007, http://wpcarey.asu.edu/hsrc-asu/upload/Alignment_CHI_Materials_Management_Leaders.pdf

⁹ Fine, op. cit., p 218

Table 1: Level of Supply Chain Centralization

Function	Mean	Standard Deviation
Overall	4.36	0.75
Strategic Sourcing	4.69	0.63
Contracting	4.68	0.54
Distribution	4.07	1.19
GPO Utilization	4.25	1.05
Inventory Management	3.79	0.99
Information Technology	4.36	0.72

Scale 1=Not at all centralized to 5=highly centralized

Table 2 provides insight into the range of organizational goals supported by the supply chain function including contribution to organizational success, meeting overall organizational strategic goals, improving the organization’s competitive advantage, reducing financial risk, supporting mission and improving clinical relationships. Both supply chain leaders and senior leadership attributed less value to the ability of supply chain strategies to optimize organizational revenue, reduce clinical risk, improve relations with medical staff, and impact patient satisfaction when compared to other areas. Overall, senior leadership ranked all areas lower than supply chain leaders. Average responses from senior leadership for supply chain impact on organizational revenue and patient satisfaction were quite low. Despite this, it is noteworthy that a number of interviewees attributed a great deal of their success to their ability to work with physicians and other clinical staff. While it was not the case in every organization, several of the organizations had developed formal relationships with physicians to provide leadership on supply chain issues.

Table 2 Supply Chain Strategy Support for Organizational Goals

Function	Supply Chain Leader		Senior Leader	
	Mean	Standard Deviation	Mean	Standard Deviation
Organizational success	4.79	0.58	4.57	0.53
Goals of organizational strategy	4.82	0.37	4.14	0.69
Optimizing organizational revenue	3.65	1.25	2.57	1.72
Organizational competitive advantage	4.23	0.76	4.00	0.82
Reduce financial risk	4.42	0.73	4.00	0.63
Reduce clinical risk	3.81	0.99	3.64	0.63
Cost savings	4.75	0.51	4.43	1.13
Support system mission	4.79	0.58	4.29	0.76
Improve relationships with medical staff	3.89	0.74	3.57	0.79
Improve other clinical relations	4.21	0.70	3.57	1.27
Patient satisfaction	3.93	0.83	2.5	1.52

Scale 1=Does not support this function to 5=highly supports this function

“Supply chain is closely linked to organizational strategy. We want to optimize so we can produce best clinical product. Supply chain is the differentiator giving competitive advantage to the organization”.
CEO Interviewee

Discussion

“Systemness” and centralization have been described as both predisposing and enabling prerequisites for successful supply chain repositioning. Yet, centralization and integration of all management and supply chain functions do not occur simultaneously. It would appear that supply chain centralization and integration is frequently a lagging functional area and one that may be dependent on other areas advancing toward centralization. The presence of a common information technology platform, as reflected in the high level of information technology centralization, was reported by respondents as critical to achieving a high level of supply chain performance. While all supply chain information technology was not inventoried for this study, a system’s adoption of enterprise technology appears to be an important indicator, if not a prerequisite, for advancing supply chain centralization/integration. The relative lag in centralization of management of distribution and inventory environment may be a reflection of the geographic dispersal of operating units across respondent organizations as well as differential involvement in self versus commercial distributor distribution.

Supply chain is about utilization and assuring that the organization meets the needs of principal constituents. As one interviewee stated:

“There is a fundamental principle - managing costs produces dollar savings. We have very regimented standardization committees that make recommendations and review outliers (physicians). Our goal is to ensure compliance and manage physicians. We want to give them choice and have them use clinically accepted superior products.”

It is through this disciplined effort that supply chain can link closely to organizational mission. In the words of a CEO interviewee who has oversight for supply chain:

“Supply chain is closely linked to organizational strategy. We want to optimize so we can produce best clinical product. Supply chain is the differentiator giving competitive advantage to the organization”.

Another respondent pointed out, supply chain is seen as a “shared entity” with crosscutting influence across the organization. Interviewees pointed out that in repositioning the supply chain function they were embracing a more corporate focus and mindset. One stated:

“We wanted to create a new vision through positioning. Note that the organization had been successful and there was no burning platform (for change). However the organization realized it had to be more strategic. Supply chain strategy is now closely linked to overall organizational strategy.”

Executive level supply chain managers appear to have wide-ranging authority pertaining to their realm of competency including decisions regarding major channel partners (e.g., GPOs and distributors). This level of empowerment is quite different from hospitals and systems where supply chain remains at a more transactional level and where decisions on supply chain strategic partnering are influenced by long standing relationships between the system and a strategic partner. CEO’s recognize the value of putting aside their personal “loyalty” to channel partners to fully empower their executive level supply chain officers to achieve their goals.

Section3: Metrics

Study Findings

The most common metrics used to assess supply chain performance were supply expense as % net revenue, supply expense/adjusted discharge and supply expense as % of net operating expense. In many systems, metrics looking at supply chain and clinical outcomes were in the process of consideration and early development. Table 3 shows a detailed list of metrics reported by supply chain executives.

Approximately 50% of respondents indicated that metrics were linked to their compensation.

Table 3 Metrics Reported by Supply Chain Executives

Financial Metrics	Level
Supply expense as % of net revenue by each hospital	Strategic
Supply expense as % of gross revenue	Strategic
Supply expense as % of net revenue	Strategic
Supply expense as % of operating expense	Strategic
Supply expense per CMI adjusted discharge	Strategic
Supply expense per CMI adjusted patient day	Strategic
Supply expense per adjusted patient day	Strategic
ROI (Total Cost Savings facilitated by Supply Chain as seen in P&L divided by Total Cost to run Supply Chain)	Strategic
Operating Margin Impact (% Operating Margin that is attributed to supply chain cost savings)	Strategic
Supply Technology/e-commerce metrics	
% Purchase order requests on-line	Tactical
% Purchase order open line items/variance	Tactical
EDI utilization	Tactical
Supplier partner & internal distribution evaluation metrics	
Efficiency in picking orders (for those involved in self-distribution)	Operational
Inventory turns	Operational
Fill rates	Operational
Stakeholder Impact metrics	
Patient satisfaction	Strategic
Clinician satisfaction	Strategic
Physician satisfaction	Strategic
Stakeholder satisfaction	Strategic

Discussion

The metrics reported by supply chain executives, as shown in Table 3 above, are fairly conventional metrics of supply chain with a focus on financial matters, utilization of technology/e-commerce, supply partner and internal distribution and stakeholder impact. It is noteworthy that none of the respondents reported metrics directly aimed at supplier management and integration. They also did not emphasize metrics pertaining to their principal trading partners (i.e., GPOs and distributors).

Respondents also did not reveal unique metrics employed in linking a proportion of their compensation to corporate goal achievement. Rather they appear to be considered

Supply chain leaders and the senior leadership indicate “relationship management” as the most important function of the supply chain leader’s job.

within the pool of other corporate officers with a mix of compensation factors including meeting general organizational goals and their own functional area (i.e. supply chain) goals. This reflects the way other senior executives in health care organizations are compensated. However the proportion of their compensation linked to supply chain improvements took into account a variety of inputs, especially the extent to which they had achieved their own rather idiosyncratic supply chain goals (e.g., reducing overall costs for physician preference items or insourcing a function such as laundry/linen supply.) There did not emerge, however, any broader strategic metrics reflecting their performance.

A number of the organizations have made progress toward the development of a balanced scorecard with the idea of moving toward a better understanding of overall corporate performance. Overall, many comments were made that more innovative and strategic metrics needed to be developed to better reflect supply chain performance and its link to organizational performance and clinical performance.

Section 4: Role & Performance Attributes of Supply Chain Leaders

Study Findings

Both supply chain leaders and senior leadership indicated relationship management as the most important function of the supply chain leader’s job. Both also stated that being able to set the vision for supply chain, build excellent teams, and possession of great business skills such as financial, analytical, and negotiation were important functions of the job. Supply chain leaders additionally noted the attributes of building trust, collaboration, and long-term relationships, development of strategy, risk management, change management and building a culture as very important for their job performance.

The ability to engage and communicate with stakeholders, especially with clinical staff and physicians, was frequently invoked as a core competency and needed capability. Key attributes included being able to understand & respect the clinical world and to make physicians a part of the strategy, decision-making, and value analysis efforts. In some cases there was a paid physician role in supply chain. In many cases the CMO had supply chain involvement via committees.

Technical skills associated with business education (e.g., finance) were valued. Interviewees identified their organizations as being “data driven” and stressed the importance of not making “random decisions.”

In relationships with suppliers, key attributes noted to be important were to build trust, focus beyond just the price, focus beyond being transactional and to be fair. As discussed earlier, GPOs and distributors were assessed strategically and utilized as a “means” not as the supply chain strategy. In the words of one interviewee “GPOs are not a strategy – they are a tool for achieving strategic goals.” Another respondent pointed out that “(our) GPO strategy is to maximize the relationship and resources. We continually assess the value of managing contracts themselves versus using the GPO.”

Discussion

Relationship management emerged as the most important competency for supply chain leaders for relationships both external and internal to the hospital. Relationship management included 1) the ability to build trust and credibility, 2) showing presence,

In relationships with suppliers, key attributes noted to be important were to build trust, focus beyond just the price, focus beyond being transactional, and to be fair.

3) accountability, 4) respect, 5) understanding and engagement and 6) maintenance of an on-going relationship. In many ways this reflects the role of the supply chain executive as a change agent or “orchestrator” and “consensus builder.”

Relationship management, while characterized by strong interpersonal skills, is also related to the employment of high quality data needed to engage stakeholders in clinically centered decision-making. Supply chain executives consistently demonstrated their understanding of the “rules for engagement” with clinical professionals.

Engagement of physicians in supply chain was an emergent theme. In addition to the above, relationship management for physicians included the ability to define what is beneficial to the physician and hospital and the greater good of patient care, to effectively engage to work for this change, and involve physicians in the supply chain process. This was done in formal and paid ways and less formal ways, but always with a focus to involve physician end-users in product analysis.

The majority of systems interviewed utilized, in a very selective manner, co-sourcing and contracting strategies to engage the supplier environment especially in the area of commodities. Although most respondents are members of national GPOs, they are building in-house sourcing and contracting capabilities and, while expressing an intention to utilize GPOs “where appropriate,” are working to assure that the GPO option is the best option. They are increasingly assessing their GPO relationship on factors beyond price especially the robustness of GPO data/analytics. In addition, they are seeking collaborative strategies to improve strategic sourcing, contracting and contract compliance.

These organizations are similarly analytic and reflective in their utilization of national distributor organizations. Here, as with GPOs, they are making decisions on the basis of a distributor’s ability to provide both price and added value.

Conclusion

While this research suggests that health care supply chain management is undergoing a dramatic restructuring in some organizations, it is noteworthy that the sample size is small and those interviewed were recommended based on their reputation for supply chain advancement. Thus, it is important to replicate this study with a larger and more diverse sample to understand the continuum of supply chain leadership and considerations within systems for supply chain positioning. Also suggested herein is the need for attention to development of metrics going beyond transactional to metrics that are more strategic in nature and to tighter linkages between supply chain and overall organizational performance.

This study has pointed to the importance of senior leadership in supply chain repositioning. First is to provide the impetus to reposition and elevate the supply chain function within the organization. Next is to recruit its requisite leadership. Lastly and very importantly is to continue to serve as its “champion” by providing support, visibility, appropriate authority to the new leader, and communicating the purpose and anticipated benefits of the repositioning. Inherent in this formulation is the recognition by senior leadership of the opportunity for significant impact not only on cost but on quality and patient safety as well. Further, it anticipates, as has been learned in other industries, that issues related to effective management of the supply chain will only become more critical over time.

Repositioning of supply chain provides the opportunity to recruit individuals who will 1) reflect on the multitude of options for bringing the best products, at the best price, to the point of use, 2) embody relationship management skills both across the organization and with external stakeholders, 3) recruit a staff to carry out the vision and 4) put into place metrics to assure performance and vehicles to tout the success.

Several other conclusions appear noteworthy. A commitment to “systemness” was a common theme among the respondents. This may well suggest that, to more fully secure the benefits of supply chain management, needed is an organizational environment characterized by commitment to integration, focus on a system perspective, and building and maintaining “connecting fibers.”

Repositioning supply chain also can provide benefits regarding human resources. Indications are that elevating its status and recognizing its importance can enhance an organization’s ability to recruit supply chain leadership. In turn, this change can lead to greater likelihood of attracting talented staff and, coupled with education and development programs, career advancement opportunities and better pay, to better retention as well.

Further emphasized was the centrality of building relationships and trust within the internal organization and between the organization and external partners. Observations by the respondents recognized that repositioning supply chain called for a cultural change built upon cooperation, collaboration, and influence rather than command and control. Internally, this means working with key constituencies to coalesce independent entities (organizations and professionals) to address such issues as variation, utilization, standardization, cost and product selection with a focus on the overall good of the system within the context of high quality patient care. Externally, it means reconsideration of relationships with various trading partners, often aimed at emphasizing interdependencies and building enduring, strategic linkages that can provide benefits beyond pricing.

Many healthcare systems see great value in controlling, at the local level, the supply chain relationships and transactions that will affect their own operating unit’s materials environment. In many instances their fears that the parent organization does not have the competencies and capabilities to assume responsibility for an area where failure to avert risk can lead to inferior financial return, delayed services and diminished stakeholder satisfaction, may be well founded. Yet as organizations grow in terms of both size and capability, alternatives for managing the supply chain emerge. While the idea of “everyone being aboard” may appear to be a trite conceptualization for “systemness,” it is not inconsequential. Systems that have repositioned the supply chain function appear to have provided the platform for those entrusted with supply chain to reflect about and invest in appropriate capabilities and to put into place a set of governance structures to carry out their work.

The strength of others being aboard means that one can carefully consider a wide repertoire of how to move an organization from “good to great.” It means that resistance will not mount to such a level as to overturn innovation. Our research has revealed that repositioning of supply chain provides the opportunity to recruit individuals who will 1) reflect on the multitude of options for bringing the best products, at the best price, to the point of use, 2) embody relationship management skills both across the organization and with external stakeholders, 3) recruit a staff to carry out the vision and 4) put into place metrics to assure performance and vehicles to tout the success. It also provides the opportunity for supply chain to become more than a cost center. Rather, it allows the idea of supply chain’s movement to a forefront position of managing the system’s materials assets.

A number of interviewees, reflecting on the repositioning of supply chain in their organizations, commented on the “multiplier effect” achieved by repositioning supply chain. As stated by one of the interviewees: “Our CEO is very positive about supply chain management, and shares this view with the Board. In so doing, this has raised expectations for performance of other service departments.”

Appendix

1: Advisory Group

Member	Organization
Mark Andrew	Witt/Keiffer
Karen Conway	GHX
Lisa Fine	VHA
Michael Hildebrandt	Scottsdale HealthCare
Jay Kirkpatrick	HCA/AHRMM
Bob Kuramoto	Quick Leonard
Nelson Mann	Tyler and Company
Tom Nash	Ministry Healthcare
Howard Zuckerman	Consultant

2: Job Description of a Chief Supply Chain Officer

The Capital Healthcare System (fictional) is a 10 hospital system committed to excellence in meeting its financial and clinical goals through excellence in supply chain management. We seek a Chief Supply Chain officer to join a team of executives committed to assuring that CHS is a leader in employing supply strategies and technologies. In this capacity you will collaborate with other corporate officers in making and enacting corporate strategic decisions in which the supply chain and its management are critical components for organizational success. You will recruit and direct a supply chain management team, provide leadership and collaborate with clinician partners to achieve a high level of satisfaction with supply chain services, reduce supply related costs, make decisions regarding the insourcing and outsourcing of critical supply chain functions and structure as well as manage relationships with major trading partners.

Job Requirements

- Ten years of progressive experience in supply chain management combined with appropriate graduate degree in business, supply chain management, operations management, health services management, or other relevant field
- Demonstrated competencies in making strategic decisions to impact organizational performance
- Demonstrated ability to hold one's self accountable for one's own actions
- Evidence of ability to build and manage teams and hold teams accountable for performance
- Experience in managing with professionals (clinical and business)
- Ability to differentiate among strategies and make key decisions pertaining to the insourcing and outsourcing of supply chain functions
- Strong understanding of the range of information technologies necessary for high level supply chain performance in an integrated delivery network
- Ability to orchestrate complex tasks and lead change with the credentials and gravitas to influence at the CEO/Executive Committee level
- Free of potential conflicts of interests with suppliers, providers of supply chain services, etc. and the ability to carry out work in an ethical manner
- Leads from a position of influence and in collaboration with key stakeholders (operations, physicians/clinicians and suppliers) to improve patient outcomes and improve financial performance
- Establishes well-grounded and comprehensive strategic intent with stakeholders, not just tactical price savings/'price buying'
- Delivers sustainable 2-3X ROI